AP - 52

ANNUAL MONITORING REPORT

YEAR(S): 2007

TALON LPE
"All the Pieces"

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C.S. CAYLER
NMOCD REF. # AP-052 (OLD 1R-0382)
2007 ANNUAL GROUNDWATER MONITORING REPORT
LEA COUNTY, NEW MEXICO
SRS #2002-10250

Section 6, Township 17 South, Range 37 East

Prepared for:

PLAINS MARKETING, L.P.
333 Clay Street
Suite 1600
Houston, Texas 77002

Prepared by:

Talon/LPE
Shanna L. Smith
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Hobbs, New Mexico 88240

Distribution:
Copy 1 – Plains Lovington
Copy 2 – Plains Houston
Copy 3 – NMOCD Hobbs
Copy 4 – NMOCD Santa Fe
Copy 5 – Talon/LPE

March 28, 2008

C.S. Cayler
2007 Annual Groundwater Monitoring Report

Plains Marketing, L.P.
Houston, Texas

Talon/LPE PROJECT NO. PLAINS044SPL

Prepared by:

Shanna L. Smith

Shanna L. Smith
Project Manager

Reviewed by:

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Regional Manager

Talon/LPE
318 E. Taylor Street
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March 28, 2008

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NMOCD - New Mexico Oil Conservation Division

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2008 APR 1 PM 2 12

March 28, 2008

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

Re: Plains All American – 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:

CS Caylor	Section 6, Township 17 South, Range 37 East, Lea County
Lovington Deep 6"	Section 6, Township 17 South, Range 36 East, Lea County
Hobbs Junction Mainline	Section 26, Township 18 South, Range 37 East, Lea County
Kimbrough Sweet 8"	Section 3, Township 18 South, Range 37 East, Lea County
8" Moore to Jal #1	Section 16, Township 17 South, Range 37 East, Lea County
8" Moore to Jal #2	Section 16, Township 17 South, Range 37 East, Lea County

Talon LPE 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 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 (505) 441-0965.

Sincerely,

Camille Reynolds

Camille Reynolds
Remediation Coordinator
Plains All American

CC: Larry Johnson, NMOCD, Hobbs, NM

Enclosures

TABLE OF CONTENTS

Appendices

ANNUAL GROUNDWATER MONITORING REPORT

1.0 Introduction

The C.S. Cayler release site is located approximately 7 miles southeast of Lovington, Lea County, New Mexico on property owned by Robert C. Rice. On September 19, 2002, a release of approximately 70 barrels (bbls) occurred from an EOTT Energy Pipeline (EOTT) pipeline at this location. In October 2003, EOTT changed its name to Link Energy, and Plains Pipeline, L.P. (Plains) subsequently purchased the assets of Link Energy on April 1, 2004. Based on available information, no crude oil was initially recovered at the release site. During site reconnaissance, it was observed that the ground surface beyond the current spill area had apparently been impacted by a prior spill or spills; however, the source(s) and date(s) of these spills are unknown.

On February 5, 2007, Talon/LPE was retained by Plains to assume remediation activities at the C.S. Cayler release site. Remediation activities at the site were previously conducted by Environmental Plus, Inc. (EPI).

2.0 Previous Site Investigation/Remediation

Preliminary delineation of the site was initiated by Environmental Plus, Inc., in September 2002, with the advancement of four soil borings. On September 24, 2002, during the advancement of soil boring BH-1, crude oil impacted soil was encountered at the groundwater interface (78 feet below ground surface (bgs)). Soil boring BH-1 was subsequently completed as monitor well MW-1.

Efforts to measure groundwater and PSH levels, and to recover PSH began subsequent to the installation of monitor well MW-1 in September of 2002. PSH recovery was accomplished initially by manual bailing, followed in March of 2003 with the deployment of a portable gasoline powered eductor recovery system designed for continuous operation. In June 2004, an automated electric-powered PSH recovery system was installed and activated.

Impacted soil at the site has been excavated to approximately 7 feet bgs. The rock and soil have been separated and are currently staged on site.

Delineation of groundwater impact at the site began with the installation of groundwater monitor wells MW-2 through MW-5 in May/June 2004 and groundwater monitor wells MW-6 through MW-10 in October 2004. The 2004 groundwater analytical results indicated that the dissolved phase hydrocarbon plume extended laterally beyond the groundwater monitor wells to the north, west, and south. In February of 2006, seven additional groundwater monitor wells, MW-11 through MW-17, were installed to further delineate the lateral extent of groundwater impact at the site. Results from the 2007 gauging and sampling events are discussed in the following sections. A summary of the historical groundwater gauging and PSH recovery data from the C.S. Cayler site is provided as Table 1. Approximately 22,827 gallons (543.5 bbls) of PSH have been recovered to date.

3.0 Groundwater Gradient and PSH Thickness

Based on gauging data collected during 2007, groundwater elevations measured at the site generally varied by two feet to five feet during the course of the calendar year. Additionally, groundwater elevations at the site indicate consistent "mounding" of the potentiometric surface at locations in the central study area, which results in a highly variable apparent groundwater flow direction across the site. The overall groundwater gradient across the site appears to trend generally to the south and east. Based on available data, the groundwater gradient slope is 0.0007 ft/ft.

A portion of the observed "mounding" may be due to an estimated assignment of the specific gravity of crude oil at the site. Groundwater gradient maps are presented as Figures 2a through 2d.

During 2007 gauging events, PSH thickness readings from the monitor wells ranged from "not-present" to a maximum of 9.38 feet (MW-5). Monitor well MW-1 is not deep enough to effectively demonstrate depth to water or PSH thickness measurements. The depth of water is currently deeper than the screened interval at this well. Based on available data, the PSH thickness in monitor wells MW-2 through MW-5 appears stable between the approximate thicknesses of 7 to 9 feet. The PSH thickness readings from monitor wells MW-7 and MW-8 ranged from approximately 6 inches to 4 feet in depth. The PSH-water depth is sometimes deeper than the screened interval, in monitor wells MW-7 and MW-8, resulting in estimated PSH thickness measurements. PSH thickness measurements for selected dates are presented as Figures 3a through 3d.

4.0 PSH Recovery

In November 2007, an automated skimmer recovery system was installed at the site. During 2007, no crude oil recovered from the subsurface was reintroduced into the Plains pipeline system at Lea Station. As of December 31, 2007, the cumulative total of crude oil recovered from the site is approximately 22,827 gallons (543.5 bbls).

5.0 Groundwater Sampling

Groundwater sampling events occurred on April 3, June 13, September 14, and December 3, 2007. During the sampling event conducted on April 3, monitor wells MW-6 and MW-9 through MW-17 were submitted for quantification of benzene, toluene, ethylbenzene and total xylenes (BTEX) using SW-846 Method 8021B, and for quantification of polycyclic-aromatic hydrocarbons (PAH) using EPA/SW-846 Methods 610 and 8270C. For the sampling events conducted on June 13, September 14, and December 3, monitor wells MW-6 and MW-9 through MW-17 samples were submitted for the quantification of BTEX by SW-846 Method 8021B.

Groundwater monitor wells MW-1 through MW-5, MW-7, and MW-8 were not sampled in 2007 due to the presence of PSH.

6.0 Groundwater Analytical Results

Groundwater analytical data from this site was compared to the New Mexico Water Quality Control Commission (NMWQCC) groundwater standards. The following paragraphs provide summaries of the analytical results from each groundwater sampling event of 2007. Analytical results for the four sampling events are summarized in Table 2 (BTEX), Table 3 (PAH) and Figures 3a through 3d. Laboratory data sheets are included as Appendix C.

New Mexico Water Quality Control Commission (NMWQCC) groundwater standards

Compound	mg/L
Benzene	0.010
Toluene	0.750
Ethylbenzene	0.750
Total Xylenes	0.620
PAH's	0.030

April 3, 2007

Analytical results from the March 29, 2007 sampling event indicate that BTEX constituents were detected above the laboratory reporting limits in monitor wells MW-6, MW-9, MW-10, MW-12, MW-13, MW-14, MW-15, MW-16 and MW-17. Benzene concentrations exceeded the NMWQCC groundwater standard of 0.010 mg/L in monitor wells MW-6 (0.112 mg/L), MW-9 (0.0186 mg/L), MW-13 (0.0313 mg/L) and MW-16 (0.0665 mg/L). In addition, all BTEX constituent concentrations exceeded NMWQCC groundwater standards in monitor well MW-12 (benzene at 18.4 mg/L, toluene at 4.65 mg/L, ethylbenzene at 1.46 mg/L and total xylenes at 2.455 mg/L). PAH constituents were detected above the NMWQCC groundwater standard of 0.030 mg/L in monitor well MW-12 (naphthalene at 0.091 mg/L).

June 13, 2007

Analytical results from the June 13, 2007 sampling event indicate that BTEX constituents were detected above the laboratory reporting limit in monitor wells MW-6, MW-9, MW-10, MW-12, MW-13, MW-14, MW-15, and MW-16. The BTEX constituent concentrations exceeded NMWQCC groundwater standard in monitor wells MW-6 (benzene at 0.101 mg/L), MW-12 (benzene at 27.6 mg/L, toluene at 4.87 mg/L, ethylbenzene at 1.16 mg/L and total xylenes at 1.05 mg/L), MW-13 (benzene at 0.0122 mg/L) and MW-16 (benzene at 0.0198 mg/L).

September 14, 2007

Analytical results from the September 14, 2007 sampling event indicate that BTEX constituents were detected above the laboratory reporting limit in monitor wells MW-6, MW-9, MW-10, MW-11, MW-12, MW-14, MW-15, and MW-16. These BTEX constituent concentrations exceeded NMWQCC groundwater standard in monitor wells MW-6 (benzene at 0.0968 m/L), MW-12 (benzene at 18.66 mg/L, toluene at 1.490 mg/L, ethylbenzene at

0.7570 mg/L and total xylenes at 1.14 mg/L), MW-15 (benzene at 0.0123 mg/L) and MW-16 (benzene at 0.0240 mg/L).

December 3, 2007

Analytical results from the December 3, 2007 sampling event indicate that BTEX constituents were detected above the laboratory reporting limit in monitor wells MW-6, MW-9, MW-10, MW-11, MW-12, MW-13, MW-15, MW-16, and MW-17. These BTEX constituent concentrations exceeded NMWQCC groundwater standard in monitor wells MW-6 (benzene at 0.1491 m/L), MW-12 (benzene at 24.91 mg/L, toluene at 1.080 mg/L, and total xylenes at 0.9100 mg/L), and MW-16 (benzene at 0.2048 mg/L).

7.0 Recommendations

Based on field monitoring and analytical results collected during 2007, the following activities are recommended for the site:

1) Gauge the monitor wells weekly to record water and PSH limits.

2) Based on the weekly gauging of monitor wells, add total fluid recovery pumps per the NMOCD request and reconfigure the existing skimmer recovery system to achieve more efficient PSH recovery.

3) Monitor wells MW-6 and MW-9 through MW-17 will be sampled and analyzed for BTEX quarterly and PAH annually.

4) Monitor wells MW-1 through MW-5, MW-7, and MW-8 will be added to the quarterly sampling/analysis schedule when PSH is no longer present in each well. Pursuant to the request of the NMOCD, Plains will collect a discrete sample below the PSH in the water table from these monitor wells on a yearly basis to evaluate BTEX, TPH, and PAH concentrations in the groundwater.

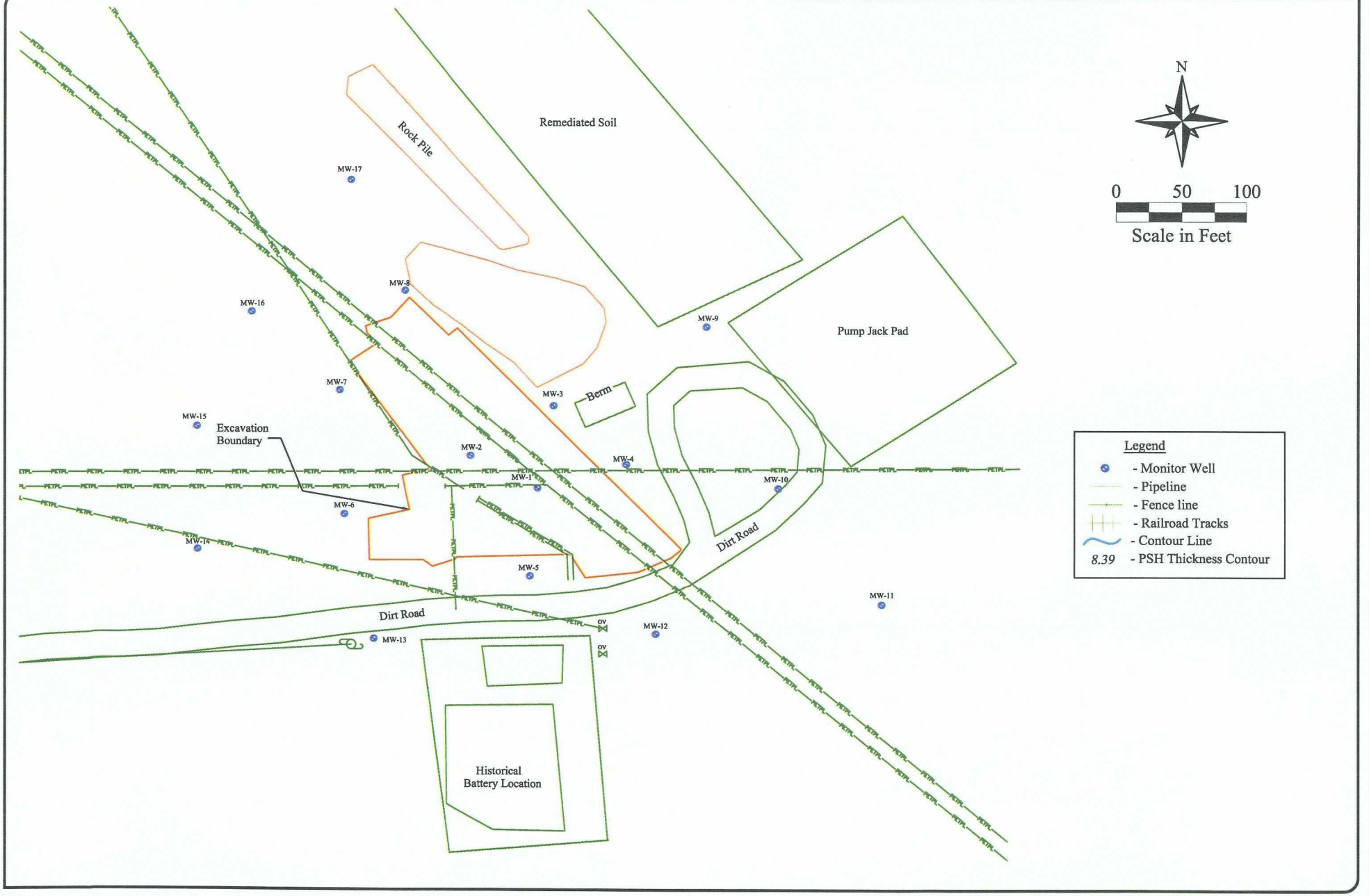
5) One additional monitor well will be installed in March 2008 to address down-gradient delineation of the dissolve–phase plume.

6) Plains will implement the NMOCD approved soil backfill plan in 2008.

Appendix A

Drawings

Figure 1 – Site Plan
Figure 2a – Groundwater Gradient Map (04/03/2007)
Figure 2b – Groundwater Gradient Map (06/26/2007)
Figure 2c – Groundwater Gradient Map (09/14/2007)
Figure 2d – Groundwater Gradient Map (12/03/2007)
Figure 3a – PSH Plume & Groundwater Concentration Map (04/03/2007)
Figure 3b – PSH Plume & Groundwater Concentration Map (06/26/2007)
Figure 3c – PSH Plume & Groundwater Concentration Map (09/14/2007)
Figure 3d – PSH Plume & Groundwater Concentration Map (12/03/2007)



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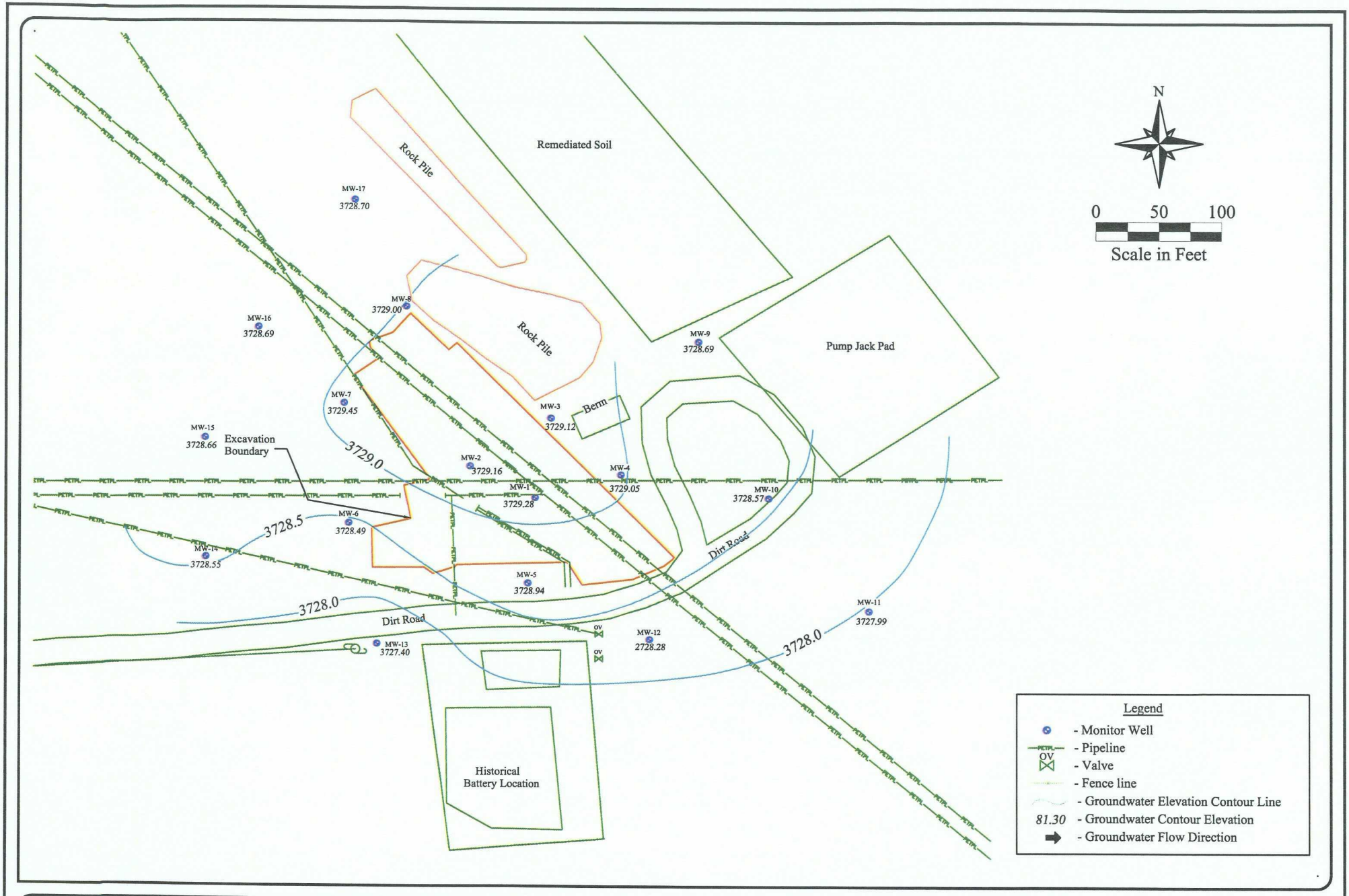
Scale:	1" = 100'
Drawn By:	WDR

C.S. Cayler (PLAINS044SPL)

SRS # 2002-10250

Lea County, New Mexico

Figure 1 - Site Plan



TALON LPE

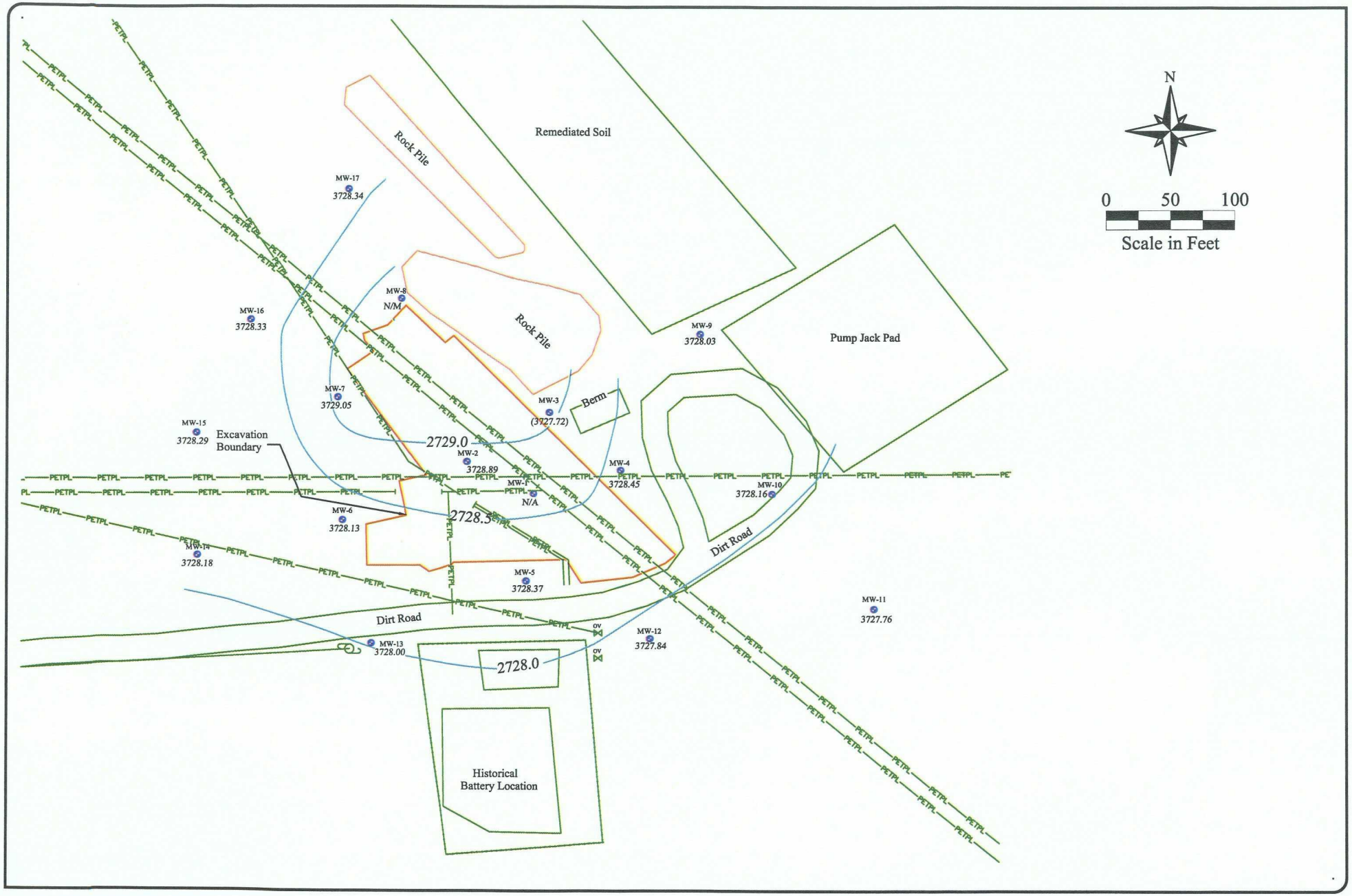
Date: 02/25/2008
Scale: 1" = 100'
Drawn By: SJA

