

AP - 54

ANNUAL MONITORING REPORT

YEAR(S):
2007



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**HOBBS JUNCTION MAINLINE
NMOCD REF. # AP-054
2007 ANNUAL GROUNDWATER
MONITORING REPORT
LEA COUNTY, NEW MEXICO
PLAINS SRS #2003-00017**

Section 26, Township 18 South, Range 37 East

Prepared for:

PLAINS MARKETING, L.P.
333 Clay Street
Suite 1600
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Prepared by:

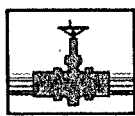
Talon/LPE
Shanna L. Smith
318 E. Taylor Street
Hobbs, New Mexico 88240

March 28, 2008

Distribution:

Copy 1 – Plains Lovington
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PLAINS
ALL AMERICAN

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2008 APR 1 PM 2 13

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
Remediation Coordinator
Plains All American

CC: Larry Johnson, NMOCD, Hobbs, NM

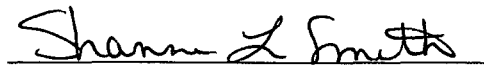
Enclosures

**Hobbs Junction Mainline
2007 Annual Groundwater Monitoring Report**

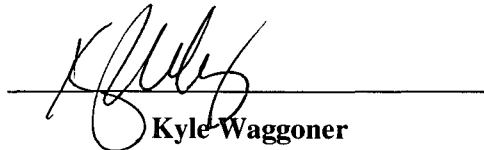
**Plains Marketing, L.P.
Houston, Texas**

Talon/LPE PROJECT NO. PLAINS047SPL

Prepared by:



**Shanna L. Smith
Project Manager**



**Kyle Waggoner
Regional Manager**

**Talon/LPE
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March 2008

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NMOCD - New Mexico Oil Conservation Division
NMSLO - New Mexico State Land Office

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Figure 2d – Groundwater Gradient Map (12/05/2007)

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Figure 3b – PSH Thickness & Groundwater Concentration Map (06/20/2007)

Figure 3c – PSH Thickness & Groundwater Concentration Map (09/19/2007)

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ANNUAL GROUNDWATER MONITORING REPORT

1.0 Introduction

The Hobbs Junction Mainline release site is located approximately 3 miles west of Hobbs, in Lea County, New Mexico. The south side of the site is owned by Ms. Faye Klein and the property to the north is owned by the State of New Mexico.

On January, 23, 2003, a release of approximately 50 barrels (bbls) of crude oil with 24 bbls recovered from a Plains Pipeline, L.P. (Plains) pipeline at this location. The release impacted approximately 12,500 square feet of pipeline right-of-way. Approximately 84 cubic yards of impacted soil was transported to the Environmental Plus, Inc. Landfarm for treatment. Site delineation activities that began in February 2003 revealed that the initial soil boring BH-1 contained groundwater impact.

2.0 Previous Groundwater Investigation/Remediation

In addition to the soil evaluation at the site, a total of twenty-two monitor wells were installed in the vicinity of the release (see Figure 1). Initial delineation activities began on February 13, 2003, by advancing a soil boring BH-1 to 28 feet bgs where an indurated caliche layer prevented further advancement. On March 5, 2003, monitor wells MW-1 and MW-2 were installed to evaluate the presence of phase separated hydrocarbons (PSH). Monitor wells MW-3 through MW-6 were installed in August 2003. After developing monitor wells MW-3 through MW-6, PSH was detected in all the wells. On January 19 and 20, 2004, monitor wells MW-7 through MW-13 were installed to delineate the dissolved phase plume. Subsequent to development, PSH was detected in monitor well MW-12. Monitor wells MW-14 through MW-17 were installed on May 24, 2004, outside the release perimeter. PSH was detected in monitor wells MW-14 and MW-17. Monitor wells MW-18 through MW-20 were installed in November 2006, and monitor wells MW-21 and MW-22 were installed on December 5, 2007, to further delineate the dissolved phase plume.

PSH recovery operations have been performed at the site since March 2004. Approximately 61,800 gallons (1,470 bbls) of PSH have been recovered to date.

3.0 Groundwater Gradient

Monitor wells at the site are regularly gauged to determine the depth to groundwater and PSH thickness. Based on existing data, the groundwater gradient appears to be primarily toward the east-southeast. The groundwater gradient slope is 0.006 ft/ft. Groundwater gradient maps are presented as Figures 2a through 2d.

4.0 PSH Recovery

An automated eductor recovery system was installed at the site in March 2004. In March 2007, the automated eductor recovery system was replaced with an automated skimmer recovery system. In 2007, approximately 4,368 gallons (104 bbls) of crude oil were recovered and reintroduced into the Plains pipeline system at Lea Station.

5.0 Groundwater Sampling

Groundwater sampling events occurred on March 28, June 20, September 19, and December 5, 2007. Based on recommendations of the NMOCDC, monitor wells MW-7 through MW-9 and MW-13 were sampled and analyzed for benzene, toluene, ethylbenzene and total xylenes (BTEX) semi-annually and poly-aromatic hydrocarbons (PAH) annually. Monitor wells MW-10, MW-11, MW-16, and MW-15 through MW-20 were sampled and analyzed quarterly for BTEX and annually for PAH. During the sampling events of March 28 and September 19, 2007, monitor wells MW-7 through MW-11, MW-13, MW-16 and MW-18 through MW-20 were submitted for quantification of BTEX using SW-846 method 8021B and for quantification of PAH's using EPA/SW-846 Methods 610 and 8270C. During the sampling events of June 20 and December 5, 2007, monitor wells MW-10, MW-11, MW-16, and MW-18 through MW-20 were submitted for quantification of BTEX using SW-846 method 8021B.

Monitor wells MW-21 and MW-22 were installed and sampled on December 5, 2007. The monitor wells were submitted for quantification of BTEX using SW-846 method 8021B.

Groundwater samples were not collected from monitor wells MW-1 through MW-6, MW-12, MW-14, MW-15, and MW-17 in 2007 due to the presence of PSH. These monitor wells will be added to the quarterly sampling/analysis when PSH is no longer present.

The Klein irrigation well was not sampled in 2007, due to the well being removed from operation by the landowner, Ms. Klein.

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

March 28, 2007

During the April 2, 2007 sampling event, groundwater samples collected from monitor wells MW-7 through MW-11, MW-13, MW-16, and MW-18 through MW-20 were submitted for quantification of BTEX and PAH. Analytical results indicate that BTEX constituents were detected above the laboratory reporting limits in monitor wells MW-8, MW-10, MW-11, MW-16, and MW-18 through MW-20. The BTEX constituent concentrations exceeded the NMWQCC groundwater standard in monitor wells MW-8 (benzene at 0.0113 mg/L), MW-10 (benzene at 6.22 mg/L), MW-11 (benzene at 17.5 mg/L, ethylbenzene at 1.88 mg/L, and total xylenes at 1.453 mg/L), MW-16 (benzene at 0.01 mg/L), and MW-20 (benzene at 20.7 mg/L, toluene at 1.39 mg/L, ethylbenzene at 1.61 mg/L, and total xylenes at 1.272 mg/L). PAH constituents were detected above the laboratory reporting limit in monitor well MW-10 (naphthalene at 0.015 mg/L). PAH constituents were reported above the NMWQCC groundwater standards for monitor wells MW-11 (naphthalene at 0.058 mg/L) and MW-20 (naphthalene at 0.056 mg/L).

Monitor wells MW-1 through MW-6, MW-12, MW-14, MW-15, and MW-17 were not sampled due to presence of PSH.

June 20, 2007

During the June 20, 2007 sampling event, groundwater samples collected from monitor wells MW-10, MW-11, MW-16, and MW-18 through MW-20 were submitted for quantification of BTEX. Analytical results indicate that BTEX constituents were detected above the laboratory reporting limits in monitor wells MW-10, MW-11, MW-16, and MW-20. The BTEX constituent concentrations exceeded the NMWQCC groundwater standard in monitor wells MW-10 (benzene at 4.648 mg/L), MW-11 (benzene at 17.86 mg/L, toluene at 1.420 mg/L, ethylbenzene at 1.836 mg/L, and total xylenes at 1.487 mg/L), and MW-20 (benzene at 20.17 mg/L and ethylbenzene at 1.624 mg/L).