C.S. Cayler (PLAINS044SPL)

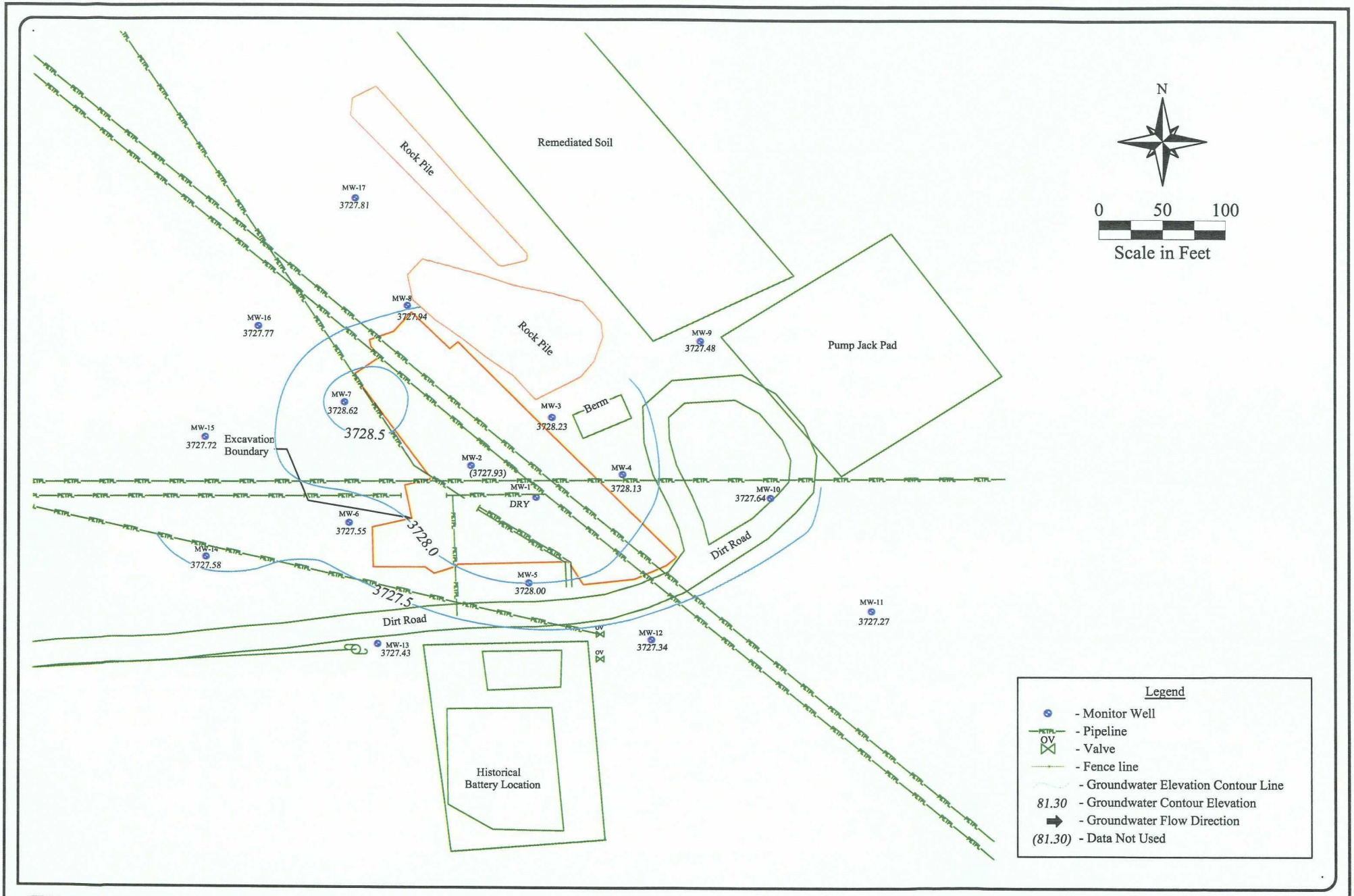
SRS # 2002-10250

Lea County, New Mexico

Figure 2a - Groundwater Gradient Map, (04/03/2007)



Date: 02/26/2008	C.S. Cayler (PLAINS044SPL)
Scale: 1" = 100'	SRS # 2002-10250, NMOCD REF. # AP-052 (OLD 1R-0382)
Drawn By: SJA	Lea County, New Mexico
	Figure 2b - Groundwater Gradient Map, (06/26/2007)



TALON LPE

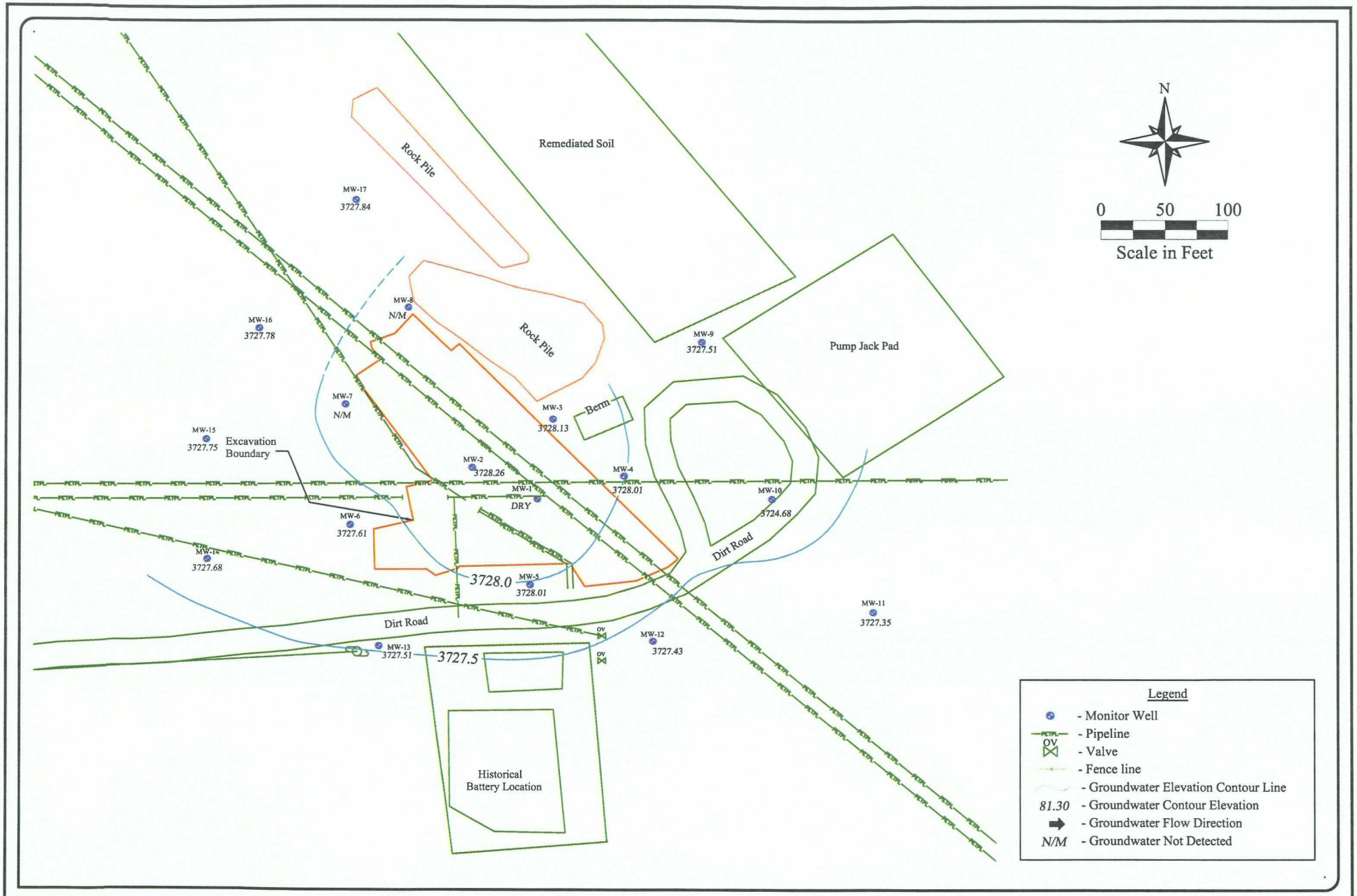
Date: 02/25/2008
Scale: 1" = 100'
Drawn By: SJA

C.S. Cayler (PLAINS044SPL)

SRS # 2002-10250

Lea County, New Mexico

Figure 2c - Groundwater Gradient Map, (09/14/2007)

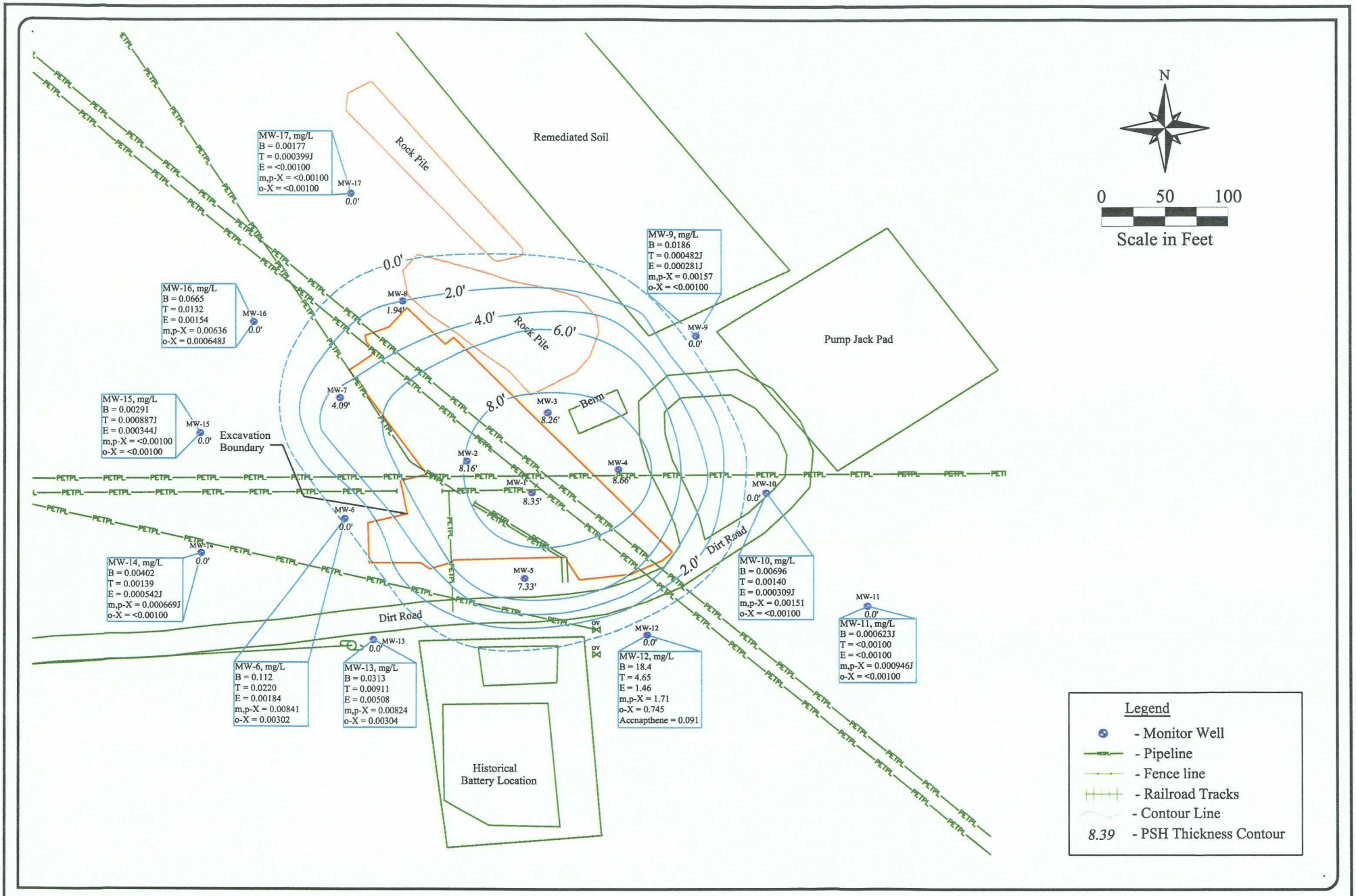


TALON LPE

Date: 02/25/2008
Scale: 1" = 100'
Drawn By: SJA

C.S. Cayler (PLAINS044SPL)

SRS # 2002-10250
Lea County, New Mexico
Figure 2d - Groundwater Gradient Map, (12/03/2007)



TALON LPE

Date: 02/29/2008

Scale: 1" = 100'

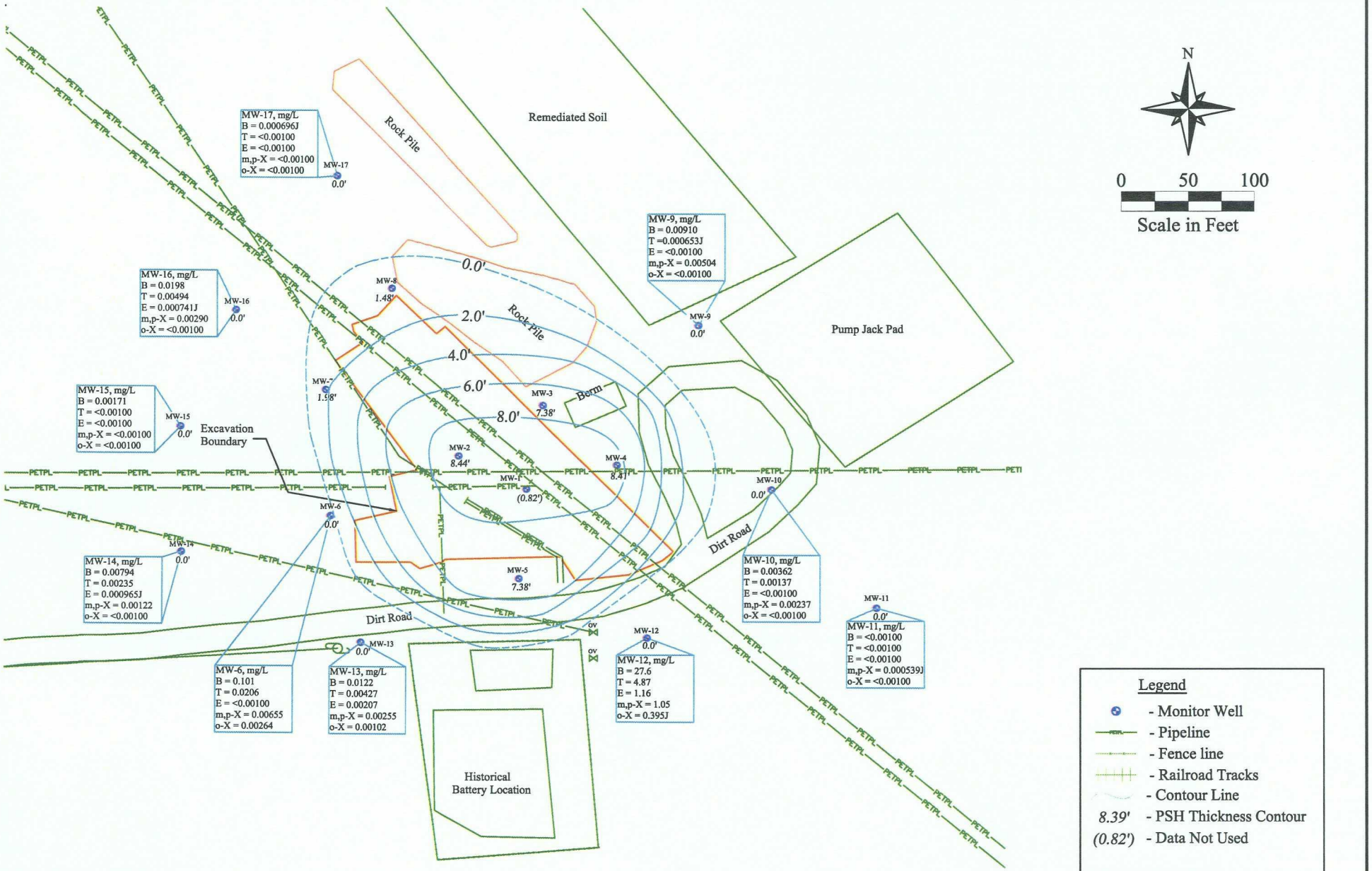
Drawn By: SJA

C.S. Cayler (PLAINS044SPL)

SRS # 2002-10250, NMOCD REF. # AP-052 (OLD 1R-0382)

Lea County, New Mexico

Figure 3a - PSH Plume & Groundwater Concentration Map, (04/03/2007)



TALON LPE

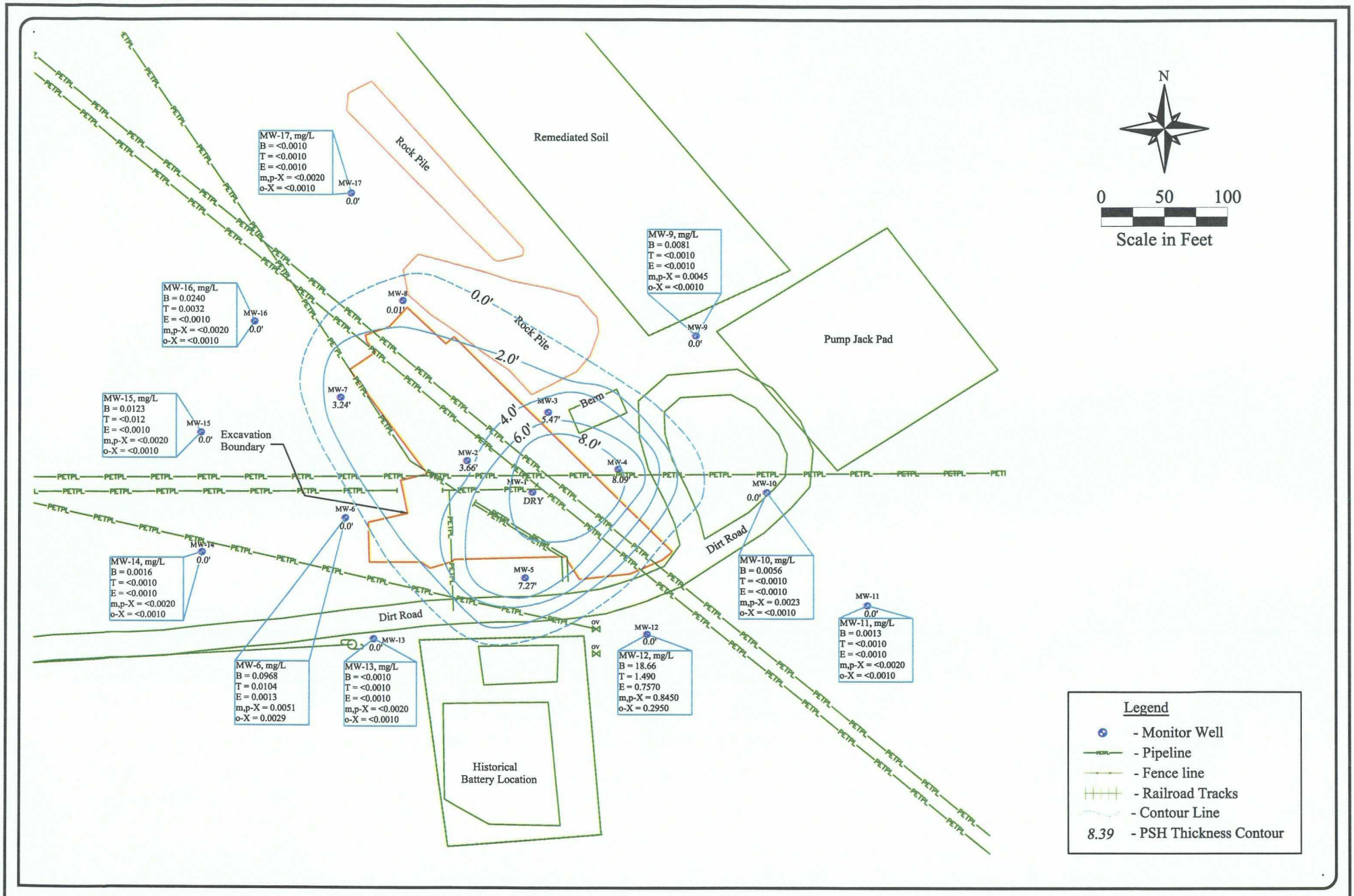
Date: 03/05/2008	
Scale: 1" = 100'	
Drawn By: SJA	

C.S. Cayler (PLAINS044SPL)

SRS # 2002-10250, NMOCD REF. # AP-052 (OLD 1R-0382)

Lea County, New Mexico

Figure 3b - PSH Plume & Groundwater Concentration Map, (06/26/2007)



TALON LPE

Date: 03/05/2008	
Scale: 1" = 100'	
Drawn By: SJA	

C.S. Cayler (PLAINS044SPL)