Monitor wells MW-1 through MW-6, MW-12, MW-14, MW-15, and MW-17 were not sampled due to presence of PSH. Monitor wells MW-7, MW-8, MW-9, and MW-13 were not scheduled for sampling during this event.

September 19, 2007

During the September 19, 2007 sampling event, groundwater samples collected from monitor wells MW-7 through MW-11, MW-13, MW-16, and MW-18 through MW-20 were submitted for quantification of BTEX. The BTEX constituent concentrations exceeded the NMWQCC groundwater standard in monitor wells MW-11 (benzene at 18.35 mg/L, toluene at 0.5280 mg/L, ethylbenzene at 1.3990 mg/L, and total xylenes at 0.8220 mg/L) and MW-20 (benzene at 31.67 mg/L, and ethylbenzene at 1.850 mg/L).

Monitor wells MW-1 through MW-6, MW-12, MW-14, MW-15, and MW-17 were not sampled due to presence of PSH.

December 5, 2007

During the December 5, 2007 sampling event, groundwater samples collected from monitor wells MW-10, MW-11, MW-16, and MW-18 through MW-22 were submitted for quantification of BTEX. Analytical results indicate that BTEX constituents were detected above the laboratory reporting limits in monitor wells MW-10, MW-11, MW-16, and MW-18 through MW-22. The BTEX constituent concentrations exceeded the NMWQCC groundwater standard in monitor wells MW-10 (benzene at 7.375 mg/L), MW-11 (benzene at 17.89 mg/L, toluene at 1.365 mg/L, ethylbenzene at 1.290 mg/L, and total xylenes at 1.011 mg/L), MW-20 (benzene at 31.41 mg/L and ethylbenzene at 1.749 mg/L), MW-21 (benzene at 0.0590 mg/L), and MW-22 (benzene at 0.1621 mg/L).

Monitor wells MW-1 through MW-6, MW-12, MW-14, MW-15, and MW-17 were not sampled due to presence of PSH (reference Figure 3d). Monitor wells MW-7, MW-8, MW-9, and MW-13 were not scheduled for sampling during this event.

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 levels.
- 2) Based on the weekly gauging of monitor wells, convert the core PSH area to total fluid pumps and reconfigure the existing skimmer recovery system to achieve more efficient PSH recovery.
- 3) Monitor wells MW-7 through MW-9 and MW-13 will be sampled and analyzed for BTEX semi-annually and PAH's annually.
- 4) Monitor wells MW-10, MW-11, MW-16, and MW-18 through MW-22 will be sampled and analyzed for BTEX quarterly and PAH annually.
- 5) Monitor wells MW-1 through MW6, MW-12, MW-14, MW-15, or MW-17 will be added to the quarterly sampling/analysis schedule when PSH is no longer present in each well. Pursuant to the request of the NMOCD, Plains will collect a discrete sample below the PSH in the water table from these monitor wells on a yearly basis to evaluate BTEX, TPH, and PAH concentrations in the groundwater.
- 6) Two additional monitor wells will be installed in 2008 to address down-gradient delineation of the dissolve-phase plume.
- 7) A recommendation, to address the soil issues, will be submitted to the NMOCD in 2008.

Appendix A

Drawings

Figure 1 – Site Plan

Figure 2a – Groundwater Gradient Map (03/28/2007)

Figure 2b – Groundwater Gradient Map (06/20/2007)

Figure 2c – Groundwater Gradient Map (09/19/2007)

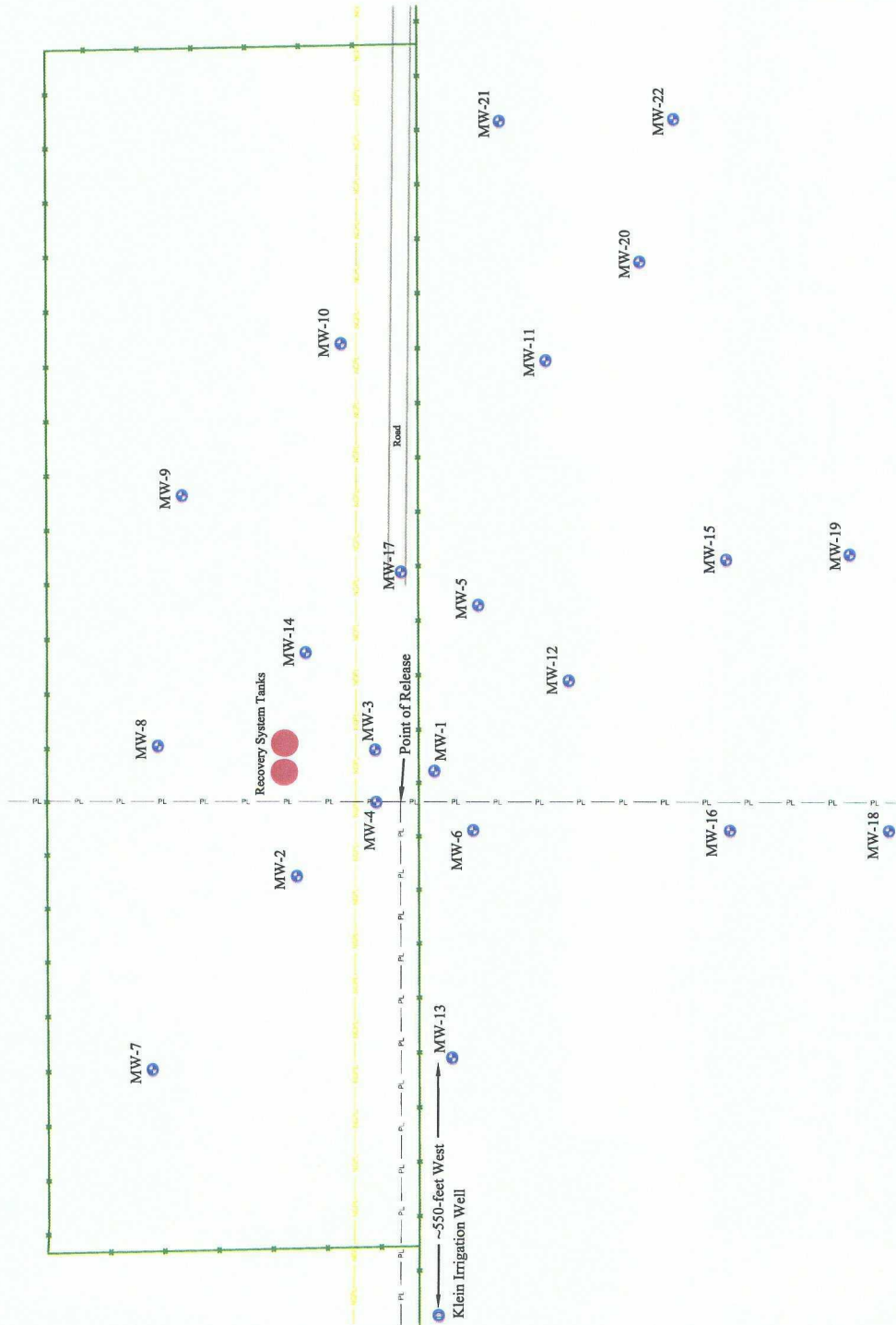
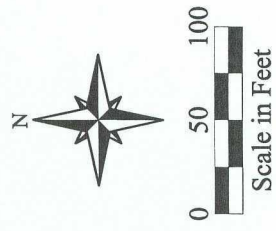
Figure 2d – Groundwater Gradient Map (12/05/2007)

Figure 3a – PSH Thickness & Groundwater Concentration Map (03/28/2007)

Figure 3b – PSH Thickness & Groundwater Concentration Map (06/20/2007)

Figure 3c – PSH Thickness & Groundwater Concentration Map (09/19/2007)

Figure 3d – PSH Thickness & Groundwater Concentration Map (12/05/2007)

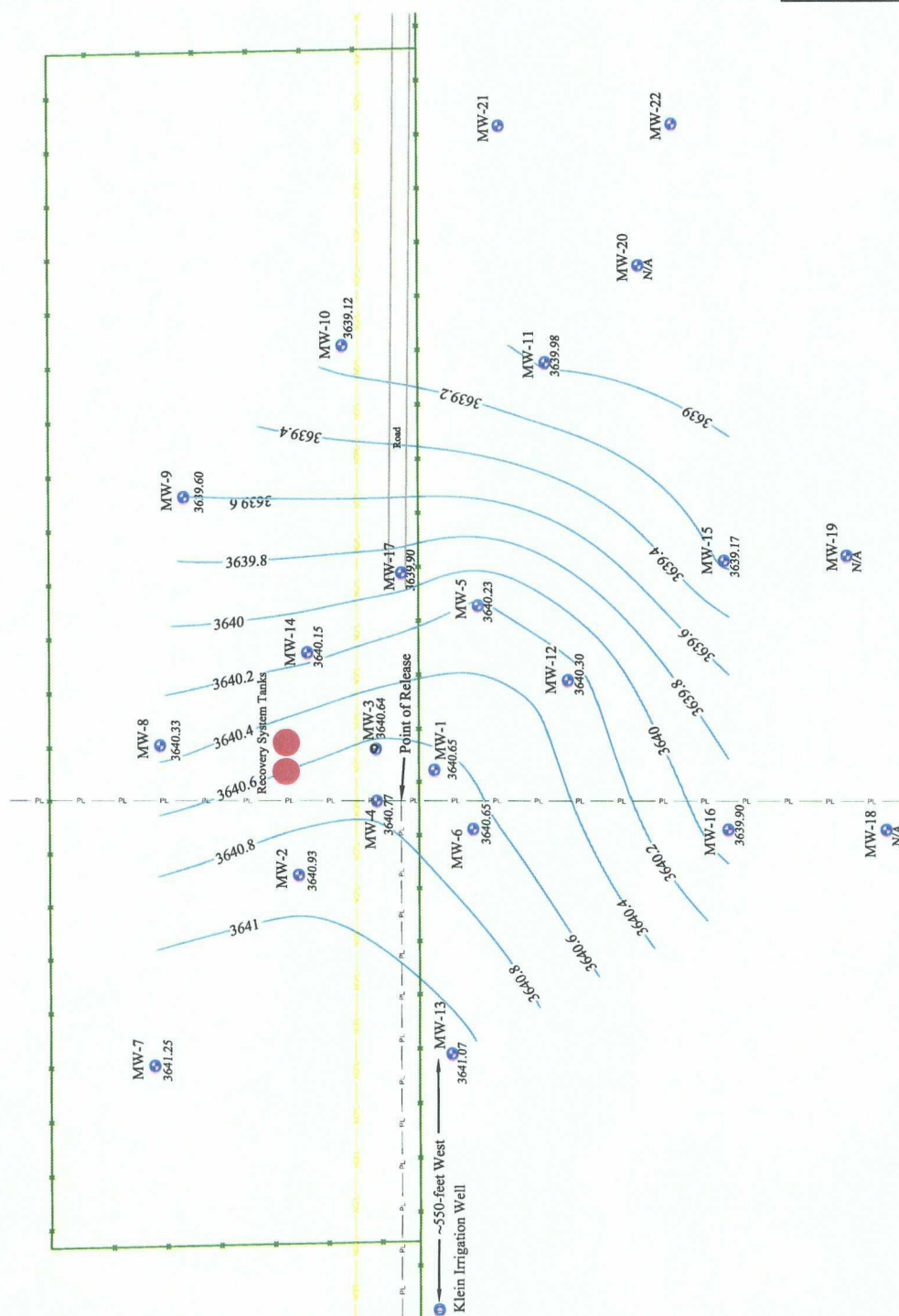


- Legend**
- Monitor Well
 - Irrigation Well
 - Fence line
 - Natural Gas Line
 - Crude Pipeline
 - Groundwater Gradient Contour Line
 - Groundwater Gradient Contour Elevation
 - Groundwater Flow Direction
- 81.30

Hobbs Junction Mainline #2003-00017
SW 1/4, SW 1/4, of Sec. 26, T18S, R37E
Lea County, New Mexico
Figure 1 - Site Plan

Date: 12/26/2007
Scale: 1" = 100'
Drawn By: SJA

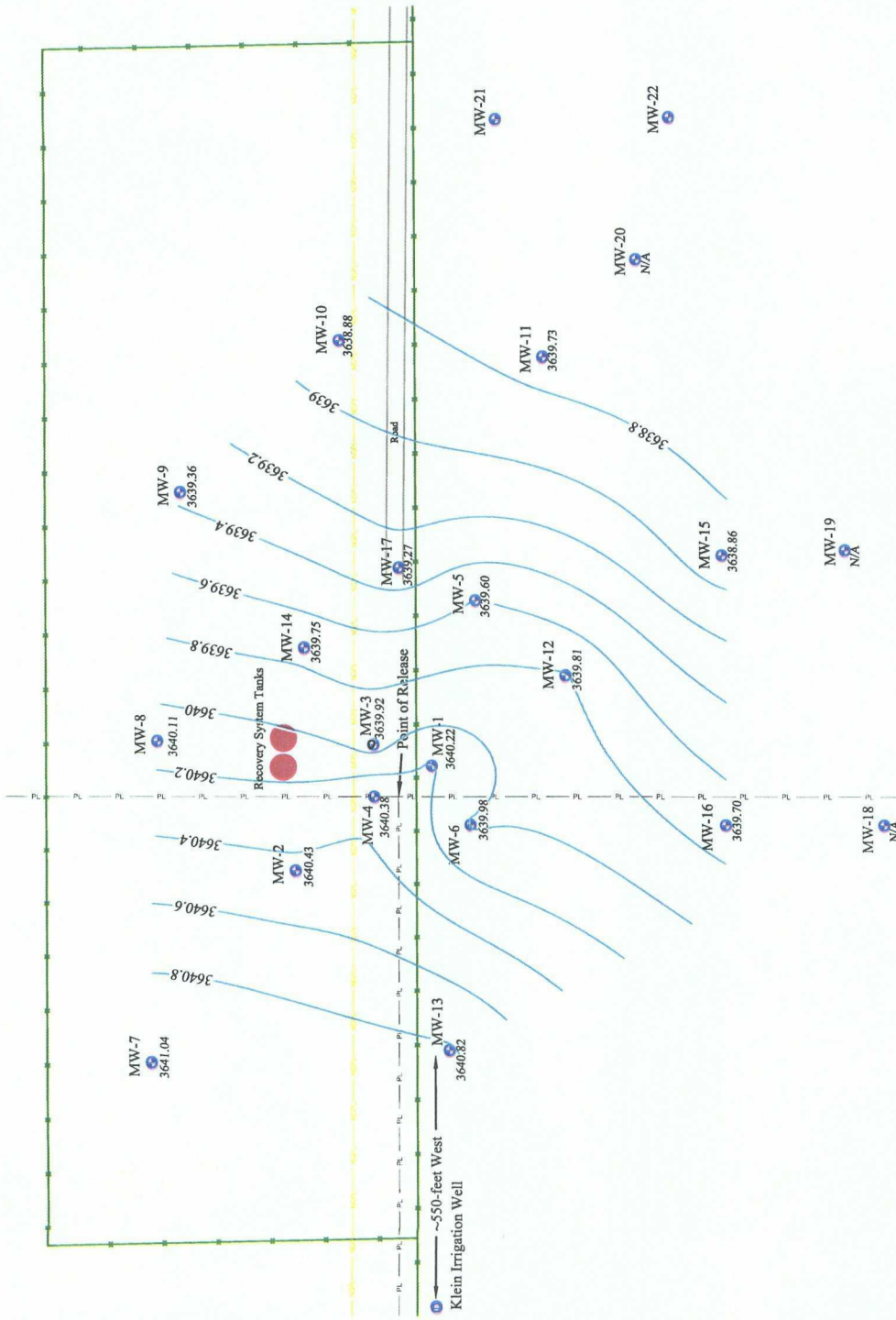




Hobbs Junction Mainline #2003-00017
SW 1/4, SW 1/4, of Sec. 26, T18S, R37E
Lea County, New Mexico
Figure 2a - Groundwater Gradient Map, (03/28/2007)