SRS # 2002-10250, NMOCD REF. # AP-052 (OLD 1R-0382)
Lea County, New Mexico
Figure 3c - PSH Plume & Groundwater Concentration Map, (09/14/2007)

TALON LPE

Date: 03/05/2008	
Scale: 1" = 100'	
Drawn By: SJA	

C.S. Cayler (PLAINS044SPL)

SRS # 2002-10250, NMOCD REF. # AP-052 (OLD 1R-0382)
Lea County, New Mexico
Figure 3d - PSH Plume & Groundwater Concentration Map, (12/03/2007)

APPENDIX B

Tables

Table 1 – Groundwater Elevations and PSH Thickness
Table 2 – Summary of Groundwater Analytical Results
Table 3 – Summary of Groundwater Polycyclic Aromatic Hydrocarbon (PAH) Analytical Results

Table 1
Groundwater Elevations and
Phase Separated Hydrocarbon (PSH) Thicknesses
Plains Pipeline, L.P.
C. S. Cayler
NMOCD REF. # AP-052 (OLD 1R-0382)
Lea County, NM SRS# 2002-10250
Talon/LPE Project Number PLAINS044SPL

Monitoring Well	Date Gauged	Surveyed Top of Casing Elevation (feet)	Depth to PSH BTOC (feet)*	Depth to Water BTOC (feet)*	Corrected Groundwater Elevation (feet)*	PSH Thickness (feet)
MW-1	10/17/02	WELL INSTALLED 17-Oct-02				
	3/7/03	3,803.97	72.28	84.20	3,730.50	11.92
	3/11/03		72.30	84.19	3,730.48	11.89
	3/17/03		72.33	84.25	3,730.45	11.92
	3/22/03		72.35	84.24	3,730.43	11.89
	5/6/03		71.55	83.11	3,731.26	11.56
	5/7/03		71.58	83.05	3,731.24	11.47
	5/8/03		71.55	83.03	3,731.27	11.48
	5/9/03		71.53	83.00	3,731.29	11.47
	5/15/03		71.57	83.01	3,731.26	11.44
	5/16/03		71.59	82.90	3,731.25	11.31
	5/28/03		71.65	82.50	3,731.24	10.85
	6/11/03		71.75	82.57	3,731.14	10.82
	8/14/03		63.45	73.41	3,739.52	9.96
	1/2/04		64.31	73.63	3,738.73	9.32
	4/12/04		64.74	73.74	3,738.33	9.00
	6/1/04		64.87	73.52	3,738.24	8.65
	6/21/04		65.04	73.49	3,738.09	8.45
	7/14/04		67.52	75.92	3,735.61	8.40
	10/17/04		68.38	73.28	3,735.10	4.90
	10/29/04		68.53	73.45	3,734.95	4.92
	3/31/05		68.23	73.00	3,735.26	4.77
	4/25/05		68.56	72.68	3,735.00	4.12
	5/31/05		68.57	72.61	3,735.00	4.04
	6/29/05		68.88	73.72	3,734.61	4.84
	9/15/05		69.79	73.63	3,733.80	3.84
	11/14/05		70.44	73.26	3,733.25	2.82
	1/23/06		70.72	73.80	3,732.94	3.08
	3/1/06		70.41	73.59	3,733.24	3.18
	5/25/06		71.05	73.20	3,732.71	2.15
	8/14/06		72.46	73.76	3,731.38	1.30
	11/29/06		73.31	73.69	3,730.62	0.38
	1/11/07		73.31	73.69	3,730.62	0.38
	2/8/07		73.38	73.73	3,730.56	0.35
	4/3/07		73.86	82.21	3,729.28	8.35
	4/11/07		74.06	82.27	3,729.09	8.21
	4/17/07		74.21	82.63	3,728.92	8.42
	5/14/07		74.06	82.00	3,729.12	7.94
	6/26/07		73.80			0.82**
	6/28/07		DRY			
	9/14/07		DRY			
	9/26/07		DRY			
	10/5/07		DRY			
	10/9/07		DRY			
	10/19/07		DRY			
	10/24/07		DRY			
	10/31/07		DRY			
	11/28/07		DRY			
	12/3/07		DRY			

Table 1
Groundwater Elevations and
Phase Separated Hydrocarbon (PSH) Thicknesses
Plains Pipeline, L.P.
C. S. Cayler
NMOCD REF. # AP-052 (OLD 1R-0382)
Lea County, NM SRS# 2002-10250
Talon/LPE Project Number PLAINS044SPL

Monitoring Well	Date Gauged	Surveyed Top of Casing Elevation (feet)	Depth to PSH BTOC (feet)*	Depth to Water BTOC (feet)*	Corrected Groundwater Elevation (feet)*	PSH Thickness (feet)
MW-2	5/28/04	WELL INSTALLED 28-May-04				
	6/1/04	3,803.93	67.17	77.76	3,735.70	10.59
	6/21/04		67.27	77.93	3,735.59	10.66
	7/14/04		67.38	78.09	3,735.48	10.71
	10/16/04		68.79	74.04	3,734.62	5.25
	10/29/04		67.97	77.70	3,734.99	9.73
	3/31/05		68.23	78.50	3,734.67	10.27
	4/25/05		68.37	77.03	3,734.69	8.66
	5/31/05		68.46	76.97	3,734.62	8.51
	6/29/05		69.09	76.12	3,734.14	7.03
	9/15/05		69.75	79.14	3,733.24	9.39
	11/14/05		70.66	78.44	3,732.49	7.78
	1/23/06		70.95	78.27	3,732.25	7.32
	3/1/06		70.53	77.41	3,732.71	6.88
	5/25/06		72.19	75.49	3,731.41	3.30
	8/14/06		73.08	78.31	3,730.33	5.23
	11/29/06		74.09	78.20	3,729.43	4.11
	12/12/06		74.53	77.57	3,729.10	3.04
	1/11/07		74.22	78.81	3,729.25	4.59
	2/8/07		75.11	75.18	3,728.81	0.07
	4/3/07		73.95	82.11	3,729.16	8.16
	4/11/07		74.02	82.30	3,729.08	8.28
	4/17/07		74.02	82.41	3,729.07	8.39
	5/14/07		74.03	82.55	3,729.05	8.52
	6/26/07		74.20	82.64	3,728.89	8.44
	6/28/07		74.36	82.48	3,728.76	8.12
	8/13/07		74.71	81.91	3,728.50	7.20
	8/17/07		75.66	79.30	3,727.91	3.64
	8/21/07			76.19	3,727.74	
	8/28/07		75.84	78.91	3,727.78	3.07
	9/14/07		75.63	79.29	3,727.93	3.66
	9/26/07		74.88	82.41	3,728.30	7.53
	10/5/07		74.85	82.70	3,728.30	7.85
	10/8/07		74.87	82.71	3,728.28	7.84
	10/19/07		74.87	82.96	3,728.25	8.09
	10/24/07		74.87	83.04	3,728.24	8.17
	10/31/07		74.88	83.11	3,728.23	8.23
	11/12/07		74.82	83.19	3,728.27	8.37
	11/28/07		74.89	83.27	3,728.20	8.38
	12/3/07		74.83	83.20	3,728.26	8.37

Table 1
Groundwater Elevations and
Phase Separated Hydrocarbon (PSH) Thicknesses
Plains Pipeline, L.P.
C. S. Cayler
NMOCD REF. # AP-052 (OLD 1R-0382)
Lea County, NM SRS# 2002-10250
Talon/LPE Project Number PLAINS044SPL

Monitoring Well	Date Gauged	Surveyed Top of Casing Elevation (feet)	Depth to PSH BTOC (feet)*	Depth to Water BTOC (feet)*	Corrected Groundwater Elevation (feet)*	PSH Thickness (feet)
MW-3	5/31/04	WELL INSTALLED 31-May-04				
	6/21/04	3,810.20	75.51	75.51	3,734.69	
	7/14/04		74.39	81.31	3,735.12	6.92
	8/26/04		74.75	84.31	3,734.49	9.56
	10/16/04		75.53	77.55	3,734.47	2.02
	10/29/04		75.45	79.00	3,734.40	3.55
	3/31/05		74.65	83.60	3,734.66	8.95
	4/25/05		74.81	82.74	3,734.60	7.93
	5/31/05		75.00	82.16	3,734.48	7.16
	6/29/05		75.83	80.44	3,733.91	4.61
	9/15/05		76.09	85.47	3,733.17	9.38
	11/14/05		77.81	81.11	3,732.06	3.30
	1/23/06		77.78	81.74	3,732.02	3.96
	3/1/06		77.43	81.49	3,732.36	4.06
	5/25/06		78.49	81.15	3,731.44	2.66
	8/14/06		79.51	84.36	3,730.21	4.85
	1/11/07		80.78	84.05	3,729.09	3.27
	2/8/07		83.65	83.66	3,726.55	0.01
	4/3/07		80.25	88.51	3,729.12	8.26
	4/11/07		80.69	88.97	3,728.68	8.28
	4/17/07		80.38	88.78	3,728.98	8.40
	5/14/07		80.43	89.56	3,728.86	9.13
	6/26/07		81.74	89.12	3,727.72	7.38
	6/28/07		80.69	89.05	3,728.67	8.36
	8/13/07		81.08	89.43	3,728.29	8.35
	8/17/07		82.05	83.50	3,728.01	1.45
	8/21/07		82.65	82.68	3,727.55	0.03
	8/28/07		81.51	88.44	3,728.00	6.93
	9/14/07		81.42	86.89	3,728.23	5.47
	9/26/07		81.22	88.92	3,728.21	7.70
	10/5/07		81.14	88.99	3,728.28	7.85
	10/8/07		81.14	89.00	3,728.27	7.86
	10/19/07		81.23	89.39	3,728.15	8.16
	10/24/07		81.24	89.35	3,728.15	8.11
	10/31/07		81.24	89.47	3,728.14	8.23
	11/12/07		81.25	89.39	3,728.14	8.14
	11/28/07		81.26	89.44	3,728.12	8.18
	12/3/07		81.26	89.36	3,728.13	8.10

Table 1
Groundwater Elevations and
Phase Separated Hydrocarbon (PSH) Thicknesses
Plains Pipeline, L.P.
C. S. Cayler
NMOCD REF. # AP-052 (OLD 1R-0382)
Lea County, NM SRS# 2002-10250
Talon/LPE Project Number PLAINS044SPL

Monitoring Well	Date Gauged	Surveyed Top of Casing Elevation (feet)	Depth to PSH BTOC (feet)*	Depth to Water BTOC (feet)*	Corrected Groundwater Elevation (feet)*	PSH Thickness (feet)
MW-4	6/1/04	WELL INSTALLED 01-Jun-04				
	6/21/04	3,810.70	76.04	76.04	3,734.66	
	7/14/04		74.51	83.91	3,735.25	9.40
	8/26/04		74.21	83.61	3,735.55	9.40
	10/16/04		75.77	80.56	3,734.45	4.79
	10/17/04		75.76	80.96	3,734.42	5.20
	10/29/04		75.56	81.42	3,734.55	5.86
	3/31/05		73.51	81.95	3,736.35	8.44
	4/25/05		75.53	82.62	3,734.46	7.09
	5/31/05		75.55	82.86	3,734.42	7.31
	6/29/05		75.96	83.51	3,733.99	7.55
	9/15/05		76.71	86.23	3,733.04	9.52
	11/14/05		77.64	85.38	3,732.29	7.74
	1/23/06		77.79	84.93	3,732.20	7.14
	3/1/06		77.48	84.12	3,732.56	6.64
	5/25/06		78.28	85.22	3,731.73	6.94
	8/14/06		79.78	86.67	3,730.23	6.89
	11/29/06		80.29	85.15	3,729.92	4.86
	12/12/06		81.71	86.01	3,728.56	4.30
	1/11/07		80.03	82.77	3,730.40	2.74
	2/8/07		81.28	82.70	3,729.28	1.42
	4/3/07		80.78	89.44	3,729.05	8.66
	4/11/07		80.85	89.55	3,728.98	8.70
	4/17/07		80.92	89.05	3,728.97	8.13
	5/14/07		80.96	89.68	3,728.87	8.72
	6/26/07		81.41	89.82	3,728.45	8.41
	6/28/07		81.28	89.71	3,728.58	8.43
	8/13/07		81.76	89.92	3,728.12	8.16
	8/17/07		80.36	87.55	3,729.62	7.19
	8/21/07		82.01	89.41	3,727.95	7.40
	8/28/07			79.50	3,731.20	
	9/14/07		81.76	89.85	3,728.13	8.09
	9/26/07		81.73	88.89	3,728.25	7.16
	10/5/07		81.66	89.80	3,728.23	8.14
	10/8/07		81.65	89.78	3,728.24	8.13
	10/19/07		81.80	90.05	3,728.08	8.25
	10/24/07		81.80	89.99	3,728.08	8.19
	10/31/07		81.82	90.07	3,728.06	8.25
	11/12/07		82.02	89.84	3,727.90	7.82
	11/28/07		81.93	89.82	3,727.98	7.89
	12/3/07		81.91	89.72	3,728.01	7.81

Table 1
Groundwater Elevations and
Phase Separated Hydrocarbon (PSH) Thicknesses
Plains Pipeline, L.P.
C. S. Cayler
NMOCD REF. # AP-052 (OLD 1R-0382)
Lea County, NM SRS# 2002-10250
Talon/LPE Project Number PLAINS044SPL

Monitoring Well	Date Gauged	Surveyed Top of Casing Elevation (feet)	Depth to PSH BTOC (feet)*	Depth to Water BTOC (feet)*	Corrected Groundwater Elevation (feet)*	PSH Thickness (feet)
MW-5	6/5/04	WELL INSTALLED 05-Jun-04				
	6/21/04	3,809.05		74.42	3,734.63	
	7/14/04			74.53	3,734.52	
	10/29/04			75.00	3,734.05	
	11/19/04			75.10	3,733.95	
	3/31/05			75.18	3,733.87	
	4/25/05			75.19	3,733.86	
	5/12/05			75.22	3,733.83	
	5/31/05			75.25	3,733.80	
	6/29/05			75.67	3,733.38	
	8/22/05			76.64	3,732.41	
	9/15/05			76.75	3,732.30	
	11/14/05			77.39	3,731.66	
	1/23/06		77.21	79.19	3,731.64	1.98
	3/1/06		76.59	79.18	3,732.20	2.59
	5/25/06		77.41	79.93	3,731.39	2.52
	8/14/06		78.99	80.63	3,729.90	1.64
	11/29/06		78.91	85.95	3,729.44	7.04
	1/11/07		78.85	86.30	3,729.46	7.45
	2/8/07		78.82	86.29	3,729.48	7.47
	2/20/07		79.22	85.66	3,729.19	6.44
	3/6/07		79.15	86.07	3,729.21	6.92
	3/14/07		78.68	85.60	3,729.68	6.92
	3/27/07		79.64	86.03	3,728.77	6.39
	3/29/07		79.36	86.25	3,729.00	6.89
	4/3/07		79.38	86.71	3,728.94	7.33
	4/11/07		79.91	87.02	3,728.43	7.11
	4/17/07		79.52	88.90	3,728.59	9.38
	5/24/07		79.54	86.90	3,728.77	7.36
	6/26/07		79.94	87.32	3,728.37	7.38
	6/28/07		79.84	87.25	3,728.47	7.41
	8/13/07		80.26	81.66	3,728.65	1.40
	8/21/07		80.39	87.63	3,727.94	7.24
	8/28/07		80.49	87.64	3,727.85	7.15
	9/14/07		80.32	87.59	3,728.00	7.27
	9/26/07		81.72	87.66	3,726.74	5.94
	10/5/07		80.22	87.51	3,728.10	7.29
	10/8/07		80.20	87.52	3,728.12	7.32
	10/19/07		80.44	87.66	3,727.89	7.22
	10/24/07		80.36	87.73	3,727.95	7.37
	10/31/07		80.37	87.85	3,727.93	7.48
	11/12/07		80.36	87.51	3,727.98	7.15
	12/28/07		80.83	87.61	3,727.54	6.78
	12/3/07		80.34	87.35	3,728.01	7.01

Table 1
Groundwater Elevations and
Phase Separated Hydrocarbon (PSH) Thicknesses
Plains Pipeline, L.P.
C. S. Cayler
NMOCD REF. # AP-052 (OLD 1R-0382)
Lea County, NM SRS# 2002-10250
Talon/LPE Project Number PLAINS044SPL

Monitoring Well	Date Gauged	Surveyed Top of Casing Elevation (feet)	Depth to PSH BTOC (feet)*	Depth to Water BTOC (feet)*	Corrected Groundwater Elevation (feet)*	PSH Thickness (feet)
MW-6	10/21/04	WELL INSTALLED 21-Oct-04				
	10/27/04	3,809.17		75.13	3,734.04	
	10/29/04			75.13	3,734.04	
	11/19/04			75.23	3,733.94	
	3/31/05			75.33	3,733.84	
	4/25/05			75.27	3,733.90	
	5/12/05			75.30	3,733.87	
	5/31/05			75.33	3,733.84	
	6/29/05			75.68	3,733.49	
	8/22/05			76.63	3,732.54	
	9/15/05			76.80	3,732.37	
	11/14/05			77.41	3,731.76	
	1/23/06			77.60	3,731.57	
	3/1/06			77.01	3,732.16	
	5/25/06			77.92	3,731.25	
	8/14/06			79.18	3,729.99	
	11/29/06			80.12	3,729.05	
	12/12/06			80.19	3,728.98	
	1/11/07			80.20	3,728.97	
	2/8/07			79.99	3,729.18	
	2/20/07			80.36	3,728.81	
	3/6/07			80.40	3,728.77	
	3/14/07			79.92	3,729.25	
	3/27/07			80.62	3,728.55	
	3/29/07			80.34	3,728.83	
	4/3/07			80.68	3,728.49	
	4/11/07			81.03	3,728.14	
	4/17/07			80.82	3,728.35	
	6/13/07			80.88	3,728.29	
	6/26/07			81.04	3,728.13	
	9/14/07			81.62	3,727.55	
	10/19/07			81.64	3,727.53	
	12/3/07			81.56	3,727.61	
MW-7	10/21/04	WELL INSTALLED 21-Oct-04				
	10/27/04	3,809.95	75.82	76.05	3,734.11	0.23
	10/29/04		75.82	76.05	3,734.11	0.23
	11/19/04		75.21	79.14	3,734.35	3.93
	3/31/05		75.22	79.18	3,734.33	3.96
	4/25/05		74.37	82.84	3,734.73	8.47
	5/31/05		75.41	78.75	3,734.21	3.34
	6/29/05		74.86	83.31	3,734.25	8.45
	9/15/05		75.92	83.58	3,733.26	7.66
	11/14/05		76.75	83.17	3,732.56	6.42
	1/23/06		77.16	83.54	3,732.15	6.38
	3/1/06		76.71	82.60	3,732.65	5.89
	5/25/06		77.71	79.37	3,732.07	1.66
	8/14/06		78.61	83.34	3,730.87	4.73
	11/29/06		79.51	83.15	3,730.08	3.64
	12/12/06		79.95	83.00	3,729.70	3.05
	1/11/07		79.77	84.41	3,729.72	4.64
	2/8/07		79.63	84.15	3,729.87	4.52
	4/3/07		80.09	84.18	3,729.45	4.09
	4/11/07		80.73	84.91	3,728.80	4.18
	4/17/07		80.74	84.96	3,728.79	4.22
	5/14/07		80.30	84.42	3,729.24	4.12
	6/26/07		80.70	82.68	3,729.05	1.98
	6/28/07		80.52	83.66	3,729.12	3.14
	8/13/07		81.22	83.66	3,728.49	2.44
	8/21/07		81.37	83.44	3,728.37	2.07
	9/14/07		81.01	84.25	3,728.62	3.24
	9/26/07		80.97	84.30	3,728.65	3.33
	10/5/07		80.92	84.33	3,728.69	3.41
	10/8/07		80.92	84.32	3,728.69	3.40
	10/19/07		81.04	84.30	3,728.58	3.26
	10/24/07		81.05	84.30	3,728.58	3.25
	10/31/07		81.08	84.34	3,728.54	3.26
	11/12/07		81.02	84.35	3,728.60	3.33
	11/28/07		80.89			3.46**
	12/3/07		80.98			3.43**

Table 1
Groundwater Elevations and
Phase Separated Hydrocarbon (PSH) Thicknesses
Plains Pipeline, L.P.
C. S. Cayler
NMOCD REF. # AP-052 (OLD 1R-0382)
Lea County, NM SRS# 2002-10250
Talon/LPE Project Number PLAINS044SPL

Monitoring Well	Date Gauged	Surveyed Top of Casing Elevation (feet)	Depth to PSH BTOC (feet)*	Depth to Water BTOC (feet)*	Corrected Groundwater Elevation (feet)*	PSH Thickness (feet)
MW-8	10/20/04	WELL INSTALLED 20-Oct-04				
	10/27/04	3,810.29		76.20	3,734.09	ND
	10/29/04			76.20	3,734.09	ND
	11/19/04			76.26	3,734.03	ND
	3/31/05			76.30	3,733.99	ND
	4/25/05			76.29	3,734.00	ND
	5/12/05			76.32	3,733.97	ND
	5/31/05			76.34	3,733.95	ND
	6/29/05			76.62	3,733.67	ND
	8/22/05		77.42	78.08	3,732.80	0.66
	11/14/05		78.16	79.40	3,732.01	1.24
	1/23/06		78.25	80.13	3,731.85	1.88
	3/1/06		77.60	80.55	3,732.40	2.95
	5/25/06		78.43	81.31	3,731.57	2.88
	8/14/06		79.63	82.84	3,730.34	3.21
	11/29/06		80.50	83.79	3,729.46	3.29
	12/12/06		80.59	83.90	3,729.37	3.31
	1/11/07		80.63	83.88	3,729.34	3.25
	2/8/07		80.66	83.94	3,729.30	3.28
	2/20/07		80.81	84.07	3,729.15	3.26
	3/6/07		80.88	84.11	3,729.09	3.23
	3/14/07		80.09	83.26	3,729.88	3.17
	3/27/07		80.13	83.24	3,729.85	3.11
	4/3/07		81.10	83.04	3,729.00	1.94
	4/11/07		81.59	83.49	3,728.51	1.90
	4/17/07		81.61	83.51	3,728.49	1.90
	5/24/07		81.33			1.77**
	6/26/07		81.62			1.48**
	6/28/07		81.52			1.58**
	8/13/07		81.86			2.1**
	8/21/07		81.96			1.79**
	8/28/07		82.02			1.73**
	9/14/07		82.35	82.36	3,727.94	0.01
	9/26/07		81.99	83.03	3,728.20	1.04
	10/5/07		81.97	84.33	3,728.08	2.36
	10/8/07		81.96	83.63	3,728.16	1.67
	10/19/07		82.04	82.41	3,728.21	0.37
	11/12/07		82.04	82.43	3,728.21	0.39
	11/28/07		82.04			0.46**
	12/3/07		82.11			0.48**