Drawn By: SJA





- Legend**
- Monitor Well
 - Underground Cable
 - Overhead Powerline
 - PSH Plume Contour Line
 - PSH Plume Contour Elevation



Date: 02/12/2008

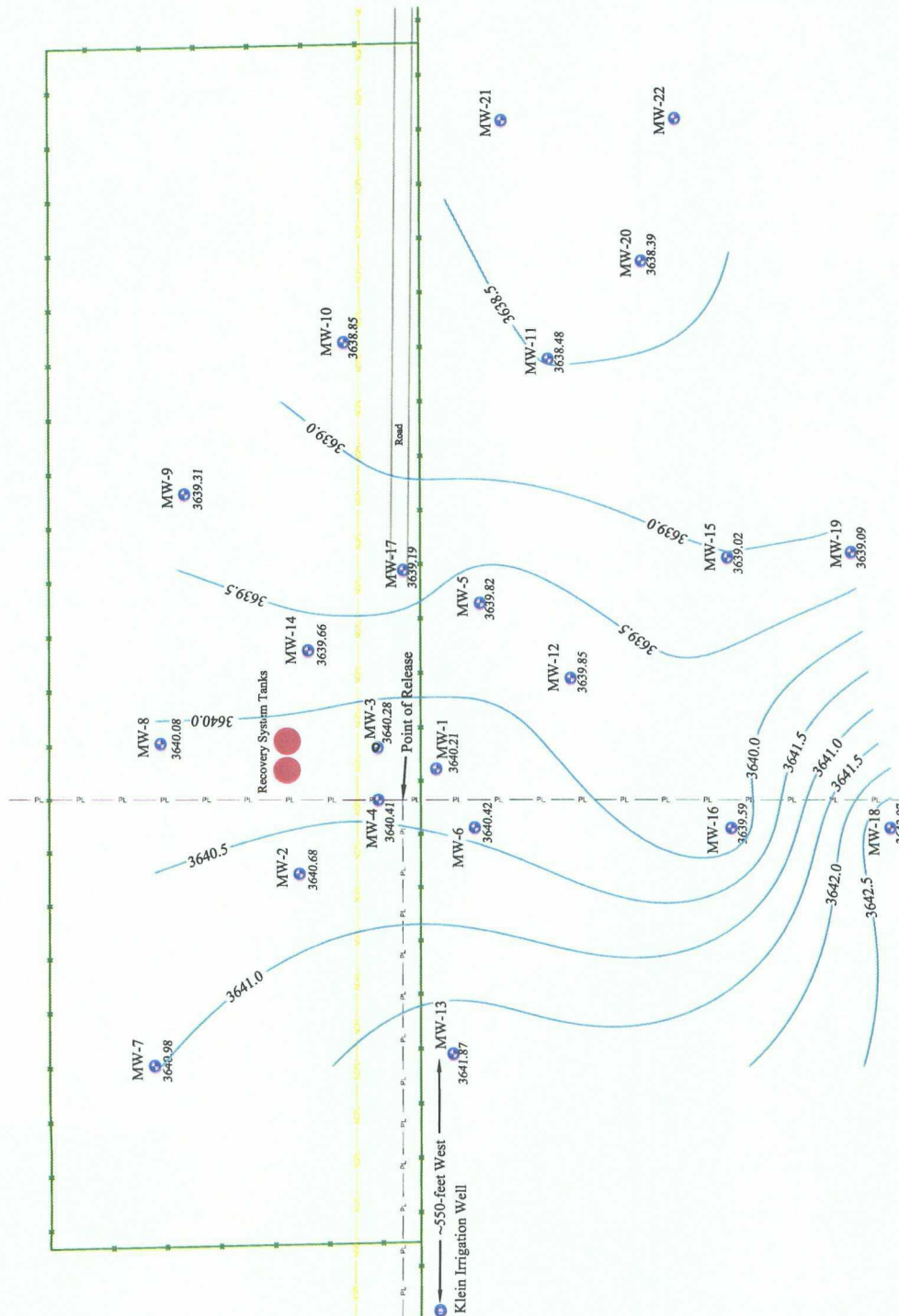
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Drawn By: SJA

Hobbs Junction Mainline #2003-00017
 SW 1/4, SW 1/4, of Sec. 26, T18S, R37E
 Lea County, New Mexico
 Figure 2b - Groundwater Gradient Map, (06/20/2007)



0 50 100
Scale in Feet



- Legend**
- Monitor Well
 - Irrigation Well
 - Fence line
 - Natural Gas Line
 - Crude Pipeline
 - Groundwater Gradient Contour Line
 - Groundwater Gradient Contour Elevation
 - Groundwater Flow Direction

Hobbs Junction Mainline #2003-00017

SW 1/4, SW 1/4, of Sec. 26, T18S, R37E

Lea County, New Mexico

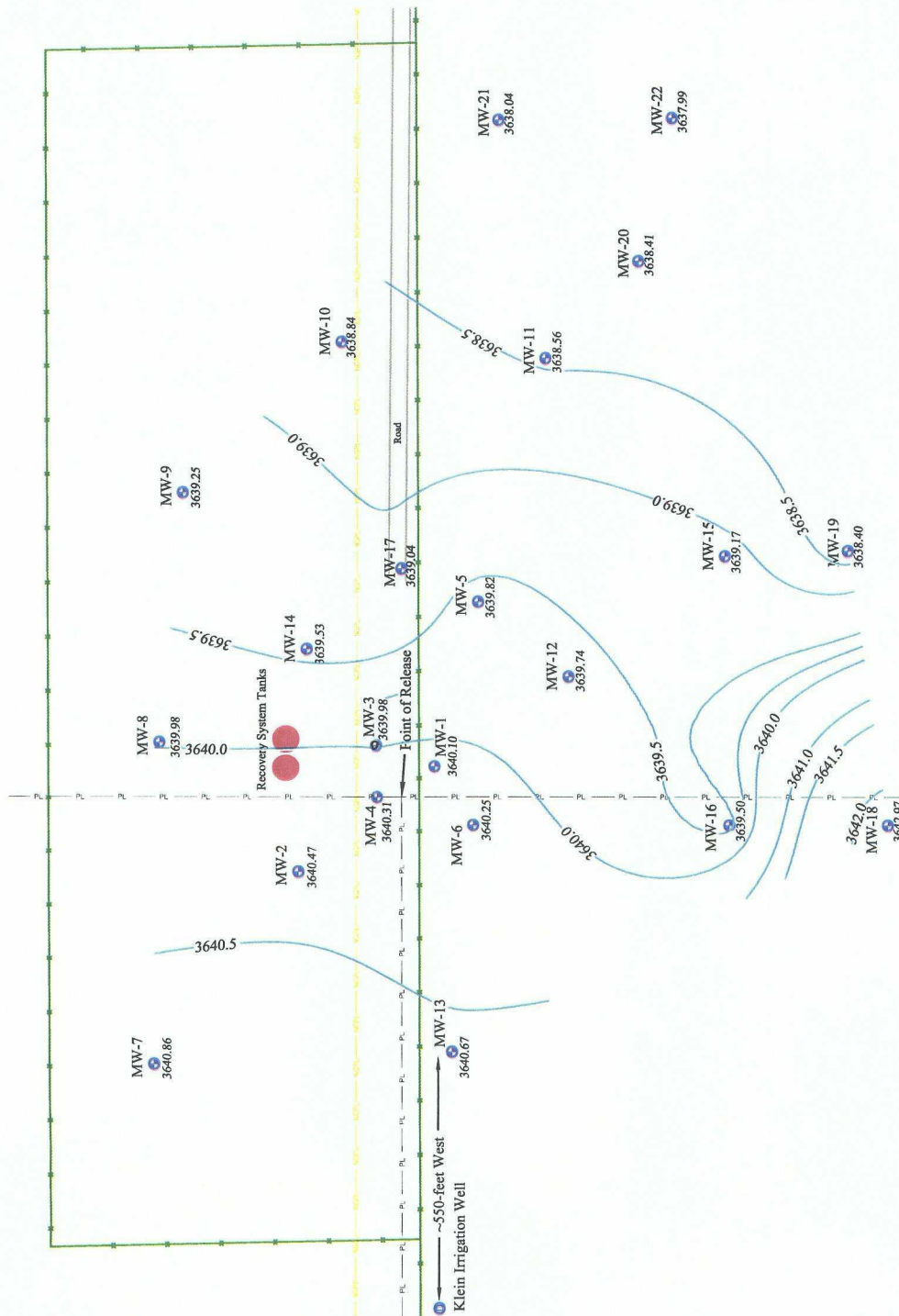
Figure 2c - Groundwater Gradient Map, (09/19/2007)

Date: 02/13/2008

Scale: 1" = 100'

Drawn By: SJA





Date: 02/13/2008

Scale: 1" = 100'

Drawn By: SJA

Hobbs Junction Mainline #2003-00017

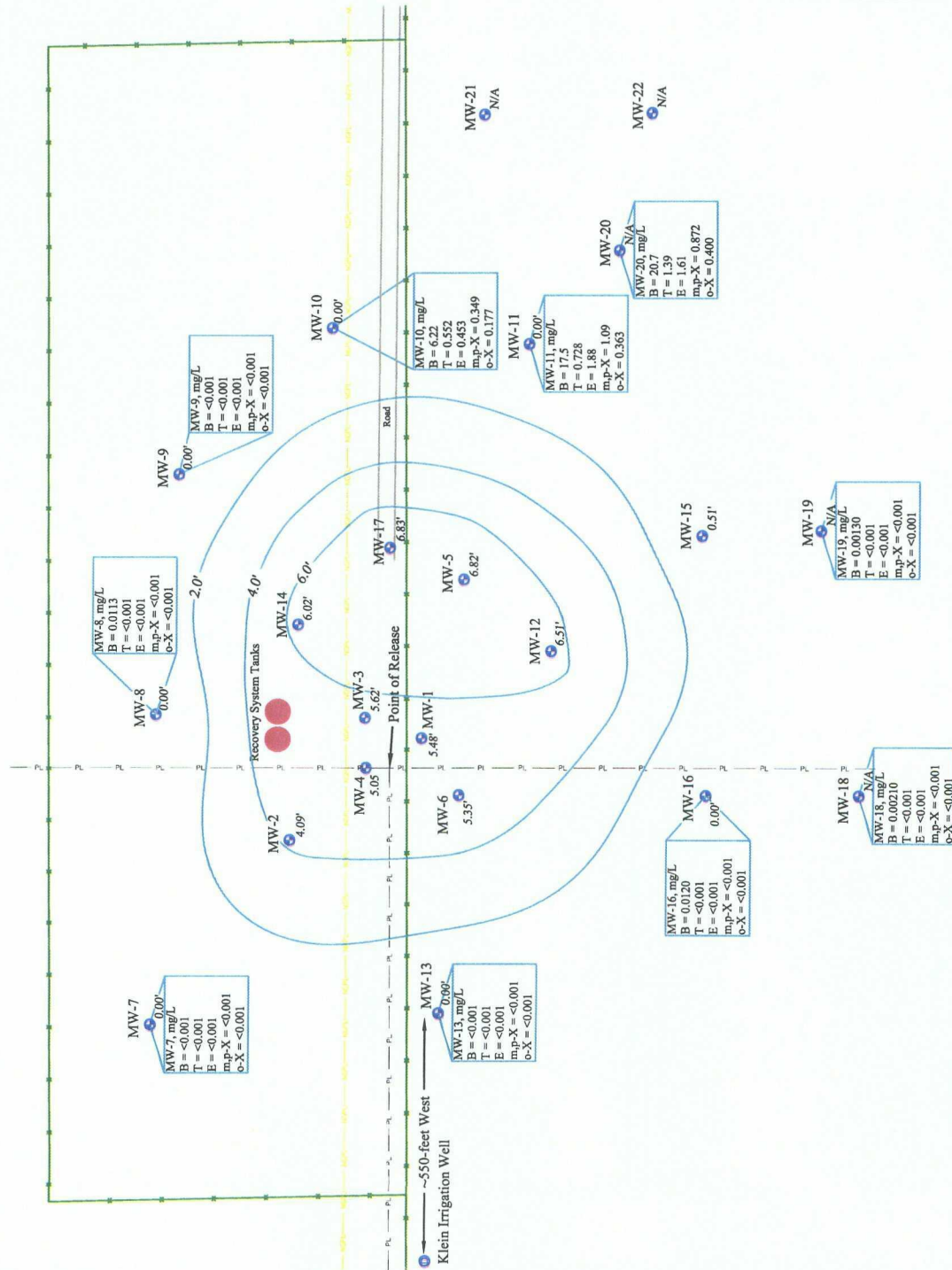
SW 1/4, SW 1/4, of Sec. 26, T18S, R37E

Lea County, New Mexico

Figure 2d - Groundwater Gradient Map, (12/05/2007)



0 50 100
Scale in Feet



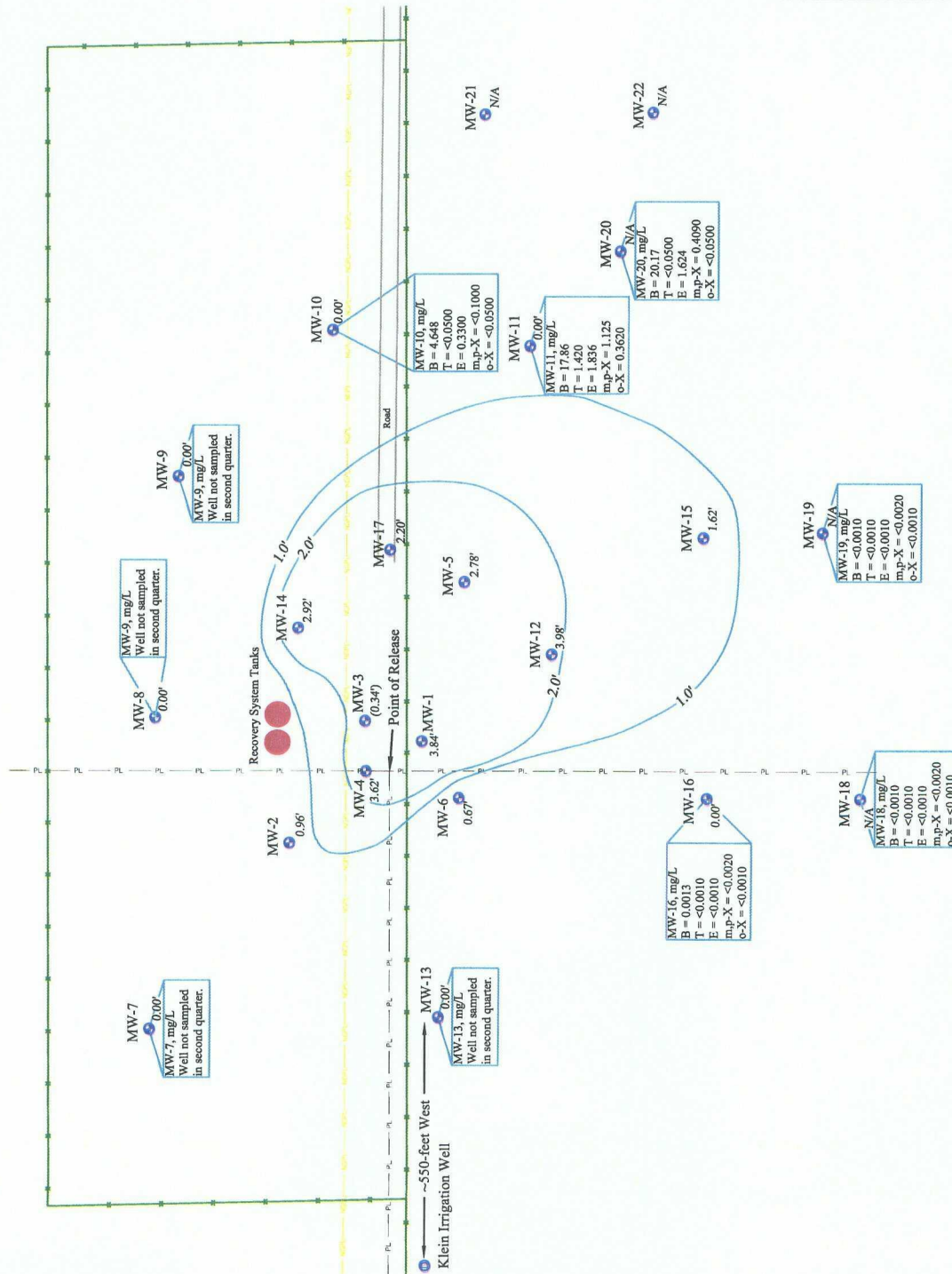
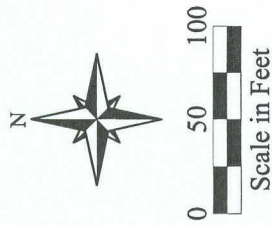
Hobbs Junction Mainline
SRS # 2003-00017, NMOCD REF. # AP-054
SW 1/4, SW 1/4, of Sec. 26, T18S, R37E, Lea County, New Mexico
Figure 3a - PSH Thickness & Groundwater Concentration Map, (03/28/2007)