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Plains Pipeline, L.P.
C. S. Cayler
NMOCD REF. # AP-052 (OLD 1R-0382)
Lea County, NM SRS# 2002-10250
Talon/LPE Project Number PLAINS044SPL

Monitoring Well	Date Gauged	Surveyed Top of Casing Elevation (feet)	Depth to PSH BTOC (feet)*	Depth to Water BTOC (feet)*	Corrected Groundwater Elevation (feet)*	PSH Thickness (feet)
MW-9	10/19/04	WELL INSTALLED 19-Oct-04				
	10/27/04	3,809.81		75.85	3,733.96	
	10/29/04			75.85	3,733.96	
	11/19/04			75.91	3,733.90	
	3/31/05			76.97	3,733.84	
	4/25/05			75.91	3,733.90	
	5/12/05			75.96	3,733.85	
	5/31/05			75.99	3,733.82	
	6/29/05			76.34	3,733.47	
	8/22/05			77.31	3,732.50	
	9/15/05			77.48	3,732.33	
	11/14/05			78.15	3,731.66	
	1/23/06			78.33	3,731.48	
	3/1/06			77.78	3,732.03	
	5/25/06			78.67	3,731.14	
	8/14/06			79.90	3,729.91	
	11/29/06			80.87	3,728.94	
	12/12/06			80.93	3,728.88	
	1/11/07			90.94	3,718.87	
	2/8/07			80.70	3,729.11	
	2/20/07			81.09	3,728.72	
	3/6/07			81.15	3,728.66	
	3/14/07			80.65	3,729.16	
	3/27/07			81.34	3,728.47	
	3/29/07			81.11	3,728.70	
	4/3/07			81.12	3,728.69	
	4/11/07			81.50	3,728.31	
	4/17/07			81.60	3,728.21	
	5/21/07			81.61	3,728.20	
	6/13/07			81.65	3,728.16	
	6/26/07			81.78	3,728.03	
	9/14/07			82.33	3,727.48	
	10/19/07			82.37	3,727.44	
	12/3/07			82.30	3,727.51	

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Phase Separated Hydrocarbon (PSH) Thicknesses
Plains Pipeline, L.P.
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Lea County, NM SRS# 2002-10250
Talon/LPE Project Number PLAINS044SPL

Monitoring Well	Date Gauged	Surveyed Top of Casing Elevation (feet)	Depth to PSH BTOC (feet)*	Depth to Water BTOC (feet)*	Corrected Groundwater Elevation (feet)*	PSH Thickness (feet)
MW-10	10/20/04	WELL INSTALLED 20-Oct-04				
	10/27/04	3,809.64		75.76	3,733.88	
	10/29/04			75.76	3,733.88	
	11/19/04			75.84	3,733.80	
	3/31/05			75.87	3,733.77	
	4/25/05			75.85	3,733.79	
	5/12/05			75.96	3,733.68	
	5/31/05			75.91	3,733.73	
	6/29/05			76.30	3,733.34	
	8/22/05			77.32	3,732.32	
	9/15/05			77.46	3,732.18	
	11/14/05			78.08	3,731.56	
	1/23/06			78.22	3,731.42	
	3/1/06			77.58	3,732.06	
	5/25/06			78.66	3,730.98	
	8/14/06			79.96	3,729.68	
	11/29/06			80.84	3,728.80	
	12/12/06			80.91	3,728.73	
	1/11/07			80.84	3,728.80	
	2/8/07			80.59	3,729.05	
	2/20/07			81.00	3,728.64	
	3/6/07			81.08	3,728.56	
	3/14/07			80.52	3,729.12	
	3/27/07			81.33	3,728.31	
	3/29/07			81.07	3,728.57	
	4/3/07			81.37	3,728.27	
	4/11/07			81.46	3,728.18	
	4/17/07			81.53	3,728.11	
	5/24/07			81.54	3,728.10	
	6/13/07			81.59	3,728.05	
	6/26/07			81.78	3,727.86	
	9/14/07			82.30	3,727.34	
	10/19/07			82.33	3,727.31	
	12/3/07			85.26	3,724.38	

Table 1
Groundwater Elevations and
Phase Separated Hydrocarbon (PSH) Thicknesses
Plains Pipeline, L.P.
C. S. Cayler
NMOCD REF. # AP-052 (OLD 1R-0382)
Lea County, NM SRS# 2002-10250
Talon/LPE Project Number PLAINS044SPL

Monitoring Well	Date Gauged	Surveyed Top of Casing Elevation (feet)	Depth to PSH BTOC (feet)*	Depth to Water BTOC (feet)*	Corrected Groundwater Elevation (feet)*	PSH Thickness (feet)
MW-11	2/21/06	WELL INSTALLED 2/21/06				
	3/1/06	3,808.95		76.95	3,732.00	
	5/25/06			78.06	3,730.89	
	8/14/06			79.57	3,729.38	
	11/29/06			80.26	3,728.69	
	12/12/06			80.27	3,728.68	
	1/11/07			80.19	3,728.76	
	2/8/07			79.91	3,729.04	
	2/20/07			80.35	3,728.60	
	3/6/07			80.42	3,728.53	
	3/14/07			80.01	3,728.94	
	3/27/09			80.43	3,728.52	
	3/29/09			80.46	3,728.49	
	4/3/07			80.96	3,727.99	
	4/11/07			80.86	3,728.09	
	4/17/07			80.94	3,728.01	
	5/24/07			80.89	3,728.06	
	6/13/07			81.08	3,727.87	
	6/26/07			81.19	3,727.76	
	9/14/07			81.68	3,727.27	
	10/19/07			81.76	3,727.19	
	12/3/07			81.60	3,727.35	
MW-12	2/23/06	WELL INSTALLED 2/23/06				
	3/1/06	3,809.63		77.60	3,732.03	
	5/25/06			78.68	3,730.95	
	8/14/06			79.99	3,729.64	
	11/29/06			80.86	3,728.77	
	12/12/06			80.90	3,728.73	
	1/11/07			80.81	3,728.82	
	2/8/07			80.55	3,729.08	
	2/20/07			80.96	3,728.67	
	3/6/07			81.04	3,728.59	
	3/14/07			81.15	3,728.48	
	3/27/07			81.31	3,728.32	
	3/29/07			81.15	3,728.48	
	4/3/07			81.35	3,728.28	
	4/11/07			81.87	3,727.76	
	4/17/07			81.50	3,728.13	
	5/24/07			81.45	3,728.18	
	6/26/07			81.79	3,727.84	
	9/14/07			82.29	3,727.34	
	10/19/07			82.36	3,727.27	
	12/3/07			82.20	3,727.43	

Table 1
Groundwater Elevations and
Phase Separated Hydrocarbon (PSH) Thicknesses
Plains Pipeline, L.P.
C. S. Cayler
NMOCD REF. # AP-052 (OLD 1R-0382)
Lea County, NM SRS# 2002-10250
Talon/LPE Project Number PLAINS044SPL

Monitoring Well	Date Gauged	Surveyed Top of Casing Elevation (feet)	Depth to PSH BTOC (feet)*	Depth to Water BTOC (feet)*	Corrected Groundwater Elevation (feet)*	PSH Thickness (feet)
MW-13	2/22/06	WELL INSTALLED 2/22/06				
	3/1/06	3,809.42		77.33	3,732.09	
	5/25/06			78.35	3,731.07	
	8/14/06			79.59	3,729.83	
	11/29/06			80.51	3,728.91	
	12/12/06			80.68	3,728.74	
	1/11/07			80.48	3,728.94	
	2/8/07			80.25	3,729.17	
	2/20/07			80.86	3,728.56	
	3/6/07			80.71	3,728.71	
	3/14/07			80.82	3,728.60	
	3/27/07			79.97	3,729.45	
	3/29/07			80.70	3,728.72	
	4/3/07			81.02	3,728.40	
	4/11/07			81.62	3,727.80	
	4/17/07			81.17	3,728.25	
	5/24/07			81.19	3,728.23	
	6/26/07			81.42	3,728.00	
	9/14/07			81.99	3,727.43	
	10/19/07			82.02	3,727.40	
	12/3/07			81.91	3,727.51	
MW-14	2/21/06	WELL INSTALLED 2/21/06				
	3/1/06	3,809.46		77.31	3,732.15	
	5/25/06			78.29	3,731.17	
	8/14/06			79.41	3,730.05	
	11/29/06			80.37	3,729.09	
	12/12/06			80.51	3,728.95	
	1/11/07			80.53	3,728.93	
	2/8/07			80.20	3,729.26	
	2/20/07			80.61	3,728.85	
	3/6/07			80.65	3,728.81	
	3/14/07			80.02	3,729.44	
	3/27/07			80.85	3,728.61	
	3/29/07			80.59	3,728.87	
	4/3/07			80.91	3,728.55	
	4/11/07			80.59	3,728.87	
	4/17/07			81.04	3,728.42	
	5/24/07			81.10	3,728.36	
	6/26/07			81.28	3,728.18	
	9/14/07			81.88	3,727.58	
	10/19/07			81.89	3,727.57	
	12/3/07			81.78	3,727.68	

Table 1
Groundwater Elevations and
Phase Separated Hydrocarbon (PSH) Thicknesses
Plains Pipeline, L.P.
C. S. Cayler
NMOCD REF. # AP-052 (OLD 1R-0382)
Lea County, NM SRS# 2002-10250
Talon/LPE Project Number PLAINS044SPL

Monitoring Well	Date Gauged	Surveyed Top of Casing Elevation (feet)	Depth to PSH BTOC (feet)*	Depth to Water BTOC (feet)*	Corrected Groundwater Elevation (feet)*	PSH Thickness (feet)
MW-15	2/22/06		WELL INSTALLED 2/22/06			
	3/1/06	3,810.77		78.50	3,732.27	
	5/25/06			79.41	3,731.36	
	8/14/06			80.54	3,730.23	
	11/29/06			81.54	3,729.23	
	12/12/06			81.63	3,729.14	
	1/11/07			81.67	3,729.10	
	2/8/07			81.43	3,729.34	
	2/20/07			81.81	3,728.96	
	3/6/07			81.85	3,728.92	
	3/14/07			81.16	3,729.61	
	3/27/07			82.07	3,728.70	
	3/29/07			81.40	3,729.37	
	4/3/07			82.11	3,728.66	
	4/11/07			82.70	3,728.07	
	4/17/07			82.24	3,728.53	
	5/24/07			82.30	3,728.47	
	6/26/07			82.48	3,728.29	
	9/14/07			83.05	3,727.72	
	10/19/07			83.06	3,727.71	
	12/3/07			83.02	3,727.75	
MW-16	2/23/06		WELL INSTALLED 2/23/06			
	3/1/06	3,812.02		79.72	3,732.30	
	5/25/06			80.58	3,731.44	
	8/14/06			81.71	3,730.31	
	11/29/06			82.74	3,729.28	
	12/12/06			82.84	3,729.18	
	1/11/07			82.90	3,729.12	
	2/8/07			82.66	3,729.36	
	2/20/07			83.06	3,728.96	
	3/6/07			83.07	3,728.95	
	3/14/07			82.69	3,729.33	
	3/27/07			83.27	3,728.75	
	3/29/07			83.01	3,729.01	
	4/3/07			83.33	3,728.69	
	4/11/07			84.02	3,728.00	
	4/17/07			83.44	3,728.58	
	5/24/07			83.55	3,728.47	
	6/26/07			83.69	3,728.33	
	9/14/07			84.25	3,727.77	
	10/19/07			84.28	3,727.74	
	12/3/07			84.24	3,727.78	

Table 1
Groundwater Elevations and
Phase Separated Hydrocarbon (PSH) Thicknesses
Plains Pipeline, L.P.
C. S. Cayler
NMOCD REF. # AP-052 (OLD 1R-0382)
Lea County, NM SRS# 2002-10250
Talon/LPE Project Number PLAINS044SPL

Monitoring Well	Date Gauged	Surveyed Top of Casing Elevation (feet)	Depth to PSH BTOC (feet)*	Depth to Water BTOC (feet)*	Corrected Groundwater Elevation (feet)*	PSH Thickness (feet)
MW-17	2/23/06	WELL INSTALLED 2/23/06				
	3/1/06	3,810.40		78.07	3,732.33	
	5/25/06			78.92	3,731.48	
	8/14/06			80.02	3,730.38	
	11/29/06			81.10	3,729.30	
	12/12/06			81.20	3,729.20	
	1/11/07			81.25	3,729.15	
	2/8/07			81.06	3,729.34	
	2/20/07			81.45	3,728.95	
	3/6/07			81.48	3,728.92	
	3/14/07			80.89	3,729.51	
	3/27/07			81.65	3,728.75	
	3/29/07			81.40	3,729.00	
	4/3/07			81.70	3,728.70	
	4/11/07			82.11	3,728.29	
	4/17/07			81.83	3,728.57	
	5/22/07			81.92	3,728.48	
	6/26/07			82.06	3,728.34	
	9/14/07			82.59	3,727.81	
	10/19/07			82.60	3,727.80	
	12/3/07			82.56	3,727.84	

Top of casing elevations referenced to groundwater monitoring well MW-3, which was assigned an elevation of 3,760 feet amsl.

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

** TD of well used for calculation of PSH thickness

- - = Not Detected

BTOC = Below Top of Casing

TALON LPE

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
PLAINS PIPELINE, L.P.
CS CAYLER
NMOCD REF. # AP-052 (OLD 1R-0382)
LEA COUNTY, NEW MEXICO - SRS# 2002-10250
Talon/LPE Project Number PLAINS044SPL

All concentrations are in mg/L

Sample Location	Sample Date	Benzene	Ethyl-benzene	m,p-Xylenes	o-Xylene	Toluene
MW-1	03/29/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	06/13/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	09/14/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	12/03/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	03/29/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	06/13/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	09/14/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	12/03/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-3	03/29/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	06/13/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	09/14/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	12/03/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-4	03/29/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	06/13/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	09/14/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	12/03/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-5	03/29/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	06/13/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	09/14/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	12/03/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-6	03/29/07	**0.112**	0.00184	0.00841	0.00302	0.0220
	06/13/07	**0.101**	<0.001	0.00655	0.00264	0.0206
	09/14/07	**0.0968**	0.0013	0.0051	0.0029	0.0104
	12/03/07	**0.1491**	0.0011	0.0086	0.0046	0.0209
MW-7	03/29/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	06/13/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	09/14/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	12/03/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-8	03/29/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	06/13/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	09/14/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	12/03/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
PLAINS PIPELINE, L.P.
CS CAYLER
NMOCD REF. # AP-052 (OLD 1R-0382)
LEA COUNTY, NEW MEXICO - SRS# 2002-10250
Talon/LPE Project Number PLAINS044SPL

All concentrations are in mg/L

Sample Location	Sample Date	Benzene	Ethyl-benzene	m,p-Xylenes	o-Xylene	Toluene
MW-9	03/29/07	**0.0186**	0.000281	0.00157	<0.001	0.000482
	06/13/07	0.00910	<0.001	0.00504	<0.001	0.000653
	09/14/07	0.0081	<0.001	0.0045	<0.001	<0.001
	12/03/07	0.0049	<0.001	0.0100	<0.001	<0.002
MW-10	03/29/07	0.00696	0.000309	0.00151	<0.001	0.00140
	06/13/07	0.00362	<0.001	0.00237	<0.001	0.00137
	09/14/07	0.0056	<0.001	0.0023	<0.001	<0.001
	12/03/07	0.0046	<0.001	<0.002	<0.001	<0.002
MW-11	03/29/07	0.000623	<0.001	0.000946	<0.001	<0.001
	06/13/07	<0.001	<0.001	0.000539	<0.001	<0.001
	09/14/07	0.0013	<0.001	<0.002	<0.001	<0.001
	12/03/07	0.0010	<0.001	<0.002	<0.001	<0.002
MW-12	03/29/07	**18.4**	**1.46**	**1.71**	**0.745**	**4.65**
	06/13/07	**27.6**	**1.16**	**1.05**	**0.395**	**4.87**
	09/14/07	**18.66**	**0.7570**	**0.8450**	**0.2950**	**1.490**
	12/03/07	**24.91**	0.6060	**0.7080**	**0.2020**	**1.080**
MW-13	03/29/07	**0.0313**	0.00508	0.00824	0.00304	0.00911
	06/13/07	**0.0122**	0.00207	0.00255	0.00102	0.00427
	09/14/07	<0.001	<0.001	<0.002	<0.001	<0.001
	12/03/07	0.0021	<0.001	<0.002	<0.001	<0.002
MW-14	03/29/07	0.00402	0.000542	0.000669	<0.001	0.00139
	06/13/07	0.00794	0.000965	0.00122	<0.001	0.00235
	09/14/07	0.0016	<0.001	<0.002	<0.001	<0.001
	12/03/07	<0.001	<0.001	<0.002	<0.001	<0.002
MW-15	03/29/07	0.00291	0.000344	<0.001	<0.001	0.000877
	06/13/07	0.00171	<0.001	<0.001	<0.001	<0.001
	09/14/07	**0.0123**	<0.001	<0.002	<0.001	0.0012
	12/03/07	0.0013	<0.001	<0.002	<0.001	<0.002
MW-16	03/29/07	**0.0665**	0.00154	0.00636	0.000648	0.0132
	06/13/07	**0.0198**	0.000741	0.00290	<0.001	0.00494
	09/14/07	**0.0240**	<0.001	<0.002	<0.001	0.0032
	12/03/07	**0.2048**	0.0015	0.0060	<0.001	0.0040
MW-17	03/29/07	0.00177	<0.001	<0.001	<0.001	0.000399
	06/13/07	0.000696	<0.001	<0.001	<0.001	<0.001
	09/14/07	<0.001	<0.001	<0.002	<0.001	<0.001
	12/03/07	0.0022	<0.001	<0.002	<0.001	<0.002
NMWQCC Remedial Limits		0.010	0.750	Total Xylenes 0.620		0.750

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

TALON LPE

TABLE 3
SUMMARY OF GROUNDWATER POLY-AROMATIC HYDROCARBON (PAH) ANALYTICAL RESULTS
PLAINS PIPELINE, L.P.
CS CAYLER
NMOCD REF. # AP-052 (OLD 1R-0382)
LEA COUNTY, NEW MEXICO - SRS# 2002-10250
Talon/LPE Project Number PLAINS044SPL

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[j,k]-fluoranthene	Chrysene	Dibenz[a,h]-anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]-pyrene	Naphthalene	Phenanthrene	Pyrene
MW-1	03/29/07	Not sampled Due to Presence of Phase Separated Hydrocarbons															
MW-2	03/29/07	Not sampled Due to Presence of Phase Separated Hydrocarbons															
MW-3	03/29/07	Not sampled Due to Presence of Phase Separated Hydrocarbons															
MW-4	03/29/07	Not sampled Due to Presence of Phase Separated Hydrocarbons															
MW-5	03/29/07	Not sampled Due to Presence of Phase Separated Hydrocarbons															
MW-6	03/29/07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-7	03/29/07	Not sampled Due to Presence of Phase Separated Hydrocarbons															
MW-8	03/29/07	Not sampled Due to Presence of Phase Separated Hydrocarbons															
MW-9	04/03/07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-10	03/29/07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-11	03/29/07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-12	03/29/07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	**0.091**	<0.005	<0.005
MW-13	03/29/07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-14	03/29/07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-15	03/29/07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-16	03/29/07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-17	03/29/07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
NMWQCC Remedial Limits		0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030

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

APPENDIX C

Laboratory Analytical Reports and Chain of Custody Documentation

Analytical Report 279975

for

PLAINS ALL AMERICAN EH&S

Project Manager: Camille Reynolds

C.S. Caylor

2002-10250

04-APR-07

12600 West I-20 East Odessa, Texas 79765

NELAC certification numbers:
Houston, TX E87603 - Miami, FL E86678 - Tampa, FL E86675

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America

XENCO Laboratories

04-APR-07

Project Manager: **Camille Reynolds**
PLAINS ALL AMERICAN EH&S
1301 S. COUNTY ROAD 1150
Midland, TX 79706

Reference: XENCO Report No: **279975**
C.S. Caylor
Project Address:

Camille Reynolds:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 279975. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 279975 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 279975

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: C.S. Caylor

Project Id: 2002-10250
Contact: Camille Reynolds
Project Location:

Date Received in Lab: Mar-30-07 08:45 am
Report Date: 04-APR-07
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	279975-001		279975-003		279975-004		279975-005	
	Field Id:	MW-6		MW-10		MW-11		MW-12	
	Depth:								
	Matrix:	WATER		WATER		WATER		WATER	
	Sampled:	Mar-29-07 14:27		Mar-29-07 13:40		Mar-29-07 13:53		Mar-29-07 14:04	
SVOA PAHs List by EPA 8270C	*Extracted:*	Apr-02-07 10:36		Apr-02-07 10:38		Apr-02-07 10:40		Apr-02-07 10:42	
	Analyzed:	Apr-03-07 16:33		Apr-03-07 17:16		Apr-03-07 18:00		Apr-03-07 18:43	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Acenaphthene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Acenaphthylene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Anthracene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Benzo(a)anthracene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Benzo(a)pyrene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Benzo(b)fluoranthene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Benzo(k)fluoranthene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Benzo(g,h,i)perylene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Chrysene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Dibenz(a,h)Anthracene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Fluoranthene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Fluorene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Indeno(1,2,3-c,d)Pyrene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Naphthalene		ND	0.005	ND	0.005	ND	0.005	0.091	0.005
Phenanthrene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Pyrene		ND	0.005	ND	0.005	ND	0.005	ND	0.005

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 279975

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: C.S. Caylor

Project Id: 2002-10250
Contact: Camille Reynolds
Project Location:

Date Received in Lab: Mar-30-07 08:45 am
Report Date: 04-APR-07
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	279975-006		279975-007		279975-008		279975-009	
	Field Id:	MW-13		MW-14		MW-15		MW-16	
	Depth:								
	Matrix:	WATER		WATER		WATER		WATER	
	Sampled:	Mar-29-07 14:14		Mar-29-07 14:21		Mar-29-07 14:37		Mar-29-07 14:40	
SVOA PAHs List by EPA 8270C	*Extracted:*	Apr-02-07 10:44		Apr-02-07 10:46		Apr-02-07 10:48		Apr-02-07 10:50	
	Analyzed:	Apr-03-07 19:26		Apr-03-07 20:09		Apr-03-07 20:52		Apr-03-07 21:35	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Acenaphthene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Acenaphthylene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Anthracene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Benzo(a)anthracene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Benzo(a)pyrene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Benzo(b)fluoranthene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Benzo(k)fluoranthene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Benzo(g,h,i)perylene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Chrysene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Dibenz(a,h)Anthracene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Fluoranthene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Fluorene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Indeno(1,2,3-c,d)Pyrene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Naphthalene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Phenanthrene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Pyrene		ND	0.005	ND	0.005	ND	0.005	ND	0.005

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 279975

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: C.S. Caylor

Project Id: 2002-10250
Contact: Camille Reynolds
Project Location:

Date Received in Lab: Mar-30-07 08:45 am
Report Date: 04-APR-07
Project Manager: Brent Barron, II

Analysis Requested			
	Lab Id:	279975-010	
	Field Id:	MW-17	
	Depth:		
	Matrix:	WATER	
	Sampled:	Mar-29-07 14:27	
SVOA PAHs List by EPA 8270C	***Extracted:***	Apr-02-07 10:52	
	Analyzed:	Apr-03-07 22:19	
	Units/RL:	mg/L	RL
Acenaphthene		ND	0.005
Acenaphthylene		ND	0.005
Anthracene		ND	0.005
Benzo(a)anthracene		ND	0.005
Benzo(a)pyrene		ND	0.005
Benzo(b)fluoranthene		ND	0.005
Benzo(k)fluoranthene		ND	0.005
Benzo(g,h,i)perylene		ND	0.005
Chrysene		ND	0.005
Dibenz(a,h)Anthracene		ND	0.005
Fluoranthene		ND	0.005
Fluorene		ND	0.005
Indeno(1,2,3-c,d)Pyrene		ND	0.005
Naphthalene		ND	0.005
Phenanthrene		ND	0.005
Pyrene		ND	0.005

Brent Barron
Odessa Laboratory Director

XENCO Laboratories

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

Form 2 - Surrogate Recoveries

Project Name: C.S. Caylor

Work Order #: 279975 **Project ID:** 2002-10250

Lab Batch #: 694393 **Sample:** 279817-001 S / MS **Batch:** 1 **Matrix:** Sludge

Units: mg/L

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.184	0.250	74	43-116	
2-Fluorophenol	0.158	0.250	63	21-100	
Nitrobenzene-d5	0.172	0.250	69	35-114	
Phenol-d6	0.134	0.250	54	10-94	
Terphenyl-D14	0.203	0.250	81	33-141	
2,4,6-Tribromophenol	0.210	0.250	84	10-123	

Lab Batch #: 694393 **Sample:** 279975-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.037	0.050	74	43-116	
2-Fluorophenol	0.019	0.050	38	21-100	
Nitrobenzene-d5	0.036	0.050	72	35-114	
Phenol-d6	0.011	0.050	22	10-94	
Terphenyl-D14	0.038	0.050	76	33-141	
2,4,6-Tribromophenol	0.042	0.050	84	10-123	

Lab Batch #: 694393 **Sample:** 279975-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.035	0.050	70	43-116	
2-Fluorophenol	0.014	0.050	28	21-100	
Nitrobenzene-d5	0.032	0.050	64	35-114	
Phenol-d6	0.008	0.050	16	10-94	
Terphenyl-D14	0.032	0.050	64	33-141	
2,4,6-Tribromophenol	0.040	0.050	80	10-123	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: C.S. Caylor

Work Order #: 279975 **Project ID:** 2002-10250

Lab Batch #: 694393 **Sample:** 279975-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.036	0.050	72	43-116	
2-Fluorophenol	0.016	0.050	32	21-100	
Nitrobenzene-d5	0.036	0.050	72	35-114	
Phenol-d6	0.009	0.050	18	10-94	
Terphenyl-D14	0.040	0.050	80	33-141	
2,4,6-Tribromophenol	0.042	0.050	84	10-123	

Lab Batch #: 694393 **Sample:** 279975-005 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.033	0.050	66	43-116	
2-Fluorophenol	0.014	0.050	28	21-100	
Nitrobenzene-d5	0.033	0.050	66	35-114	
Phenol-d6	0.009	0.050	18	10-94	
Terphenyl-D14	0.034	0.050	68	33-141	
2,4,6-Tribromophenol	0.042	0.050	84	10-123	

Lab Batch #: 694393 **Sample:** 279975-006 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.039	0.050	78	43-116	
2-Fluorophenol	0.019	0.050	38	21-100	
Nitrobenzene-d5	0.039	0.050	78	35-114	
Phenol-d6	0.010	0.050	20	10-94	
Terphenyl-D14	0.042	0.050	84	33-141	
2,4,6-Tribromophenol	0.043	0.050	86	10-123	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: C.S. Caylor

Work Order #: 279975 **Project ID:** 2002-10250

Lab Batch #: 694393 **Sample:** 279975-007 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.035	0.050	70	43-116	
2-Fluorophenol	0.016	0.050	32	21-100	
Nitrobenzene-d5	0.034	0.050	68	35-114	
Phenol-d6	0.009	0.050	18	10-94	
Terphenyl-D14	0.037	0.050	74	33-141	
2,4,6-Tribromophenol	0.041	0.050	82	10-123	

Lab Batch #: 694393 **Sample:** 279975-008 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.064	0.100	64	43-116	
2-Fluorophenol	0.029	0.100	29	21-100	
Nitrobenzene-d5	0.064	0.100	64	35-114	
Phenol-d6	0.016	0.100	16	10-94	
Terphenyl-D14	0.064	0.100	64	33-141	
2,4,6-Tribromophenol	0.075	0.100	75	10-123	

Lab Batch #: 694393 **Sample:** 279975-009 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.034	0.050	68	43-116	
2-Fluorophenol	0.014	0.050	28	21-100	
Nitrobenzene-d5	0.033	0.050	66	35-114	
Phenol-d6	0.008	0.050	16	10-94	
Terphenyl-D14	0.036	0.050	72	33-141	
2,4,6-Tribromophenol	0.038	0.050	76	10-123	

** *Surrogates outside limits; data and surrogates confirmed by reanalysis*

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: C.S. Caylor

Work Order #: 279975 **Project ID:** 2002-10250

Lab Batch #: 694393 **Sample:** 279975-010 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.035	0.050	70	43-116	
2-Fluorophenol	0.019	0.050	38	21-100	
Nitrobenzene-d5	0.036	0.050	72	35-114	
Phenol-d6	0.010	0.050	20	10-94	
Terphenyl-D14	0.037	0.050	74	33-141	
2,4,6-Tribromophenol	0.037	0.050	74	10-123	

Lab Batch #: 694393 **Sample:** 493724-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.038	0.050	76	43-116	
2-Fluorophenol	0.030	0.050	60	21-100	
Nitrobenzene-d5	0.036	0.050	72	35-114	
Phenol-d6	0.022	0.050	44	10-94	
Terphenyl-D14	0.041	0.050	82	33-141	
2,4,6-Tribromophenol	0.042	0.050	84	10-123	

Lab Batch #: 694393 **Sample:** 493724-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.037	0.050	74	43-116	
2-Fluorophenol	0.028	0.050	56	21-100	
Nitrobenzene-d5	0.036	0.050	72	35-114	
Phenol-d6	0.020	0.050	40	10-94	
Terphenyl-D14	0.041	0.050	82	33-141	
2,4,6-Tribromophenol	0.039	0.050	78	10-123	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: C.S. Caylor

Work Order #: 279975 **Project ID:** 2002-10250

Lab Batch #: 694393 **Sample:** 493724-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.041	0.050	82	43-116	
2-Fluorophenol	0.032	0.050	64	21-100	
Nitrobenzene-d5	0.039	0.050	78	35-114	
Phenol-d6	0.023	0.050	46	10-94	
Terphenyl-D14	0.043	0.050	86	33-141	
2,4,6-Tribromophenol	0.045	0.050	90	10-123	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

XENCO Laboratories

BS / BSD Recoveries

Project Name: C.S. Caylor

Work Order #: 279975 **Project ID:** 2002-10250

Analyst: TTD **Date Prepared:** 04/02/2007 **Date Analyzed:** 04/03/2007

Lab Batch ID: 694393 **Sample:** 493724-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

SVOA PAHs List by EPA 8270C	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Acenaphthene	ND	0.050	0.037	74	0.05	0.040	80	8	27-132	31	
Acenaphthylene	ND	0.050	0.037	74	0.05	0.040	80	8	46-108	25	
Anthracene	ND	0.050	0.038	76	0.05	0.040	80	5	47-145	25	
Benzo(a)anthracene	ND	0.050	0.039	78	0.05	0.041	82	5	33-143	25	
Benzo(a)pyrene	ND	0.050	0.039	78	0.05	0.041	82	5	65-135	25	
Benzo(b)fluoranthene	ND	0.050	0.040	80	0.05	0.043	86	7	24-159	25	
Benzo(k)fluoranthene	ND	0.050	0.039	78	0.05	0.040	80	3	25-125	25	
Benzo(g,h,i)perylene	ND	0.050	0.041	82	0.05	0.043	86	5	65-135	25	
Chrysene	ND	0.050	0.039	78	0.05	0.041	82	5	65-135	25	
Dibenz(a,h)Anthracene	ND	0.050	0.040	80	0.05	0.042	84	5	50-125	25	
Fluoranthene	ND	0.050	0.040	80	0.05	0.042	84	5	47-125	25	
Fluorene	ND	0.050	0.038	76	0.05	0.041	82	8	48-139	25	
Indeno(1,2,3-c,d)Pyrene	ND	0.050	0.039	78	0.05	0.041	82	5	27-160	25	
Naphthalene	ND	0.050	0.036	72	0.05	0.040	80	11	26-175	25	
Phenanthrene	ND	0.050	0.039	78	0.05	0.040	80	3	65-135	25	
Pyrene	ND	0.050	0.039	78	0.05	0.041	82	5	23-152	31	

Relative Percent Difference RPD = 200*|(D-F)/(D+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

XENCO Laboratories

Form 3 - MS Recoveries

Project Name: C.S. Caylor

Work Order #: 279975
Lab Batch #: 694393
Date Analyzed: 04/03/2007
QC- Sample ID: 279817-001 S
Reporting Units: mg/L

Date Prepared: 04/02/2007
Batch #: 1

Project ID: 2002-10250
Analyst: TTD
Matrix: Sludge

SVOA PAHs List by EPA 8270C	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Acenaphthene	ND	0.250	0.183	73	27-132	
Acenaphthylene	ND	0.250	0.174	70	46-108	
Anthracene	ND	0.250	0.189	76	47-145	
Benzo(a)anthracene	ND	0.250	0.189	76	33-143	
Benzo(a)pyrene	ND	0.250	0.190	76	65-135	
Benzo(b)fluoranthene	ND	0.250	0.199	80	24-159	
Benzo(k)fluoranthene	ND	0.250	0.194	78	25-125	
Benzo(g,h,i)perylene	ND	0.250	0.106	42	65-135	X
Chrysene	ND	0.250	0.187	75	65-135	
Dibenz(a,h)Anthracene	ND	0.250	0.114	46	50-125	X
Fluoranthene	ND	0.250	0.193	77	47-125	
Fluorene	ND	0.250	0.188	75	48-139	
Indeno(1,2,3-c,d)Pyrene	ND	0.250	0.113	45	27-160	
Naphthalene	ND	0.250	0.180	72	26-175	
Phenanthrene	ND	0.250	0.188	75	65-135	
Pyrene	ND	0.250	0.199	80	23-152	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765
Phone: 432-563-1800
Fax: 432-563-1713

C. S. Cay/Or

Project Manager: S. Smith
Company Name: Talon LPE
Company Address: #9E Industrial Rd.
City/State/Zip: Midland, Tx, 79701
Telephone No: 432-522-2133 Fax No: 432-522-2180
Sampler Signature: [signature]

Project Name: Plains 044 SPL
Project #: 2002-10250
Project Loc:
PO #: C. Reynolds
Report Format: ☒ Standard ☐ TRRP ☐ NPDES
e-mail: ssmith@talonLPE.com

(lab use only)
ORDER #: MC30004

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	No. of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Sond NP=Non-Potable Specify Other	Analyze For: TCLP / TOTAL: TPH: 418.1 8015M 1005 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B 5030 or BTEX 8260	RCI	N.O.R.M.	PAH	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	MW-6			3/29/07	1427	3	✓		✓						GW								✓		X			
02	MW-9				1329		✓								GW								✓					
03	MW-10				1340		✓								GW								✓					
04	MW-11				1353		✓								GW								✓					
05	MW-12				1404		✓								GW								✓					
06	MW-13				1414		✓								GW								✓					
07	MW-14				1421		✓								GW								✓					
08	MW-15				1437		✓								GW								✓					
09	MW-16				1440		✓								GW								✓					
10	MW-17			↓	1427	↓	✓		✓						GW								✓		↓			

Special Instructions: 1L Amber → MW-9 broke in transit

Relinquished by	Date	Time	Received by	Date	Time
[signature]	3/30/07	845			
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by	Date	Time	Received by ELOT: [signature]	Date 3/30/07	Time 8:45

Laboratory Comments:
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N
Custody seals on container(s) Y N
Custody seals on cooler(s) Y N
Sample Hand Delivered by Sampler/Client Rep. ? Y N
by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 0.5 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Talon | Plains

Date/ Time: 3/20/07 5:45

Lab ID #: 7C30004

Initials: UK

Sample Receipt Checklist

					Client Initials
1	Temperature of container/ cooler?	Yes	No	0.5 °C	
2	Shipping container in good condition?	Yes	No		
3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
4	Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
5	Chain of Custody present?	Yes	No		
6	Sample instructions complete of Chain of Custody?	Yes	No		
7	Chain of Custody signed when relinquished/ received?	Yes	No		
8	Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid	
9	Container label(s) legible and intact?	Yes	No	Not Applicable	
10	Sample matrix/ properties agree with Chain of Custody?	Yes	No		
11	Containers supplied by ELOT?	Yes	No		
12	Samples in proper container/ bottle?	Yes	No	See Below	
13	Samples properly preserved?	Yes	No	See Below	
14	Sample bottles intact?	Yes	No		
15	Preservations documented on Chain of Custody?	Yes	No		
16	Containers documented on Chain of Custody?	Yes	No		
17	Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
18	All samples received within sufficient hold time?	Yes	No	See Below	
19	Subcontract of sample(s)?	Yes	No	Not Applicable	
20	VOC samples have zero headspace?	Yes	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken:

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

ENVIRONMENTAL LAB OF

1(800) West I-20 East Odessa, Texas 79766

A Xenco Laboratories Company

Analytical Report

Prepared for:

Camille Reynolds

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: C.S. Cayler

Project Number: 2002-10250

Location: None Given

Lab Order Number: 7C30004

Report Date: 04/06/07

Plains All American EH & S	Project: C.S. Cayler	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10250	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-6	7C30004-01	Water	03/29/07 14:27	03-30-2007 08:45
MW-9	7C30004-02	Water	03/29/07 13:29	03-30-2007 08:45
MW-10	7C30004-03	Water	03/29/07 13:40	03-30-2007 08:45
MW-11	7C30004-04	Water	03/29/07 13:53	03-30-2007 08:45
MW-12	7C30004-05	Water	03/29/07 14:04	03-30-2007 08:45
MW-13	7C30004-06	Water	03/29/07 14:14	03-30-2007 08:45
MW-14	7C30004-07	Water	03/29/07 14:21	03-30-2007 08:45
MW-15	7C30004-08	Water	03/29/07 14:37	03-30-2007 08:45
MW-16	7C30004-09	Water	03/29/07 14:40	03-30-2007 08:45
MW-17	7C30004-10	Water	03/29/07 14:27	03-30-2007 08:45

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Plains All American EH & S	Project: C.S. Cayler	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10250	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-6 (7C30004-01) Water									
Benzene	**0.112**	0.00100	mg/L	1	ED70506	04/05/07	04/05/07	EPA 8021B	
Toluene	**0.0220**	0.00100	"	"	"	"	"	"	
Ethylbenzene	**0.00184**	0.00100	"	"	"	"	"	"	
Xylene (p/m)	**0.00841**	0.00100	"	"	"	"	"	"	
Xylene (o)	**0.00302**	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*111 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*91.4 %*	*80-120*		"	"	"	"	
MW-9 (7C30004-02) Water									
Benzene	**0.0186**	0.00100	mg/L	1	ED70506	04/05/07	04/05/07	EPA 8021B	
Toluene	**J [0.000482]**	0.00100	"	"	"	"	"	"	
Ethylbenzene	**J [0.000281]**	0.00100	"	"	"	"	"	"	
Xylene (p/m)	**0.00157**	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*106 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*90.6 %*	*80-120*		"	"	"	"	
MW-10 (7C30004-03) Water									
Benzene	**0.00696**	0.00100	mg/L	1	ED70506	04/05/07	04/05/07	EPA 8021B	
Toluene	**0.00140**	0.00100	"	"	"	"	"	"	
Ethylbenzene	**J [0.000309]**	0.00100	"	"	"	"	"	"	
Xylene (p/m)	**0.00151**	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*106 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*94.0 %*	*80-120*		"	"	"	"	
MW-11 (7C30004-04) Water									
Benzene	**J [0.000623]**	0.00100	mg/L	1	ED70506	04/05/07	04/05/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	**J [0.000946]**	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*102 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*86.6 %*	*80-120*		"	"	"	"	

Plains All American EH & S	Project: C.S. Cayler	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10250	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-12 (7C30004-05) Water									
Benzene	**18.4**	0.0500	mg/L	50	ED70506	04/05/07	04/06/07	EPA 8021B	
Toluene	**4.65**	0.0500	"	"	"	"	"	"	
Ethylbenzene	**1.46**	0.0500	"	"	"	"	"	"	
Xylene (p/m)	**1.71**	0.0500	"	"	"	"	"	"	
Xylene (o)	**0.745**	0.0500	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*110 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*90.6 %*	*80-120*		"	"	"	"	
MW-13 (7C30004-06) Water									
Benzene	**0.0313**	0.00100	mg/L	1	ED70506	04/05/07	04/05/07	EPA 8021B	
Toluene	**0.00911**	0.00100	"	"	"	"	"	"	
Ethylbenzene	**0.00508**	0.00100	"	"	"	"	"	"	
Xylene (p/m)	**0.00824**	0.00100	"	"	"	"	"	"	
Xylene (o)	**0.00304**	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*108 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*91.6 %*	*80-120*		"	"	"	"	
MW-14 (7C30004-07) Water									
Benzene	**0.00402**	0.00100	mg/L	1	ED70506	04/05/07	04/05/07	EPA 8021B	
Toluene	**0.00139**	0.00100	"	"	"	"	"	"	
Ethylbenzene	**J [0.000542]**	0.00100	"	"	"	"	"	"	
Xylene (p/m)	**J [0.000669]**	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*106 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*91.2 %*	*80-120*		"	"	"	"	
MW-15 (7C30004-08) Water									
Benzene	**0.00291**	0.00100	mg/L	1	ED70506	04/05/07	04/05/07	EPA 8021B	
Toluene	**J [0.000877]**	0.00100	"	"	"	"	"	"	
Ethylbenzene	**J [0.000344]**	0.00100	"	"	"	"	"	"	
Xylene (p/m)	**ND**	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*103 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*94.6 %*	*80-120*		"	"	"	"	

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Plains All American EH & S	Project: C.S. Cayler	Fax: (432) 687-4914
1301 S. County Road 1150	Project Number: 2002-10250	
Midland TX, 79706-4476	Project Manager: Camille Reynolds	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-16 (7C30004-09) Water									
Benzene	**0.0665**	0.00100	mg/L	1	ED70506	04/05/07	04/05/07	EPA 8021B	
Toluene	**0.0132**	0.00100	"	"	"	"	"	"	
Ethylbenzene	**0.00154**	0.00100	"	"	"	"	"	"	
Xylene (p/m)	**0.00636**	0.00100	"	"	"	"	"	"	
Xylene (o)	**J [0.000648]**	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*111 %*		*80-120*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*91.6 %*		*80-120*	"	"	"	"	
MW-17 (7C30004-10) Water									
Benzene	**0.00177**	0.00100	mg/L	1	ED70506	04/05/07	04/05/07	EPA 8021B	
Toluene	**J [0.000399]**	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*101 %*		*80-120*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*87.2 %*		*80-120*	"	"	"	"	

Plains All American EH & S
1301 S. County Road 1150
Midland TX, 79706-4476

Project: C.S. Cayler
Project Number: 2002-10250
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ED70506 - EPA 5030C (GC)										
Blank (ED70506-BLK1)				Prepared & Analyzed: 04/05/07						
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	*53.5*		*ug/l*	*50.0*		*107*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*44.5*		"	*50.0*		*89.0*	*80-120*			
LCS (ED70506-BS1)				Prepared & Analyzed: 04/05/07						
Benzene	0.0493	0.00100	mg/L	0.0500		98.6	80-120			
Toluene	0.0466	0.00100	"	0.0500		93.2	80-120			
Ethylbenzene	0.0489	0.00100	"	0.0500		97.8	80-120			
Xylene (p/m)	0.0910	0.00100	"	0.100		91.0	80-120			
Xylene (o)	0.0499	0.00100	"	0.0500		99.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	*49.8*		*ug/l*	*50.0*		*99.6*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*47.0*		"	*50.0*		*94.0*	*80-120*			
Calibration Check (ED70506-CCV1)				Prepared & Analyzed: 04/05/07						
Benzene	55.0		ug/l	50.0		110	80-120			
Toluene	50.8		"	50.0		102	80-120			
Ethylbenzene	50.8		"	50.0		102	80-120			
Xylene (p/m)	91.8		"	100		91.8	80-120			
Xylene (o)	52.7		"	50.0		105	80-120			
Surrogate: a,a,a-Trifluorotoluene	*54.8*		"	*50.0*		*110*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*48.1*		"	*50.0*		*96.2*	*80-120*			
Matrix Spike (ED70506-MS1)	**Source: 7C30008-01**			Prepared & Analyzed: 04/05/07						
Benzene	0.0531	0.00100	mg/L	0.0500	ND	106	80-120			
Toluene	0.0495	0.00100	"	0.0500	ND	99.0	80-120			
Ethylbenzene	0.0488	0.00100	"	0.0500	ND	97.6	80-120			
Xylene (p/m)	0.0931	0.00100	"	0.100	ND	93.1	80-120			
Xylene (o)	0.0527	0.00100	"	0.0500	ND	105	80-120			
Surrogate: a,a,a-Trifluorotoluene	*55.2*		*ug/l*	*50.0*		*110*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*51.0*		"	*50.0*		*102*	*80-120*			

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Plains All American EH & S
1301 S. County Road 1150
Midland TX, 79706-4476

Project: C.S. Cayler
Project Number: 2002-10250
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ED70506 - EPA 5030C (GC)										
Matrix Spike Dup (ED70506-MSD1)		**Source: 7C30008-01**		Prepared & Analyzed: 04/05/07						
Benzene	0.0526	0.00100	mg/L	0.0500	ND	105	80-120	0.948	20	
Toluene	0.0493	0.00100	"	0.0500	ND	98.6	80-120	0.405	20	
Ethylbenzene	0.0504	0.00100	"	0.0500	ND	101	80-120	3.42	20	
Xylene (p/m)	0.0919	0.00100	"	0.100	ND	91.9	80-120	1.30	20	
Xylene (o)	0.0521	0.00100	"	0.0500	ND	104	80-120	0.957	20	
Surrogate: a,a,a-Trifluorotoluene	*52.3*		*ug/l*	*50.0*		*105*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*48.0*		"	*50.0*		*96.0*	*80-120*			

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Plains All American EH & S
1301 S. County Road 1150
Midland TX. 79706-4476

Project: C.S. Cayler
Project Number: 2002-10250
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Celey D Keene Date: 04/06/07

Brent Barron, Laboratory Director/Corp. Technical Director
Celey D. Keene, Org. Tech Director
Raland K. Tuttle, Laboratory Consultant

James Mathis, QA/QC Officer
Jeanne Mc Murrey, Inorg. Tech Director

Analytical Report 280290

for

PLAINS ALL AMERICAN EH&S

Project Manager: Camille Reynolds

C.S. Cayler

SRS# 2002-10250

12-APR-07

12600 West I-20 East Odessa, Texas 79765

NELAC certification numbers:
Houston, TX E87603 - Miami, FL E86678 - Tampa, FL E86675

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America

XENCO Laboratories

12-APR-07

Project Manager: **Camille Reynolds**
PLAINS ALL AMERICAN EH&S
1301 S. COUNTY ROAD 1150
Midland, TX 79706

Reference: XENCO Report No: **280290**
C.S. Cayler
Project Address: Lea County, NM

Camille Reynolds:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 280290. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 280290 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 280290

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: C.S. Cayler

Project Id: SRS# 2002-10250
Contact: Camille Reynolds
Project Location: Lea County, NM

Date Received in Lab: Apr-05-07 12:35 pm
Report Date: 30-APR-07
Project Manager: Brent Barron, II

Analysis Requested						
	Lab Id:	280290-001				
	Field Id:	MW-9				
	Depth:					
	Matrix:	WATER				
	Sampled:	Apr-03-07 12:35				
SVOA PAHs List by EPA 8270C	***Extracted:***	Apr-06-07 14:06				
	Analyzed:	Apr-09-07 16:27				
	Units/RL:	mg/L	RL			
Acenaphthene		ND	0.005			
Acenaphthylene		ND	0.005			
Anthracene		ND	0.005			
Benzo(a)anthracene		ND	0.005			
Benzo(a)pyrene		ND	0.005			
Benzo(b)fluoranthene		ND	0.005			
Benzo(k)fluoranthene		ND	0.005			
Benzo(g,h,i)perylene		ND	0.005			
Chrysene		ND	0.005			
Dibenz(a,h)Anthracene		ND	0.005			
Fluoranthene		ND	0.005			
Fluorene		ND	0.005			
Indeno(1,2,3-c,d)Pyrene		ND	0.005			
Naphthalene		ND	0.005			
Phenanthrene		ND	0.005			
Pyrene		ND	0.005			

Brent Barron
Odessa Laboratory Director

XENCO Laboratories

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

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Form 2 - Surrogate Recoveries

Project Name: C.S. Cayler

Work Order #: 280290 **Project ID:** SRS# 2002-10250

Lab Batch #: 694754 **Sample:** 280290-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.034	0.050	68	43-116	
2-Fluorophenol	0.016	0.050	32	21-100	
Nitrobenzene-d5	0.032	0.050	64	35-114	
Phenol-d6	0.008	0.050	16	10-94	
Terphenyl-D14	0.033	0.050	66	33-141	
2,4,6-Tribromophenol	0.039	0.050	78	10-123	

Lab Batch #: 694754 **Sample:** 493968-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.041	0.050	82	43-116	
2-Fluorophenol	0.031	0.050	62	21-100	
Nitrobenzene-d5	0.037	0.050	74	35-114	
Phenol-d6	0.020	0.050	40	10-94	
Terphenyl-D14	0.042	0.050	84	33-141	
2,4,6-Tribromophenol	0.043	0.050	86	10-123	

Lab Batch #: 694754 **Sample:** 493968-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.040	0.050	80	43-116	
2-Fluorophenol	0.028	0.050	56	21-100	
Nitrobenzene-d5	0.037	0.050	74	35-114	
Phenol-d6	0.017	0.050	34	10-94	
Terphenyl-D14	0.044	0.050	88	33-141	
2,4,6-Tribromophenol	0.040	0.050	80	10-123	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: C.S. Cayler

Work Order #: 280290 **Project ID:** SRS# 2002-10250

Lab Batch #: 694754 **Sample:** 493968-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.039	0.050	78	43-116	
2-Fluorophenol	0.029	0.050	58	21-100	
Nitrobenzene-d5	0.036	0.050	72	35-114	
Phenol-d6	0.018	0.050	36	10-94	
Terphenyl-D14	0.042	0.050	84	33-141	
2,4,6-Tribromophenol	0.043	0.050	86	10-123	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

XENCO Laboratories

BS / BSD Recoveries

Project Name: C.S. Cayler

Work Order #: 280290 **Project ID:** SRS# 2002-10250

Analyst: TTD **Date Prepared:** 04/06/2007 **Date Analyzed:** 04/09/2007

Lab Batch ID: 694754 **Sample:** 493968-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

SVOA PAHs List by EPA 8270C	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Acenaphthene	ND	0.050	0.041	82	0.05	0.040	80	2	27-132	31	
Acenaphthylene	ND	0.050	0.041	82	0.05	0.040	80	2	46-108	25	
Anthracene	ND	0.050	0.042	84	0.05	0.041	82	2	47-145	25	
Benzo(a)anthracene	ND	0.050	0.042	84	0.05	0.041	82	2	33-143	25	
Benzo(a)pyrene	ND	0.050	0.043	86	0.05	0.042	84	2	65-135	25	
Benzo(b)fluoranthene	ND	0.050	0.042	84	0.05	0.042	84	0	24-159	25	
Benzo(k)fluoranthene	ND	0.050	0.044	88	0.05	0.042	84	5	25-125	25	
Benzo(g,h,i)perylene	ND	0.050	0.040	80	0.05	0.040	80	0	65-135	25	
Chrysene	ND	0.050	0.042	84	0.05	0.041	82	2	65-135	25	
Dibenz(a,h)Anthracene	ND	0.050	0.039	78	0.05	0.039	78	0	50-125	25	
Fluoranthene	ND	0.050	0.044	88	0.05	0.042	84	5	47-125	25	
Fluorene	ND	0.050	0.042	84	0.05	0.041	82	2	48-139	25	
Indeno(1,2,3-c,d)Pyrene	ND	0.050	0.041	82	0.05	0.039	78	5	27-160	25	
Naphthalene	ND	0.050	0.040	80	0.05	0.040	80	0	26-175	25	
Phenanthrene	ND	0.050	0.042	84	0.05	0.041	82	2	65-135	25	
Pyrene	ND	0.050	0.042	84	0.05	0.042	84	0	23-152	31	

Relative Percent Difference RPD = 200*|(D-F)/(D+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765
Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Shanna Smith
Company Name: Talon TPE
Company Address: #9 E. Industrial Rd.
City/State/Zip: Midland Tx 79701
Telephone No: (432) 522-2133 Fax No: (432) 522-2180
Sampler Signature: [signature] e-mail: ssmith@talon-lpe.com

Project Name: CS Cayler
Project #: PLAINS044SPL SRS#2002-10250
Project Loc: Lea County, NM
PO #:
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 7D05008

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	No. of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M 1005 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	PAH 8270	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	MW-9 ~~Groundwater~~ Soil/Solid			04/03/02	1340	1	X								GW											X		X

Special Instructions:

Laboratory Comments:
Sample Containers Intact? (Y) N
VOCs Free of Headspace? Y N
Custody seals on container(s) Y N
Custody seals on cooler(s) Y N
Sample Hand Delivered by Sampler/Client Rep.? (Y) N
by Courier? UPS DHL FedEx Lone Star
1L Overnight
Temperature Upon Receipt: 0 0 °C

Relinquished by	Date	Time	Received by:	Date	Time
[signature]	04/04/02	1235			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Cindera Jam	Date 4-5-02	Time 12:35

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Plains

Date/ Time: 4-5-07 12:35

Lab ID #: 705008

Initials: GL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	0.0 °C	
#2	Shipping container in good condition?	Yes	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
#5	Chain of Custody present?	Yes	No		
#6	Sample instructions complete of Chain of Custody?	Yes	No		
#7	Chain of Custody signed when relinquished/ received?	Yes	No		
#8	Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	Yes	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	Yes	No		
#11	Containers supplied by ELOT?	Yes	No		
#12	Samples in proper container/ bottle?	Yes	No	See Below	
#13	Samples properly preserved?	Yes	No	See Below	
#14	Sample bottles intact?	Yes	No		
#15	Preservations documented on Chain of Custody?	Yes	No		
#16	Containers documented on Chain of Custody?	Yes	No		
#17	Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
#18	All samples received within sufficient hold time?	Yes	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	Not Applicable	
#20	VOC samples have zero headspace?	Yes	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

ENVIRONMENTAL LAB OF

[illegible]

A Xenco Laboratories Company

Analytical Report

Prepared for:

Camille Reynolds

Plains All American EH & S

1301 S. County Road 1150

Midland, TX 79706-4476

Project: C.S. Cayler Gathering

Project Number: 2002-10250

Location: Lea County, NM

Lab Order Number: 7F15001

Report Date: 06/22/07

Plains All American EH & S
1301 S. County Road 1150
Midland TX, 79706-4476

Project: C.S. Cayler Gathering
Project Number: 2002-10250
Project Manager: Camille Reynolds

Fax: (432) 687-4914

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-6	7F15001-01	Water	06/13/07 14:42	06-14-2007 16:15
MW-9	7F15001-02	Water	06/13/07 14:04	06-14-2007 16:15
MW-10	7F15001-03	Water	06/13/07 14:09	06-14-2007 16:15
MW-11	7F15001-04	Water	06/13/07 14:18	06-14-2007 16:15
MW-12	7F15001-05	Water	06/13/07 14:25	06-14-2007 16:15
MW-13	7F15001-06	Water	06/13/07 14:31	06-14-2007 16:15
MW-14	7F15001-07	Water	06/13/07 14:38	06-14-2007 16:15
MW-15	7F15001-08	Water	06/13/07 14:50	06-14-2007 16:15
MW-16	7F15001-09	Water	06/13/07 14:55	06-14-2007 16:15
MW-17	7F15001-10	Water	06/13/07 15:02	06-14-2007 16:15

Plains All American EH & S
1301 S. County Road 1150
Midland TX, 79706-4476

Project: C.S. Cayler Gathering
Project Number: 2002-10250
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-6 (7F15001-01) Water									
Benzene	**0.101**	0.00100	mg/L	1	EF71907	06/19/07	06/20/07	EPA 8021B	
Toluene	**0.0206**	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	**0.00655**	0.00100	"	"	"	"	"	"	
Xylene (o)	**0.00264**	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*108 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*92.8 %*	*80-120*		"	"	"	"	
MW-9 (7F15001-02) Water									
Benzene	**0.00910**	0.00100	mg/L	1	EF71907	06/19/07	06/20/07	EPA 8021B	
Toluene	**J [0.000653]**	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	**0.00504**	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*115 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*92.4 %*	*80-120*		"	"	"	"	
MW-10 (7F15001-03) Water									
Benzene	**0.00362**	0.00100	mg/L	1	EF71907	06/19/07	06/20/07	EPA 8021B	
Toluene	**0.00137**	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	**0.00237**	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*103 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*90.6 %*	*80-120*		"	"	"	"	
MW-11 (7F15001-04) Water									
Benzene	ND	0.00100	mg/L	1	EF71907	06/19/07	06/20/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	**J [0.000539]**	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*101 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*90.2 %*	*80-120*		"	"	"	"	

Plains All American EH & S
1301 S. County Road 1150
Midland TX, 79706-4476

Project: C.S. Cayler Gathering
Project Number: 2002-10250
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-12 (7F15001-05) Water									
Benzene	**27.6**	1.00	mg/L	1000	EF71907	06/19/07	06/22/07	EPA 8021B	
Toluene	**4.87**	1.00	"	"	"	"	"	"	
Ethylbenzene	**1.16**	1.00	"	"	"	"	"	"	
Xylene (p/m)	**1.05**	1.00	"	"	"	"	"	"	
Xylene (o)	**J [0.395]**	1.00	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*106 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.6 %*	*80-120*		"	"	"	"	
MW-13 (7F15001-06) Water									
Benzene	**0.0122**	0.00100	mg/L	1	EF71907	06/19/07	06/20/07	EPA 8021B	
Toluene	**0.00427**	0.00100	"	"	"	"	"	"	
Ethylbenzene	**0.00207**	0.00100	"	"	"	"	"	"	
Xylene (p/m)	**0.00255**	0.00100	"	"	"	"	"	"	
Xylene (o)	**0.00102**	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*89.2 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*81.2 %*	*80-120*		"	"	"	"	
MW-14 (7F15001-07) Water									
Benzene	**0.00794**	0.00100	mg/L	1	EF71907	06/19/07	06/20/07	EPA 8021B	
Toluene	**0.00235**	0.00100	"	"	"	"	"	"	
Ethylbenzene	**J [0.000965]**	0.00100	"	"	"	"	"	"	
Xylene (p/m)	**0.00122**	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*103 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*90.2 %*	*80-120*		"	"	"	"	
MW-15 (7F15001-08) Water									
Benzene	**0.00171**	0.00100	mg/L	1	EF71907	06/19/07	06/20/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*95.8 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*87.6 %*	*80-120*		"	"	"	"	

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Plains All American EH & S
1301 S. County Road 1150
Midland TX, 79706-4476

Project: C.S. Cayler Gathering
Project Number: 2002-10250
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-16 (7F15001-09) Water									
Benzene	**0.0198**	0.00100	mg/L	1	EF71907	06/19/07	06/20/07	EPA 8021B	
Toluene	**0.00494**	0.00100	"	"	"	"	"	"	
Ethylbenzene	**J [0.000741]**	0.00100	"	"	"	"	"	"	
Xylene (p/m)	**0.00290**	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*85.0 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*73.8 %*	*80-120*		"	"	"	"	*S-04*
MW-17 (7F15001-10) Water									
Benzene	**J [0.000696]**	0.00100	mg/L	1	EF71907	06/19/07	06/20/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*106 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.2 %*	*80-120*		"	"	"	"	

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF71907 - EPA 5030C (GC)										
Blank (EF71907-BLK1)				Prepared: 06/19/07 Analyzed: 06/20/07						
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	*51.5*		*ug/l*	*50.0*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*45.5*		*"*	*50.0*		*91.0*	*80-120*			
LCS (EF71907-BS1)				Prepared: 06/19/07 Analyzed: 06/20/07						
Benzene	0.0487	0.00100	mg/L	0.0500		97.4	80-120			
Toluene	0.0489	0.00100	"	0.0500		97.8	80-120			
Ethylbenzene	0.0531	0.00100	"	0.0500		106	80-120			
Xylene (p/m)	0.0940	0.00100	"	0.100		94.0	80-120			
Xylene (o)	0.0515	0.00100	"	0.0500		103	80-120			
Surrogate: a,a,a-Trifluorotoluene	*50.7*		*ug/l*	*50.0*		*101*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*48.4*		*"*	*50.0*		*96.8*	*80-120*			
Calibration Check (EF71907-CCV1)				Prepared: 06/19/07 Analyzed: 06/20/07						
Benzene	0.0450		mg/L	0.0500		90.0	80-120			
Toluene	0.0451		"	0.0500		90.2	80-120			
Ethylbenzene	0.0449		"	0.0500		89.8	80-120			
Xylene (p/m)	0.0817		"	0.100		81.7	80-120			
Xylene (o)	0.0460		"	0.0500		92.0	80-120			
Surrogate: a,a,a-Trifluorotoluene	*51.4*		*ug/l*	*50.0*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*49.3*		*"*	*50.0*		*98.6*	*80-120*			
Matrix Spike (EF71907-MS1)	**Source: 7F14024-01**			Prepared: 06/19/07 Analyzed: 06/20/07						
Benzene	0.0495	0.00100	mg/L	0.0500	0.00614	86.7	80-120			
Toluene	0.0491	0.00100	"	0.0500	0.00436	89.5	80-120			
Ethylbenzene	0.0488	0.00100	"	0.0500	ND	97.6	80-120			
Xylene (p/m)	0.0846	0.00100	"	0.100	0.000642	84.0	80-120			
Xylene (o)	0.0475	0.00100	"	0.0500	ND	95.0	80-120			
Surrogate: a,a,a-Trifluorotoluene	*52.5*		*ug/l*	*50.0*		*105*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*48.2*		*"*	*50.0*		*96.4*	*80-120*			

Plains All American EH & S
1301 S. County Road 1150
Midland TX, 79706-4476

Project: C.S. Cayler Gathering
Project Number: 2002-10250
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF71907 - EPA 5030C (GC)										
Matrix Spike Dup (EF71907-MSD1)	**Source: 7F14024-01**			Prepared: 06/19/07 Analyzed: 06/20/07						
Benzene	0.0445	0.00100	mg/L	0.0500	0.00614	76.7	80-120	12.2	20	M8
Toluene	0.0454	0.00100	"	0.0500	0.00436	82.1	80-120	8.62	20	
Ethylbenzene	0.0445	0.00100	"	0.0500	ND	89.0	80-120	9.22	20	
Xylene (p/m)	0.0774	0.00100	"	0.100	0.000642	76.8	80-120	8.96	20	M8
Xylene (o)	0.0431	0.00100	"	0.0500	ND	86.2	80-120	9.71	20	
Surrogate: a,a,a-Trifluorotoluene	*54.6*		*ug/l*	*50.0*		*109*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*49.2*		*"*	*50.0*		*98.4*	*80-120*			

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Plains All American EH & S
1301 S. County Road 1150
Midland TX, 79706-4476

Project: C.S. Cayler Gathering
Project Number: 2002-10250
Project Manager: Camille Reynolds

Fax: (432) 687-4914

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
M8	The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: _____ Date: 6/22/2007

Brent Barron, Laboratory Director/Corp. Technical Director
Celey D. Keene, Org. Tech Director
Raland K. Tuttle, Laboratory Consultant

James Mathis, QA/QC Officer
Jeanne Mc Murrey, Inorg. Tech Director

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765
Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: S. Smith
Company Name: Talon LPE
Company Address: #9 E. Industrial Rd
City/State/Zip: Midland TX 79701
Telephone No: 432-522-2133 Fax No: 432-522-2180
Sampler Signature:
e-mail: ss.smith@talonlpe.com

Project Name: C.S. Taylor Gath. Plains 044 SPL
Project #: 32002-10250
Project Loc: Lea County N.M.
PO #:
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 7F15001

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	No. of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M 1005 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	MW-6			6/13/07	14:42	2	X		X						GW								X				X
02	MW-9			6/13/07	14:04	2	X		X						GW								X				X
03	MW-10			6/13/07	14:09	2	X		X						GW								X				X
04	MW-11			6/13/07	14:18	2	X		X						GW								X				X
05	MW-12			6/13/07	14:25	2	X		X						GW								X				X
06	MW-13			6/13/07	14:31	2	X		X						GW								X				X
07	MW-14			6/13/07	14:38	2	X		X						GW								X				X
08	MW-15			6/13/07	14:50	2	X		X						GW								X				X
09	MW-16			6/13/07	14:55	2	X		X						GW								X				X
10	MW-17			6/13/07	15:02	2	X		X						GW								X				X

Lab # 284319

Special Instructions: please email results to mstroope@lpe.com

Relinquished by	Date	Time	Received by	Date	Time
	06/14/07	1330	Katy Holster	6-14-07	1330
Relinquished by: Katy Holster	6-14-07	4:15	Received by:		
Relinquished by:	Date	Time	Received by ELOT: Andrea Law	6.14.07	4.15

Laboratory Comments:
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N
Custody seals on container(s) Y N
Custody seals on cooler(s) Y N
Sample Hand Delivered by Sampler/Client Rep.? Y N
by Courier? UPS DHL FedEx Lone Star
w/labels
Temperature Upon Receipt: 1.0 °C

Analytical Report 289708

for

PLAINS ALL AMERICAN EH&S

Project Manager: Camille Reynolds

C. S. Cayler

2002-10250

21-SEP-07

ENVIRONMENTAL LAB OF

12600 West I-20 East Odessa, Texas 79765

A Xenco Laboratories Company

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Houston, TX T104704215

Florida certification numbers:
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Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America
Midland - Corpus Christi - Atlanta

XENCO Laboratories

21-SEP-07

Project Manager: **Camille Reynolds**
PLAINS ALL AMERICAN EH&S
1301 S. COUNTY ROAD 1150
Midland, TX 79706

Reference: XENCO Report No: **289708**
C. S. Cayler
Project Address: Lea County, NM

Camille Reynolds:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 289708. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 289708 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron
Odessa Laboratory Director