Date: 02/28/2008

Scale: 1" = 100'

Drawn By: SJA





Date: 02/28/2008

Scale: 1" = 100'

Drawn By: SJA

Hobbs Junction Mainline

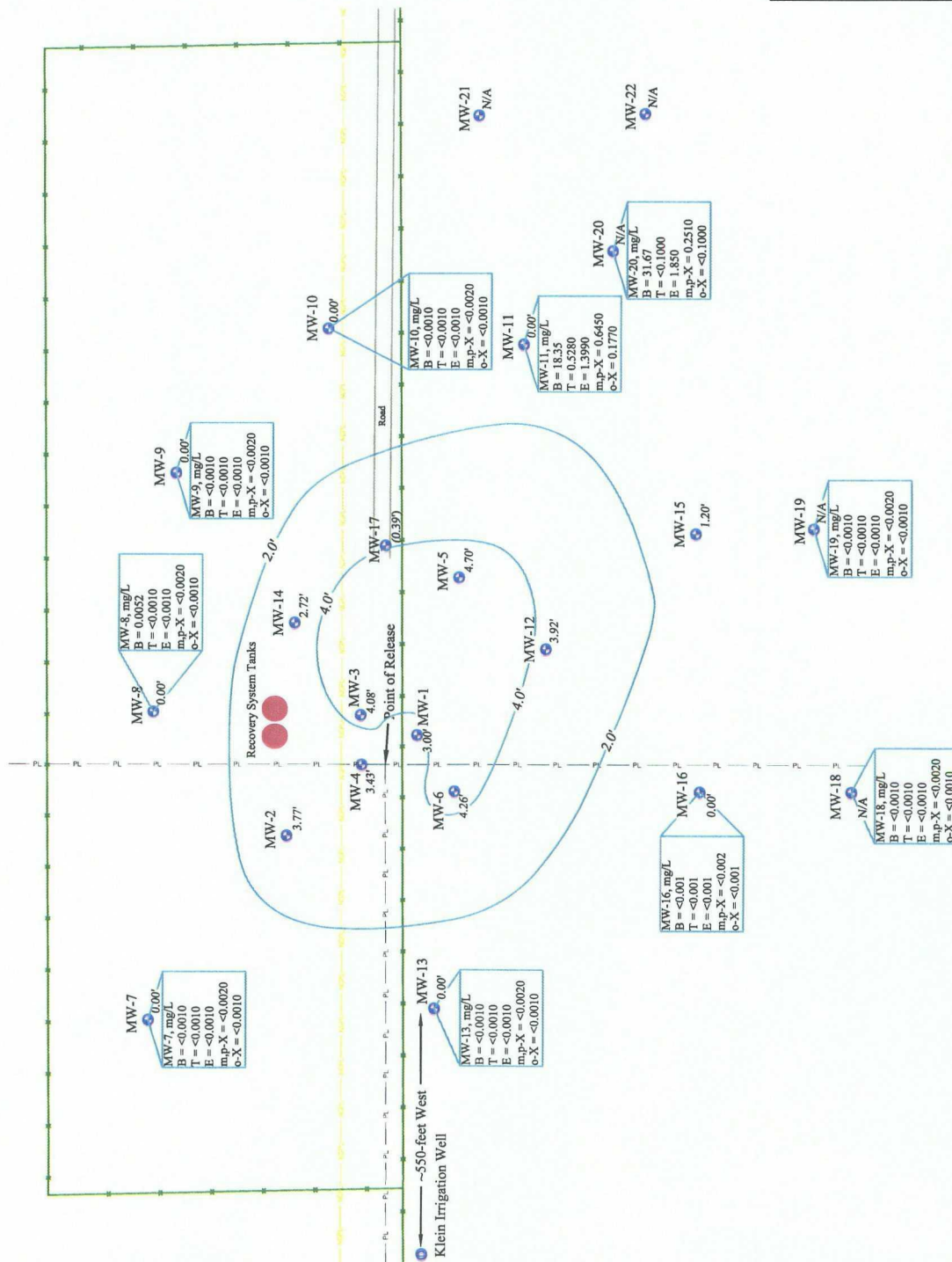
SRS # 2003-00017, NMOCD REF. # AP-054

SW 1/4, SW 1/4, of Sec. 26, T18S, R37E, Lea County, New Mexico

Figure 3b - PSH Thickness & Groundwater Concentration, (06/20/2007)



0 50 100
Scale in Feet



Date: 02/28/2008

Scale: 1" = 100'

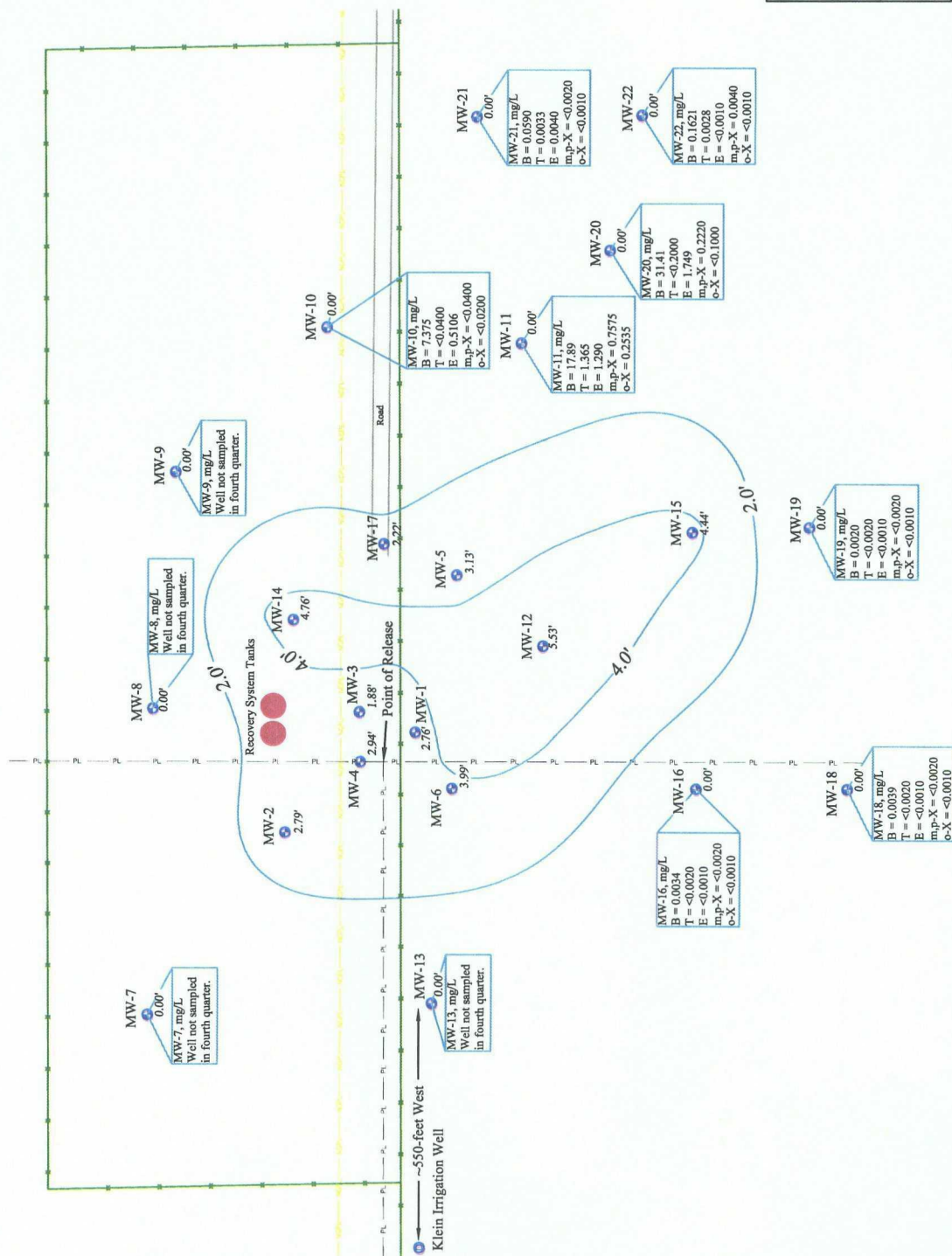
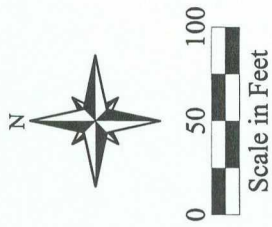
Drawn By: SJA

Hobbs Junction Mainline

SRS # 2003-00017, NMOCD REF. # AP-054

SW 1/4, SW 1/4, of Sec. 26, T18S, R37E, Lea County, New Mexico

Figure 3c - PSH Thickness & Groundwater Concentration Map, (09/19/2007)



Legend

- Monitor Well
- Underground Cable
- Overhead Powerline
- PSH Plume Contour Line
- PSH Plume Contour Elevation (0.39')
- Data Not Used



Date: 02/28/2008

Scale: 1" = 100'

Drawn By: SJA

Hobbs Junction Mainline

SRS # 2003-00017, NMOCD REF. # AP-054

SW 1/4, SW 1/4, of Sec. 26, T18S, R37E, Lea County, New Mexico

Figure 3d - PSH Thickness & Groundwater Concentration Map, (12/05/2007)

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) THICKNESS
PLAINS PIPELINE, L.P.
HOBBS JUNCTION MAINLINE
NMOCD REF. # AP-054
LEA COUNTY, NEW MEXICO - SRS# 2003-00017
Talon/LPE Project Number PLAINS047SPL

Sample Location	Date	Top of Casing Elevation (feet-amsl)	Depth to PSH (feet-btoc)	Depth to Water (feet-btoc)	PSH Thickness (feet)	PSH Recovered (gallons)	Corrected Groundwater Elevation* (feet-amsl)
MW-1	06/23/03	3,678.50	38.49	45.43	6.94		3,639.32
MW-1	06/25/03		38.48	45.43	6.95		3,639.33
MW-1	07/01/03		36.64	48.25	11.61		3,640.70
MW-1	07/07/03		38.73	45.55	6.82		3,639.09
MW-1	07/22/03		37.32	48.05	10.73		3,640.11
MW-1	07/23/03		37.33	48.06	10.73		3,640.10
MW-1	07/24/03		37.40	47.90	10.50		3,640.05
MW-1	07/30/03		37.41	47.90	10.49		3,640.04
MW-1	10/13/03		36.81	47.34	10.53		3,640.64
MW-1	12/11/03		37.79	46.85	9.06		3,639.80
MW-1	12/15/03		37.75	46.77	9.02		3,639.85
MW-1	02/18/04		38.42	47.64	9.22		3,639.16
MW-1	03/29/04		37.45	45.35	7.90		3,640.26
MW-1	04/29/04		38.26	42.18	3.92		3,639.85
MW-1	05/03/04		37.44	46.11	8.67		3,640.19
MW-1	07/12/04		38.34	45.66	7.32		3,639.43
MW-1	12/09/04		35.90	43.54	7.64		3,641.84
MW-1	02/16/05		35.15	42.54	7.39		3,642.61
MW-1	03/31/05		35.27	42.81	7.54		3,642.48
MW-1	05/13/05		35.31	42.60	7.29		3,642.46
MW-1	05/26/05		35.41	42.61	7.20		3,642.37
MW-1	06/28/05		35.48	42.65	7.17		3,642.30
MW-1	08/15/05		35.72	42.16	6.44		3,642.14
MW-1	11/14/05		36.26	41.80	5.54		3,641.69
MW-1	01/23/06		36.71	42.14	5.43		3,641.25
MW-1	03/02/06		36.36	41.41	5.05		3,641.64
MW-1	06/01/06		37.58	42.01	4.43		3,640.48
MW-1	08/14/06		37.63	43.68	6.05		3,640.27
MW-1	11/28/06		37.27	42.50	5.23		3,640.71
MW-1	12/12/06		37.25	41.49	4.24		3,640.83
MW-1	01/09/07		37.31	42.71	5.40		3,640.65
MW-1	02/08/07		37.25	42.78	5.53		3,640.70
MW-1	02/27/07		37.34	42.88	5.54	8.00	3,640.61
MW-1	03/09/07		37.30	42.74	5.44		3,640.66
MW-1	03/13/07		37.28	42.78	5.50	4.00	3,640.67
MW-1	03/15/07		37.31	42.79	5.48	4.00	3,640.64
MW-1	03/23/07		37.32	42.80	5.48		3,640.63
MW-1	03/28/07		37.30	42.78	5.48		3,640.65
MW-1	04/12/07		38.03	42.40	4.37		3,640.03
MW-1	04/18/07		37.47	42.61	5.14		3,640.52
MW-1	05/23/07		38.28	42.24	3.96		3,639.82
MW-1	06/20/07		37.90	41.74	3.84		3,640.22
MW-1	06/28/07		37.87	41.69	3.82		3,640.25
MW-1	07/18/07		37.95	41.63	3.68		3,640.18
MW-1	08/15/07		37.74	42.62	4.88		3,640.27
MW-1	08/22/07		38.41	39.20	0.79		3,640.01
MW-1	08/28/07		38.76	39.08	0.32		3,639.71
MW-1	09/19/07		37.99	40.99	3.00		3,640.21
MW-1	09/25/07		39.30	39.93	0.63		3,639.14
MW-1	10/09/07		38.52	38.90	0.38		3,639.94
MW-1	10/17/07		38.51	38.88	0.37		3,639.95
MW-1	10/26/07		38.49	38.91	0.42		3,639.97
MW-1	11/05/07		38.16	42.11	3.95		3,639.95
MW-1	11/12/07		38.51	38.96	0.45		3,639.95
MW-1	12/05/07		38.12	40.88	2.76		3,640.10

TABLE 1
GROUNDWATER ELEVATIONS AND
PHASE SEPARATED HYDROCARBON (PSH) THICKNESS
PLAINS PIPELINE, L.P.
HOBBS JUNCTION MAINLINE
NMOCD REF. # AP-054
LEA COUNTY, NEW MEXICO - SRS# 2003-00017
Talon/LPE Project Number PLAINS047SPL