XENCO Laboratories

Sample Cross Reference 289708

PLAINS ALL AMERICAN EH&S, Midland, TX

C. S. Cayler

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-6	W	Sep-14-07 13:39		289708-001
MW-9	W	Sep-14-07 13:05		289708-002
MW-10	W	Sep-14-07 13:15		289708-003
MW-11	W	Sep-14-07 13:19		289708-004
MW-12	W	Sep-14-07 13:23		289708-005
MW-13	W	Sep-14-07 13:27		289708-006
MW-14	W	Sep-14-07 13:11		289708-007
MW-15	W	Sep-14-07 14:09		289708-008
MW-16	W	Sep-14-07 13:31		289708-009
MW-17	W	Sep-14-07 13:35		289708-010

Certificate of Analysis Summary 289708

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: C. S. Cayler

Project Id: 2002-10250
Contact: Camille Reynolds
Project Location: Lea County, NM

Date Received in Lab: Mon Sep-17-07 10:45 am
Report Date: 21-SEP-07
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	289708-001		289708-002		289708-003		289708-004		289708-005		289708-006	
	Field Id:	MW-6		MW-9		MW-10		MW-11		MW-12		MW-13	
	Depth:												
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	Sampled:	Sep-14-07 13:39		Sep-14-07 13:05		Sep-14-07 13:15		Sep-14-07 13:19		Sep-14-07 13:23		Sep-14-07 13:27	
BTEX by EPA 8021B	*Extracted:*	Sep-19-07 09:01		Sep-19-07 09:01		Sep-19-07 09:01		Sep-20-07 08:40		Sep-20-07 08:40		Sep-20-07 08:40	
	Analyzed:	Sep-20-07 00:34		Sep-20-07 00:56		Sep-20-07 01:18		Sep-20-07 10:51		Sep-20-07 11:53		Sep-20-07 11:13	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		0.0968	0.0010	0.0081	0.0010	0.0056	0.0010	0.0013	0.0010	18.66	0.1000	ND	0.0010
Toluene		0.0104	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	1.490	0.1000	ND	0.0010
Ethylbenzene		0.0013	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	0.7570	0.1000	ND	0.0010
m,p-Xylene		0.0051	0.0020	0.0045	0.0020	0.0023	0.0020	ND	0.0020	0.8450	0.2000	ND	0.0020
o-Xylene		0.0029	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	0.2950	0.1000	ND	0.0010
Total Xylenes		0.008		0.0045		0.0023		ND		1.14		ND	
Total BTEX		0.1165		0.0126		0.0079		0.0013		22.047		ND	

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 289708

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: C. S. Cayler

Project Id: 2002-10250
Contact: Camille Reynolds
Project Location: Lea County, NM

Date Received in Lab: Mon Sep-17-07 10:45 am
Report Date: 21-SEP-07
Project Manager: Brent Barron, II

Analysis Requested									
	Lab Id:	289708-007		289708-008		289708-009		289708-010			
	Field Id:	MW-14		MW-15		MW-16		MW-17			
	Depth:										
	Matrix:	WATER		WATER		WATER		WATER			
	Sampled:	Sep-14-07 13:11		Sep-14-07 14:09		Sep-14-07 13:31		Sep-14-07 13:35			
BTEX by EPA 8021B	*Extracted:*	Sep-20-07 08:40		Sep-19-07 09:01		Sep-19-07 09:01		Sep-20-07 13:10			
	Analyzed:	Sep-20-07 11:31		Sep-20-07 03:07		Sep-20-07 03:29		Sep-20-07 17:29			
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL		
Benzene		0.0016	0.0010	0.0123	0.0010	0.0240	0.0010	ND	0.0010		
Toluene		ND	0.0010	0.0012	0.0010	0.0032	0.0010	ND	0.0010		
Ethylbenzene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010		
m,p-Xylene		ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020		
o-Xylene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010		
Total Xylenes		ND		ND		ND		ND			
Total BTEX		0.0016		0.0135		0.0272		ND			

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Brent Barron
Odessa Laboratory Director

XENCO Laboratories

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

* Outside XENCO'S scope of NELAC Accreditation

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: C. S. Cayler

Work Order #: 289708 **Project ID:** 2002-10250

Lab Batch #: 704631 **Sample:** 289708-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0330	0.0300	110	80-120	
4-Bromofluorobenzene	0.0255	0.0300	85	80-120	

Lab Batch #: 704631 **Sample:** 289708-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0338	0.0300	113	80-120	
4-Bromofluorobenzene	0.0265	0.0300	88	80-120	

Lab Batch #: 704631 **Sample:** 289708-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0324	0.0300	108	80-120	
4-Bromofluorobenzene	0.0275	0.0300	92	80-120	

Lab Batch #: 704631 **Sample:** 289708-008 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0325	0.0300	108	80-120	
4-Bromofluorobenzene	0.0267	0.0300	89	80-120	

Lab Batch #: 704631 **Sample:** 289708-009 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0324	0.0300	108	80-120	
4-Bromofluorobenzene	0.0268	0.0300	89	80-120	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: C. S. Cayler

Work Order #: 289708 **Project ID:** 2002-10250

Lab Batch #: 704631 **Sample:** 289708-009 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0313	0.0300	104	80-120	
4-Bromofluorobenzene	0.0282	0.0300	94	80-120	

Lab Batch #: 704631 **Sample:** 289708-009 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0313	0.0300	104	80-120	
4-Bromofluorobenzene	0.0282	0.0300	94	80-120	

Lab Batch #: 704631 **Sample:** 499480-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0285	0.0300	95	80-120	

Lab Batch #: 704631 **Sample:** 499480-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0325	0.0300	108	80-120	
4-Bromofluorobenzene	0.0310	0.0300	103	80-120	

Lab Batch #: 704631 **Sample:** 499480-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0304	0.0300	101	80-120	
4-Bromofluorobenzene	0.0281	0.0300	94	80-120	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: C. S. Cayler

Work Order #: 289708 **Project ID:** 2002-10250

Lab Batch #: 704669 **Sample:** 289708-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0320	0.0300	107	80-120	
4-Bromofluorobenzene	0.0267	0.0300	89	80-120	

Lab Batch #: 704669 **Sample:** 289708-004 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0311	0.0300	104	80-120	
4-Bromofluorobenzene	0.0273	0.0300	91	80-120	

Lab Batch #: 704669 **Sample:** 289708-005 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	3.104	3.000	103	80-120	
4-Bromofluorobenzene	2.462	3.000	82	80-120	

Lab Batch #: 704669 **Sample:** 289708-006 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0323	0.0300	108	80-120	
4-Bromofluorobenzene	0.0258	0.0300	86	80-120	

Lab Batch #: 704669 **Sample:** 289708-007 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0328	0.0300	109	80-120	
4-Bromofluorobenzene	0.0259	0.0300	86	80-120	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: C. S. Cayler

Work Order #: 289708 **Project ID:** 2002-10250

Lab Batch #: 704669 **Sample:** 499554-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0281	0.0300	94	80-120	

Lab Batch #: 704669 **Sample:** 499554-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0333	0.0300	111	80-120	
4-Bromofluorobenzene	0.0270	0.0300	90	80-120	

Lab Batch #: 704669 **Sample:** 499554-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0306	0.0300	102	80-120	
4-Bromofluorobenzene	0.0286	0.0300	95	80-120	

Lab Batch #: 704749 **Sample:** 289699-010 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0295	0.0300	98	80-120	
4-Bromofluorobenzene	0.0312	0.0300	104	80-120	

Lab Batch #: 704749 **Sample:** 289708-010 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0335	0.0300	112	80-120	
4-Bromofluorobenzene	0.0301	0.0300	100	80-120	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: C. S. Cayler

Work Order #: 289708 **Project ID:** 2002-10250

Lab Batch #: 704749 **Sample:** 499592-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0294	0.0300	98	80-120	
4-Bromofluorobenzene	0.0317	0.0300	106	80-120	

Lab Batch #: 704749 **Sample:** 499592-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0319	0.0300	106	80-120	
4-Bromofluorobenzene	0.0305	0.0300	102	80-120	

Lab Batch #: 704749 **Sample:** 499592-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0296	0.0300	99	80-120	
4-Bromofluorobenzene	0.0306	0.0300	102	80-120	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

XENCO Laboratories

BS / BSD Recoveries

Project Name: C. S. Cayler

Work Order #: 289708 **Project ID:** 2002-10250

Analyst: JBU **Date Prepared:** 09/19/2007 **Date Analyzed:** 09/19/2007

Lab Batch ID: 704631 **Sample:** 499480-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.0983	98	0.1	0.0986	99	0	70-125	25	
Toluene	ND	0.1000	0.0981	98	0.1	0.0981	98	0	70-125	25	
Ethylbenzene	ND	0.1000	0.0976	98	0.1	0.0972	97	0	71-129	25	
m,p-Xylene	ND	0.2000	0.1945	97	0.2	0.1938	97	0	70-131	25	
o-Xylene	ND	0.1000	0.1000	100	0.1	0.0992	99	1	71-133	25	

Analyst: JBU **Date Prepared:** 09/20/2007 **Date Analyzed:** 09/20/2007

Lab Batch ID: 704669 **Sample:** 499554-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.1013	101	0.1	0.1016	102	0	70-125	25	
Toluene	ND	0.1000	0.0987	99	0.1	0.1003	100	2	70-125	25	
Ethylbenzene	ND	0.1000	0.0980	98	0.1	0.1018	102	4	71-129	25	
m,p-Xylene	ND	0.2000	0.1950	98	0.2	0.2033	102	4	70-131	25	
o-Xylene	ND	0.1000	0.1009	101	0.1	0.1048	105	4	71-133	25	

Relative Percent Difference RPD = 200*|(D-F)/(D+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

XENCO Laboratories

BS / BSD Recoveries

Project Name: C. S. Cayler

Work Order #: 289708
Analyst: JBU
Lab Batch ID: 704749
Sample: 499592-1-BKS
Units: mg/L

Date Prepared: 09/20/2007
Batch #: 1

Project ID: 2002-10250
Date Analyzed: 09/20/2007
Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.1019	102	0.1	0.1028	103	1	70-125	25	
Toluene	ND	0.1000	0.1038	104	0.1	0.1143	114	10	70-125	25	
Ethylbenzene	ND	0.1000	0.1106	111	0.1	0.1077	108	3	71-129	25	
m,p-Xylene	ND	0.2000	0.2210	111	0.2	0.2141	107	3	70-131	25	
o-Xylene	ND	0.1000	0.1098	110	0.1	0.1058	106	4	71-133	25	

Relative Percent Difference RPD = 200*|(D-F)/(D+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

XENCO Laboratories

Form 3 - MS Recoveries

Project Name: C. S. Cayler

Work Order #: 289708

Lab Batch #: 704669 **Project ID:** 2002-10250

Date Analyzed: 09/20/2007 **Date Prepared:** 09/20/2007 **Analyst:** JBU

QC- Sample ID: 289708-004 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

BTEX by EPA 8021B	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Benzene	0.0013	0.1000	0.0960	95	70-125	
Toluene	ND	0.1000	0.0927	93	70-125	
Ethylbenzene	ND	0.1000	0.0919	92	71-129	
m,p-Xylene	ND	0.2000	0.1820	91	70-131	
o-Xylene	ND	0.1000	0.0943	94	71-133	

Lab Batch #: 704749

Date Analyzed: 09/20/2007 **Date Prepared:** 09/20/2007 **Analyst:** JBU

QC- Sample ID: 289699-010 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

BTEX by EPA 8021B	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Benzene	ND	0.1000	0.0764	76	70-125	
Toluene	ND	0.1000	0.0765	77	70-125	
Ethylbenzene	ND	0.1000	0.0785	79	71-129	
m,p-Xylene	ND	0.2000	0.1550	78	70-131	
o-Xylene	ND	0.1000	0.0768	77	71-133	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

Form 3 - MS / MSD Recoveries

Project Name: C. S. Cayler

Work Order # : 289708 **Project ID:** 2002-10250

Lab Batch ID: 704631 **QC- Sample ID:** 289708-009 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 09/20/2007 **Date Prepared:** 09/19/2007 **Analyst:** JBU

Reporting Units: mg/L

BTEX by EPA 8021B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	0.0240	0.1000	0.1126	89	0.1000	0.1133	89	0	70-125	25	
Toluene	0.0032	0.1000	0.0923	89	0.1000	0.0944	91	2	70-125	25	
Ethylbenzene	ND	0.1000	0.0893	89	0.1000	0.0916	92	3	71-129	25	
m,p-Xylene	ND	0.2000	0.1763	88	0.2000	0.1811	91	3	70-131	25	
o-Xylene	ND	0.1000	0.0927	93	0.1000	0.0951	95	2	71-133	25	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*(D-G)/(D+G)

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Environmental Lab of Texas

A Xenco Laboratories Company

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Shanna Smith
Company Name: Talon/LPE
Company Address: 2901 Rankin Hwy.
City/State/Zip: Midland, Tx. 79706
Telephone No: (432) 522-2133 Fax No:
Sampler Signature: Carl Vessels / Camilo Chavez e-mail: SSmith@talonlpe.com

Project Name: C.S. Taylor
Project #: PLAINS0445R
Project Loc: Lea County, NM
PO #:
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 289708

Lab # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water GW=Groundwater NP=Non-Potable SL=Sludge S=Soil/Solid Specify Other	Analyze For: TCLP: TPH: 418.1	8015M	TPH: TX 1005	TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	MW-6			9/14/07	1334		2	X		X						GW											X			
02	MW-9			9/14/07	1305		2	X		X						GW											X			
03	MW-10			9/14/07	1315		2	X		X						GW											X			
04	MW-11			9/14/07	1319		2	X		X						GW											X			
05	MW-12			9/14/07	1323		2	X		X						GW											X			
06	MW-13			9/14/07	1327		2	X		X						GW											X			
07	MW-14			9/14/07	1311		2	X		X						GW											X			
08	MW-15			9/14/07	1409		2	X		X						GW											X			
09	MW-16			9/14/07	1331		2	X		X						GW											X			
10	MW-17			9/14/07	1335		2	X		X						GW											X			

Special Instructions:
Camille Reynolds SRS# 2002-10250

Relinquished by:	Date	Time	Received by:	Date	Time
Camilo Chavez	9-17-07	1020		9/17/07	1020
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
	9/17/07	1645	Andrea Dan	9-17-07	16:45

Laboratory Comments:
Sample Containers Intact? N
VOCs Free of Headspace? N
Custody seals on container(s) N
Sample Hand Delivered by Sampler/Client Rep. ? N
by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt: 6.0 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

ent: Talon / Plains

ıte/ Time: 9.17.07 10:45

b ID # : 289708

ıtials: AL

Sample Receipt Checklist

				Client Initials
1	Temperature of container/ cooler?	Yes	No	6.0 °C
2	Shipping container in good condition?	Yes	No	
3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present
4	Custody Seals intact on sample bottles/ container?	Yes	No	Not Present
5	Chain of Custody present?	Yes	No	
6	Sample instructions complete of Chain of Custody?	Yes	No	
7	Chain of Custody signed when relinquished/ received?	Yes	No	
8	Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid
9	Container label(s) legible and intact?	Yes	No	Not Applicable
#10	Sample matrix/ properties agree with Chain of Custody?	Yes	No	
#11	Containers supplied by ELOT?	Yes	No	
#12	Samples in proper container/ bottle?	Yes	No	See Below
#13	Samples properly preserved?	Yes	No	See Below
#14	Sample bottles intact?	Yes	No	
#15	Preservations documented on Chain of Custody?	Yes	No	
#16	Containers documented on Chain of Custody?	Yes	No	
#17	Sufficient sample amount for indicated test(s)?	Yes	No	See Below
#18	All samples received within sufficient hold time?	Yes	No	See Below
#19	Subcontract of sample(s)?	Yes	No	Not Applicable
#20	VOC samples have zero headspace?	Yes	No	Not Applicable

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken:

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

Analytical Report 293901

for

PLAINS ALL AMERICAN EH&S

Project Manager: Camille Reynolds

C.S. Cayler

SRS# 2002-10250

12-DEC-07

12600 West I-20 East Odessa, Texas 79765

A Xenco Laboratories Company

Texas certification numbers:
Houston, TX T104704215

Florida certification numbers:
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America
Midland - Corpus Christi - Atlanta

12-DEC-07

Project Manager: **Camille Reynolds**
PLAINS ALL AMERICAN EH&S
1301 S. COUNTY ROAD 1150
Midland, TX 79706

Reference: XENCO Report No: **293901**
C.S. Cayler
Project Address: Hobbs, NM

Camille Reynolds:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 293901. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 293901 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

Sample Cross Reference 293901

PLAINS ALL AMERICAN EH&S, Midland, TX

C.S. Cayler

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-6	W	Dec-03-07 11:44		293901-001
MW-9	W	Dec-03-07 11:27		293901-002
MW-10	W	Dec-03-07 11:34		293901-003
MW-11	W	Dec-03-07 11:30		293901-004
MW-12	W	Dec-03-07 11:39		293901-005
MW-13	W	Dec-03-07 11:54		293901-006
MW-14	W	Dec-03-07 11:49		293901-007
MW-15	W	Dec-03-07 12:04		293901-008
MW-16	W	Dec-03-07 12:09		293901-009
MW-17	W	Dec-03-07 11:59		293901-010

Certificate of Analysis Summary 293901

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: C.S. Cayler

Project Id: SRS# 2002-10250
Contact: Camille Reynolds
Project Location: Hobbs, NM

Date Received in Lab: Tue Dec-04-07 08:40 am
Report Date: 12-DEC-07
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	293901-001		293901-002		293901-003		293901-004		293901-005		293901-006	
	Field Id:	MW-6		MW-9		MW-10		MW-11		MW-12		MW-13	
	Depth:												
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	Sampled:	Dec-03-07 11:44		Dec-03-07 11:27		Dec-03-07 11:34		Dec-03-07 11:30		Dec-03-07 11:39		Dec-03-07 11:54	
BTEX by EPA 8021B	*Extracted:*	Dec-06-07 12:45		Dec-06-07 12:45		Dec-06-07 14:46		Dec-06-07 14:46		Dec-12-07 08:24		Dec-06-07 14:46	
	Analyzed:	Dec-06-07 21:46		Dec-06-07 22:03		Dec-07-07 02:17		Dec-07-07 00:18		Dec-12-07 13:30		Dec-07-07 00:51	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		0.1491	0.0010	0.0049	0.0010	0.0046	0.0010	0.0010	0.0010	24.91	0.2000	0.0021	0.0010
Toluene		0.0209	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	1.080	0.4000	ND	0.0020
Ethylbenzene		0.0011	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	0.6060	0.2000	ND	0.0010
m,p-Xylenes		0.0086	0.0020	0.0100	0.0020	ND	0.0020	ND	0.0020	0.7080	0.4000	ND	0.0020
o-Xylene		0.0046	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	0.2020	0.2000	ND	0.0010
Xylenes, Total		0.0132		0.01		ND		ND		0.91		ND	
Total BTEX		0.1843		0.0149		0.0046		0.001		27.506		0.0021	

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Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 293901

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: C.S. Cayler

Project Id: SRS# 2002-10250
Contact: Camille Reynolds
Project Location: Hobbs, NM

Date Received in Lab: Tue Dec-04-07 08:40 am
Report Date: 12-DEC-07
Project Manager: Brent Barron, II

Analysis Requested							
	Lab Id:	293901-007	293901-008	293901-009	293901-010		
	Field Id:	MW-14	MW-15	MW-16	MW-17		
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER		
	Sampled:	Dec-03-07 11:49	Dec-03-07 12:04	Dec-03-07 12:09	Dec-03-07 11:59		
BTEX by EPA 8021B	*Extracted:*	Dec-06-07 14:46	Dec-06-07 14:46	Dec-06-07 14:46	Dec-06-07 14:46		
	Analyzed:	Dec-07-07 01:09	Dec-07-07 01:26	Dec-07-07 01:43	Dec-07-07 01:59		
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL		
Benzene		ND 0.0010	0.0013 0.0010	0.2048 0.0010	0.0022 0.0010		
Toluene		ND 0.0020	ND 0.0020	0.0040 0.0020	ND 0.0020		
Ethylbenzene		ND 0.0010	ND 0.0010	0.0015 0.0010	ND 0.0010		
m,p-Xylenes		ND 0.0020	ND 0.0020	0.0060 0.0020	ND 0.0020		
o-Xylene		ND 0.0010	ND 0.0010	ND 0.0010	ND 0.0010		
Xylenes, Total		ND	ND	0.006	ND		
Total BTEX		ND	0.0013	0.2163	0.0022		

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Brent Barron
Odessa Laboratory Director

XENCO Laboratories

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

* Outside XENCO'S scope of NELAC Accreditation

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: C.S. Cayler

Work Order #: 293901 **Project ID:** SRS# 2002-10250

Lab Batch #: 710056 **Sample:** 293896-054 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0295	0.0300	98	80-120	
4-Bromofluorobenzene	0.0276	0.0300	92	80-120	

Lab Batch #: 710056 **Sample:** 293896-054 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0296	0.0300	99	80-120	
4-Bromofluorobenzene	0.0280	0.0300	93	80-120	

Lab Batch #: 710056 **Sample:** 293901-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0317	0.0300	106	80-120	
4-Bromofluorobenzene	0.0268	0.0300	89	80-120	

Lab Batch #: 710056 **Sample:** 293901-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0324	0.0300	108	80-120	
4-Bromofluorobenzene	0.0250	0.0300	83	80-120	

Lab Batch #: 710056 **Sample:** 502290-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0288	0.0300	96	80-120	
4-Bromofluorobenzene	0.0273	0.0300	91	80-120	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: C.S. Cayler

Work Order #: 293901 **Project ID:** SRS# 2002-10250

Lab Batch #: 710056 **Sample:** 502290-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0310	0.0300	103	80-120	
4-Bromofluorobenzene	0.0261	0.0300	87	80-120	

Lab Batch #: 710056 **Sample:** 502290-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0289	0.0300	96	80-120	
4-Bromofluorobenzene	0.0273	0.0300	91	80-120	

Lab Batch #: 710059 **Sample:** 293901-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0323	0.0300	108	80-120	
4-Bromofluorobenzene	0.0244	0.0300	81	80-120	

Lab Batch #: 710059 **Sample:** 293901-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0310	0.0300	103	80-120	
4-Bromofluorobenzene	0.0259	0.0300	86	80-120	

Lab Batch #: 710059 **Sample:** 293901-006 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0325	0.0300	108	80-120	
4-Bromofluorobenzene	0.0252	0.0300	84	80-120	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: C.S. Cayler

Work Order #: 293901 **Project ID:** SRS# 2002-10250

Lab Batch #: 710059 **Sample:** 293901-007 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0319	0.0300	106	80-120	
4-Bromofluorobenzene	0.0243	0.0300	81	80-120	

Lab Batch #: 710059 **Sample:** 293901-008 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0319	0.0300	106	80-120	
4-Bromofluorobenzene	0.0239	0.0300	80	80-120	

Lab Batch #: 710059 **Sample:** 293901-009 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0287	0.0300	96	80-120	
4-Bromofluorobenzene	0.0267	0.0300	89	80-120	

Lab Batch #: 710059 **Sample:** 293901-009 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0307	0.0300	102	80-120	

Lab Batch #: 710059 **Sample:** 293901-009 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0306	0.0300	102	80-120	
4-Bromofluorobenzene	0.0301	0.0300	100	80-120	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: C.S. Cayler

Work Order #: 293901 **Project ID:** SRS# 2002-10250

Lab Batch #: 710059 **Sample:** 293901-010 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0322	0.0300	107	80-120	
4-Bromofluorobenzene	0.0255	0.0300	85	80-120	

Lab Batch #: 710059 **Sample:** 502295-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0333	0.0300	111	80-120	
4-Bromofluorobenzene	0.0313	0.0300	104	80-120	

Lab Batch #: 710059 **Sample:** 502295-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0312	0.0300	104	80-120	
4-Bromofluorobenzene	0.0255	0.0300	85	80-120	

Lab Batch #: 710059 **Sample:** 502295-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0272	0.0300	91	80-120	

Lab Batch #: 710260 **Sample:** 293901-005 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0329	0.0300	110	80-120	
4-Bromofluorobenzene	0.0256	0.0300	85	80-120	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: C.S. Cayler

Work Order #: 293901 **Project ID:** SRS# 2002-10250

Lab Batch #: 710260 **Sample:** 502403-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0262	0.0300	87	80-120	

Lab Batch #: 710260 **Sample:** 502403-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0246	0.0300	82	80-120	

Lab Batch #: 710260 **Sample:** 502403-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0261	0.0300	87	80-120	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

BS / BSD Recoveries

Project Name: C.S. Cayler

Work Order #: 293901 **Project ID:** SRS# 2002-10250

Analyst: SHE **Date Prepared:** 12/06/2007 **Date Analyzed:** 12/06/2007

Lab Batch ID: 710056 **Sample:** 502290-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.0870	87	0.1	0.0889	89	2	70-125	25	
Toluene	ND	0.1000	0.0872	87	0.1	0.0892	89	2	70-125	25	
Ethylbenzene	ND	0.1000	0.0907	91	0.1	0.0924	92	2	71-129	25	
m,p-Xylenes	ND	0.2000	0.1781	89	0.2	0.1813	91	2	70-131	25	
o-Xylene	ND	0.1000	0.0895	90	0.1	0.0918	92	3	71-133	25	

Analyst: SHE **Date Prepared:** 12/06/2007 **Date Analyzed:** 12/06/2007

Lab Batch ID: 710059 **Sample:** 502295-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.0837	84	0.1	0.0906	91	8	70-125	25	
Toluene	ND	0.1000	0.0841	84	0.1	0.0908	91	8	70-125	25	
Ethylbenzene	ND	0.1000	0.0881	88	0.1	0.0943	94	7	71-129	25	
m,p-Xylenes	ND	0.2000	0.1723	86	0.2	0.1834	92	6	70-131	25	
o-Xylene	ND	0.1000	0.0883	88	0.1	0.0940	94	6	71-133	25	

Relative Percent Difference RPD = 200*|(D-F)/(D+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: C.S. Cayler

Work Order #: 293901
Analyst: SHE
Lab Batch ID: 710260
Sample: 502403-1-BKS
Units: mg/L

Date Prepared: 12/12/2007
Batch #: 1

Project ID: SRS# 2002-10250
Date Analyzed: 12/12/2007
Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.1012	101	0.1	0.1038	104	3	70-125	25	
Toluene	ND	0.1000	0.0984	98	0.1	0.1011	101	3	70-125	25	
Ethylbenzene	ND	0.1000	0.0966	97	0.1	0.1000	100	3	71-129	25	
m,p-Xylenes	ND	0.2000	0.1897	95	0.2	0.1965	98	4	70-131	25	
o-Xylene	ND	0.1000	0.0939	94	0.1	0.0971	97	3	71-133	25	

Relative Percent Difference RPD = 200*|(D-F)/(D+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS / MSD Recoveries

Project Name: C.S. Cayler

Work Order # : 293901 **Project ID:** SRS# 2002-10250

Lab Batch ID: 710056 **QC- Sample ID:** 293896-054 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 12/06/2007 **Date Prepared:** 12/06/2007 **Analyst:** SHE

Reporting Units: mg/L

BTEX by EPA 8021B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	0.0054	0.1000	0.0859	81	0.1000	0.0860	81	0	70-125	25	
Toluene	ND	0.1000	0.0858	86	0.1000	0.0863	86	0	70-125	25	
Ethylbenzene	ND	0.1000	0.0892	89	0.1000	0.0900	90	1	71-129	25	
m,p-Xylenes	ND	0.2000	0.1740	87	0.2000	0.1758	88	1	70-131	25	
o-Xylene	ND	0.1000	0.0901	90	0.1000	0.0910	91	1	71-133	25	

Lab Batch ID: 710059 **QC- Sample ID:** 293901-009 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 12/07/2007 **Date Prepared:** 12/06/2007 **Analyst:** SHE

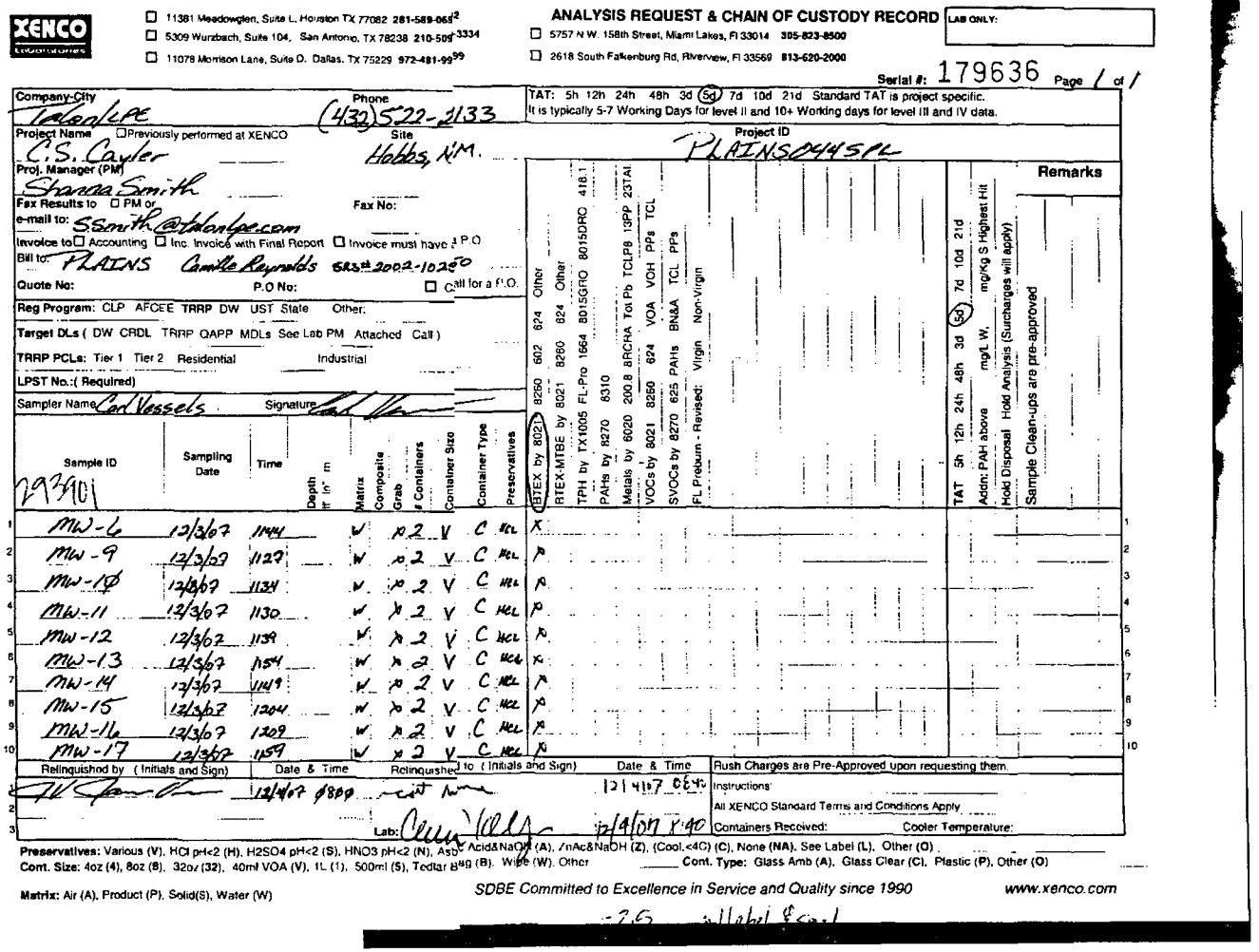
Reporting Units: mg/L

BTEX by EPA 8021B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	0.2048	0.1000	0.2391	34	0.1000	0.2404	36	6	70-125	25	X
Toluene	0.0040	0.1000	0.1140	110	0.1000	0.1142	110	0	70-125	25	
Ethylbenzene	0.0015	0.1000	0.0965	95	0.1000	0.0970	96	1	71-129	25	
m,p-Xylenes	0.0060	0.2000	0.1936	94	0.2000	0.1945	94	0	70-131	25	
o-Xylene	ND	0.1000	0.1009	101	0.1000	0.1023	102	1	71-133	25	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*(D-G)/(D+G)

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit



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☐ 5309 Wurzbach, Suite 104, San Antonio, TX 78238 210-509-3334
☐ 11078 Morrison Lane, Suite D, Dallas, TX 75229 972-481-9999
☐ 5757 N.W. 158th Street, Miami Lakes, Fl 33014 305-823-8500
☐ 2618 South Falkenburg Rd, Riverview, Fl 33569 813-620-2000

ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

LAB ONLY:

Serial #: 179636 Page 1 of 1

Company-City: Talon/LPE
Phone: (432) 522-2133
Project Name: C.S. Cowler ☐ Previously performed at XENCO
Site: Hobbs, NM.
Proj. Manager (PM): Shanna Smith
Fax Results to ☐ PM or
Fax No:
e-mail to: SSmith@talonlpe.com
Invoice to ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to: PLAINS Camille Reynolds 575-394-2002-10250
Quote No:
P.O No:
☐ Call for a P.O.

TAT: 5h 12h 24h 48h 3d (5d) 7d 10d 21d Standard TAT is project specific.
It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.
Project ID: PLAINS0445CL

Reg Program: CLP AFCEE TRRP DW UST State Other:
Target DLs (DW CRDL TRRP QAPP MDLs See Lab PM Attached Call)
TRRP PCLs: Tier 1 Tier 2 Residential Industrial
LPST No.:(Required)
Sampler Name: Carl Vessels Signature:

	Sample ID	Sampling Date	Time	Depth ft in m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives
	179636										
1	MW-6	12/3/07	1144		W		X	2	V	C	HCL
2	MW-9	12/3/07	1127		W		X	2	V	C	HCL
3	MW-10	12/3/07	1134		W		X	2	V	C	HCL
4	MW-11	12/3/07	1130		W		X	2	V	C	HCL
5	MW-12	12/3/07	1139		W		X	2	V	C	HCL
6	MW-13	12/3/07	1154		W		X	2	V	C	HCL
7	MW-14	12/3/07	1149		W		X	2	V	C	HCL
8	MW-15	12/3/07	1204		W		X	2	V	C	HCL
9	MW-16	12/3/07	1209		W		X	2	V	C	HCL
10	MW-17	12/3/07	1159		W		X	2	V	C	HCL

	BTEX by 8021	BTEX-MTBE by 8021	TPH by TX1005 FL-Pro 1664	PAHs by 8270 8310	Metals by 6020 200.8 8RCRA Tot Pb TCLP 8 13PP 23TAL	VOCs by 8021 8260 624 VOA VOH PPs TCL	SVOCs by 8270 625 PAHs BN&A TCL PPs	FL Prelpaum - Revised: Virgin Non-Virgin	TAT 5h 12h 24h 48h 3d (5d) 7d 10d 21d
1	X								
2	X								
3	X								
4	X								
5	X								
6	X								
7	X								
8	X								
9	X								
10	X								

Addn: PAH above mg/L W. mg/Kg S Highest Hit
Hold Disposal Hold Analysis (Surcharges will apply)
Sample Clean-ups are pre-approved

Remarks

Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time
1			12/4/07 0845
2	12/4/07 0800		
3		Lab:	12/4/07 1:40

Rush Charges are Pre-Approved upon requesting them.
Instructions:
All XENCO Standard Terms and Conditions Apply
Containers Received: Cooler Temperature:

Preservatives: Various (V), HCl pH<2 (H), H2SO4 pH<2 (S), HNO3 pH<2 (N), Asb Acid&NaOH (A), ZnAc&NaOH (Z), (Cool.<4C) (C), None (NA). See Label (L), Other (O)
Cont. Size: 4oz (4), 8oz (8), 32oz (32), 40ml VOA (V), 1L (1), 500ml (5), Tedlar Bag (B), Wipe (W), Other
Cont. Type: Glass Amb (A), Glass Clear (C), Plastic (P), Other (O)
Matrix: Air (A), Product (P), Solid(S), Water (W)

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-2.6 Label & Seal

XENCO Laboratories

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☐ 5309 Wurzbach, Suite 104, San Antonio, TX 78238 210-509-3334
☐ 11078 Morrison Lane, Suite P, Dallas, TX 75229 972-481-9999
☐ 5757 N.W. 158th Street, Miami Lakes, Fl 33014 305-823-8500
☐ 2618 South Falkenburg Rd, Riverview, Fl 33569 813-620-2000

ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

LAB ONLY:

Serial #: 179636 Page of

Company-City	Phone	TAT: 5h 12h 24h 48h 3d 5d 7d 10d 21d Standard TAT is project specific. It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.
Project Name ☐Previously performed at XENCO	Site	Project ID
Proj. Manager (PM)		
Fax Results to ☐ PM or e-mail to:	Fax No:	
Invoice to☐ Accounting ☐ Inc. Invoice with Final R Bill to:	eport ☐ Invoice must have a P.O	
Quote No: P.O No:	☐ Call for a P.O.	
Reg Program: CLP AFCEE TRRP DW UST Sta	te Other:	
Target DLs (DW CRDL TRRP QAPP MDLs See	Lab PM Attached Call)	
TRRP PCLs: Tier 1 Tier 2 Residential	Industrial	
LPST No.:(Required)		
Sampler Name	Signature	

Sample ID	Sampling Date	Time	Depth or In²	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	BTEX by 8021 8260 602 624 Other	BTEX-MTBE by 8021 8260 624 Other	TPH by TX1005 FL-Pro 1664 8015GRO 8015DRO 418.1	PAHs by 8270 8310	Metals by 6020 200.8 8RCRA Tot.Pb TCLPb 13PP 23TAL	VOCs by 8021 8260 624 VOA VOH PPs TCL	SVOCs by 8270 625 PAHs BN&A TCL PPs	FL Preburn - Revised: Virgin Non-Virgin	TAT 5h 12h 24h 48h 3d 5d 7d 10d 21d	Adm: PAH above mg/L W. mg/Kg S Highest Hit	Hold Disposal Hold Analysis (Surcharges will apply)	Sample Clean-ups are pre-approved	Remarks
1																							1
2																							2
3																							3
4																							4
5																							5
6																							6
7																							7
8																							8
9																							9
10																							10

Relinquished by (Initials and Sign)	Date & Time	Relinquished to (Initials and Sign)	Date & Time	
1				Rush Charges are Pre-Approved upon requesting them.
2				Instructions:
3		Lab:		All XENCO Standard Terms and Conditions Apply.
				Containers Received: Cooler Temperature:

Preservatives: Various (V), HCl pH<2 (H), H2SO4 pH<2 (S), HNO3 pH<2 (N), Asbc Acid&NaOH (A), ZnAc&NaOH (Z), (Cool,<4C) (C), None (NA), See Label (L), Other (O) _____

Cont. Size: 4oz (4), 8oz (8), 32oz (32), 40ml VOA (V), 1L (1), 500ml (5), Tedlar Bag (B), Wipe (W), Other ___ . . **Cont. Type:** Glass Amb (A), Glass Clear (C), Plastic (P), Other (O) _____

Matrix: Air (A), Product (P), Solid(S), Water (W)

SDBE Committed to Excellence in Service and Quality since 1990 www.xenco.com

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Plains

Date/ Time: 12/4/07 8:40

Lab ID #: 29390

Initials: CK

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	-2.6 °C	
#2	Shipping container in good condition?	Yes	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
#5	Chain of Custody present?	Yes	No		
#6	Sample instructions complete of Chain of Custody?	Yes	No		
#7	Chain of Custody signed when relinquished/ received?	Yes	No		
#8	Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	Yes	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	Yes	No		
#11	Containers supplied by ELOT?	Yes	No		
#12	Samples in proper container/ bottle?	Yes	No	See Below	
#13	Samples properly preserved?	Yes	No	See Below	
#14	Sample bottles intact?	Yes	No		
#15	Preservations documented on Chain of Custody?	Yes	No		
#16	Containers documented on Chain of Custody?	Yes	No		
#17	Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
#18	All samples received within sufficient hold time?	Yes	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	Not Applicable	
#20	VOC samples have zero headspace?	Yes	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

APPENDIX D

NMOCD C-141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised March 17, 1999

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

Release Notification and Corrective Action

OPERATOR "INFORMATION ONLY NON-REPORTABLE" ☒ Initial Report ☐ Final Report

Name of Company	Contact
EOTT Energy Pipeline	Frank Hernandez
Address 5805 East Highway 80 / P.O. Box 1660, Midland, TX 79703	Telephone No. 915.638.3799
Facility Name: Moore to Kimbrough 8" Sweet Vacuum (C.S. Cayler) 9-19-02 #2002-10250	Facility Type Crude Oil Pipeline

Surface Owner	Mineral Owner	Lease No.
Robert C. Rice		

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County: Lea Lat.: 32°52'2.45"N Lon:103°17'17.73"W
B	6	17S	37E					

NATURE OF RELEASE

Type of Release	Volume of Release	Volume Recovered
Crude Oil	70 bbls	0 bbls
Source of Release 8" steel pipeline	Date and Hour of Occurrence 9-19-02 8:00 AM	Date and Hour of Discovery 9-19-02 12:00 PM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Paul Sheeley, Hobbs NMOCD	
By Whom? Pat McCasland (Environmental Plus, Inc.)	Date and Hour: NMOCD notified on 9-19-02 3:15 PM	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
The cause of the leak was internal/external corrosion. The contaminated soil was stockpiled on a plastic barrier on site awaiting remediation.

Describe Area Affected and Cleanup Action Taken.*

Spill Area = ~2,199 ft^2 Near surface soil will be characterized in accordance with 40 CFR 261 and with NMOCD approval, disposed of in a NMOCD approved facility. The site will be delineated and remediated.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Frank Hernandez	OIL CONSERVATION DIVISION	
Printed Name: Frank Hernandez	Approved by District Supervisor:	
Title: District Environmental Supervisor	Approval Date:	Expiration Date:
Date: October 2, 2002 Phone: 915.638.3799	Conditions of Approval:	Attached ☐

* Attach Additional Sheets If Necessary

EOTT Energy Pipeline Site Information and Metrics	**Incident Date and NMOCD Notified?:** Discovered 9-19-02 NMOCD verbally notified on 9-19-02
SITE: 8" Sweet Vacuum (C.S. Cayler) 9-19-02	Assigned Site Reference #: #2002-10250
Company: EOTT Energy Pipeline	
Street Address: 5805 East Highway 80	
Mailing Address: P.O. Box 1660	
City, State, Zip: Midland, Texas 79703	
Representative: Frank Hernandez, District Environmental Supervisor	
Representative Telephone: 915.638.3799	
Telephone:	
Fluid volume released (bbls): 70 bbls	Recovered (bbls): 0
~~>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" Sweet Vacuum (C.S. Cayler) 9-19-02 #2002-10250	
Source of contamination: Crude Oil Pipeline	
Land Owner, i.e., BLM, ST, Fee, Other: Robert C. Rice	
LSP Dimensions 85' X 45'	
LSP Area: Spill Area 2,199 ft^2	
Location of Reference Point (RP)	
Location distance and direction from RP	
Latitude: 32°52'2.45"N	
Longitude: 103°17'17.73"W	
Elevation above mean sea level: ~3,805 'amsl	
Feet from South Section Line	
Feet from West Section Line	
Location- Unit or ¼¼: UL-B NW ¼ of the NE ¼	
Location- Section: 6	
Location- Township: 17S	
Location- Range: 37E	
Surface water body within 1000 ' radius of site: None	
Domestic water wells within 1000' radius of site: None	
Agricultural water wells within 1000' radius of site: None	
Public water supply wells within 1000' radius of site: None	
Depth from land surface to ground water (DG) ~40.0'below ground surface	
Depth of contamination (DC) – ?	
Depth to ground water (DG – DC = DtGW) - to be determined	

1. Ground Water	**2. Wellhead Protection Area**	**3. Distance to Surface Water Body**
If Depth to GW <50 feet: *20 points*	If <1000' from water source, or;<200' from private domestic water source: *20 points*	<200 horizontal feet: *20 points*
If Depth to GW 50 to 99 feet: *10 points*		200-100 horizontal feet: *10 points*
If Depth to GW >100 feet: *0 points*	If >1000' from water source, or; >200' from private domestic water source: *0 points*	>1000 horizontal feet: *0 points*
Ground water Score = 20	*Wellhead Protection Area Score= 0*	*Surface Water Score= 0*
Site Rank (1+2+3) = 20		

Total Site Ranking Score and Acceptable Concentrations

Parameter	**>19 (Surface to 40.0'bgs)**	10-19	0-9
Benzene[1]	**10 ppm**	10 ppm	10 ppm
BTEX[1]	**50 ppm**	50 ppm	50 ppm
TPH	**100 ppm**	1000 ppm	5000 ppm

[1]100 ppm field VOC headspace measurement may be substituted for lab analysis