Sample Location	Date	Top of Casing Elevation (feet-amsl)	Depth to PSH (feet-btgc)	Depth to Water (feet-btgc)	PSH Thickness (feet)	PSH Recovered (gallons)	Corrected Groundwater Elevation* (feet-amsl)
MW-2	06/26/03	3,679.47	38.72	44.93	6.21		3,640.13
MW-2	07/01/03		38.65	45.42	6.77		3,640.14
MW-2	07/22/03		38.63	45.63	7.00		3,640.14
MW-2	07/23/03		38.64	45.63	6.99		3,640.13
MW-2	07/24/03		39.20	43.57	4.37		3,639.83
MW-2	07/30/03		39.21	43.58	4.37		3,639.82
MW-2	12/11/03		38.88	45.51	6.63		3,639.93
MW-2	12/15/03		38.84	45.41	6.57		3,639.97
MW-2	03/23/04		38.36	44.52	6.16		3,640.49
MW-2	03/29/04		38.47	44.04	5.57		3,640.44
MW-2	04/29/04		38.16	48.06	9.90		3,640.32
MW-2	05/03/04		38.39	44.27	5.88		3,640.49
MW-2	07/12/04		39.42	44.67	5.25		3,639.53
MW-2	12/09/04		37.00	42.52	5.52		3,641.92
MW-2	02/16/05		36.87	44.03	7.16		3,641.88
MW-2	03/31/05		36.17	41.85	5.68		3,642.73
MW-2	05/13/05		36.27	42.10	5.83		3,642.62
MW-2	05/26/05		36.84	39.29	2.45		3,642.39
MW-2	06/28/05		36.39	41.57	5.18		3,642.56
MW-2	08/15/05		37.15	38.92	1.77		3,642.14
MW-2	11/14/05		37.56	39.16	1.60		3,641.75
MW-2	01/23/06		38.01	39.54	1.53		3,641.31
MW-2	03/02/06		37.60	38.93	1.33		3,641.74
MW-2	06/01/06		38.48	41.05	2.57		3,640.73
MW-2	08/14/06		39.23	41.24	2.01		3,640.04
MW-2	11/28/06		38.33	40.73	2.40		3,640.90
MW-2	12/12/06		37.80	44.10	6.30		3,641.04
MW-2	01/09/07		38.20	42.21	4.01		3,640.87
MW-2	02/08/07		37.94	42.60	4.66		3,641.06
MW-2	02/27/07		38.15	43.34	5.19	8.00	3,640.80
MW-2	03/09/07		38.07	42.24	4.17		3,640.98
MW-2	03/13/07		38.07	42.32	4.25	3.50	3,640.98
MW-2	03/15/07		38.09	42.39	4.30	4.50	3,640.95
MW-2	03/23/07		38.16	42.00	3.84		3,640.93
MW-2	03/28/07		38.13	42.22	4.09		3,640.93
MW-2	04/12/07		38.51	41.93	3.42		3,640.62
MW-2	04/18/07		38.97	39.73	0.76		3,640.42
MW-2	05/23/07		38.98	39.50	0.52		3,640.44
MW-2	06/20/07		38.94	39.90	0.96		3,640.43
MW-2	06/28/07		38.66	40.88	2.22		3,640.59
MW-2	07/18/07		38.53	41.85	3.32		3,640.61
MW-2	08/15/07		38.50	42.11	3.61		3,640.61
MW-2	08/28/07		38.40	42.21	3.81		3,640.69
MW-2	09/19/07		38.41	42.18	3.77		3,640.68
MW-2	09/25/07		38.41	42.20	3.79		3,640.68
MW-2	10/09/07		38.86	40.37	1.51		3,640.46
MW-2	10/17/07		38.93	40.07	1.14		3,640.43
MW-2	10/26/07		38.68	41.27	2.59		3,640.53
MW-2	11/05/07		38.80	40.64	1.84		3,640.49
MW-2	11/12/07		38.91	40.23	1.32		3,640.43
MW-2	12/05/07		38.72	41.51	2.79		3,640.47



TABLE 1
GROUNDWATER ELEVATIONS AND
PHASE SEPARATED HYDROCARBON (PSH) THICKNESS
PLAINS PIPELINE, L.P.
HOBBS JUNCTION MAINLINE
NMOCD REF. # AP-054
LEA COUNTY, NEW MEXICO - SRS# 2003-00017
Talon/LPE Project Number PLAINS047SPL

Sample Location	Date	Top of Casing Elevation (feet-amsl)	Depth to PSH (feet-btoc)	Depth to Water (feet-btoc)	PSH Thickness (feet)	PSH Recovered (gallons)	Corrected Groundwater Elevation* (feet-amsl)
MW-3	10/13/03	3,679.81	39.21	48.75	9.54		3,639.65
MW-3	12/11/03		39.15	48.95	9.80		3,639.68
MW-3	12/15/03		39.08	50.91	11.83		3,639.55
MW-3	02/18/04		38.72	48.26	9.54		3,640.14
MW-3	03/12/04		39.82	48.49	8.67		3,639.12
MW-3	03/29/04		38.81	46.32	7.51		3,640.25
MW-3	04/29/04		39.49	44.11	4.62		3,639.86
MW-3	05/03/04		38.77	46.51	7.74		3,640.27
MW-3	07/12/04		39.68	46.81	7.13		3,639.42
MW-3	12/09/04		37.21	45.06	7.85		3,641.82
MW-3	02/16/05		36.70	42.67	5.97		3,642.51
MW-3	03/31/05		38.17	38.20	0.03		3,641.64
MW-3	05/13/05		36.67	44.45	7.78		3,642.36
MW-3	05/26/05		36.92	42.88	5.96		3,642.29
MW-3	06/28/05		36.72	44.05	7.33		3,642.36
MW-3	08/15/05		37.12	43.17	6.05		3,642.09
MW-3	11/14/05		37.69	42.67	4.98		3,641.62
MW-3	01/23/06		38.08	43.31	5.23		3,641.21
MW-3	03/02/06		37.80	42.37	4.57		3,641.55
MW-3	06/01/06		38.50	42.53	4.03		3,640.91
MW-3	08/14/06		39.27	44.64	5.37		3,640.00
MW-3	11/28/06		38.61	43.75	5.14		3,640.69
MW-3	12/12/06		38.56	43.91	5.35		3,640.72
MW-3	01/09/07		38.36	43.21	4.85		3,640.97
MW-3	02/08/07		38.50	44.15	5.65		3,640.75
MW-3	02/27/07		38.67	44.25	5.58	9.00	3,640.58
MW-3	03/09/07		38.89	44.13	5.24		3,640.40
MW-3	03/13/07		38.58	44.19	5.61	4.50	3,640.67
MW-3	03/15/07		38.62	44.23	5.61	5.00	3,640.63
MW-3	03/23/07		38.61	44.12	5.51		3,640.65
MW-3	03/28/07		38.61	44.23	5.62		3,640.64
MW-3	04/12/07		39.88	39.93	0.05		3,639.93
MW-3	04/18/07		39.64	41.30	1.66		3,640.00
MW-3	05/23/07		39.96	40.32	0.36		3,639.81
MW-3	06/20/07		39.86	40.20	0.34		3,639.92
MW-3	06/28/07		39.86	40.12	0.26		3,639.92
MW-3	07/18/07		39.89	40.19	0.30		3,639.89
MW-3	08/15/07		39.12	43.68	4.56		3,640.23
MW-3	08/22/07		39.11	43.56	4.45		3,640.26
MW-3	08/28/07		39.30	43.09	3.79		3,640.13
MW-3	09/19/07		39.12	43.20	4.08		3,640.28
MW-3	09/25/07		39.17	42.94	3.77		3,640.26
MW-3	10/09/07		39.07	41.74	2.67		3,640.47
MW-3	10/17/07		39.12	43.44	4.32		3,640.26
MW-3	10/26/07		39.24	42.99	3.75		3,640.20
MW-3	11/05/07		39.19	43.10	3.91		3,640.23
MW-3	11/12/07		39.90	40.21	0.31		3,639.88
MW-3	12/05/07		39.64	41.52	1.88		3,639.98



TABLE 1
GROUNDWATER ELEVATIONS AND
PHASE SEPARATED HYDROCARBON (PSH) THICKNESS
PLAINS PIPELINE, L.P.
HOBBS JUNCTION MAINLINE
NMOCD REF. # AP-054
LEA COUNTY, NEW MEXICO - SRS# 2003-00017
Talon/LPE Project Number PLAINS047SPL

Sample Location	Date	Top of Casing Elevation (feet-amsl)	Depth to PSH (feet-btoc)	Depth to Water (feet-btoc)	PSH Thickness (feet)	PSH Recovered (gallons)	Corrected Groundwater Elevation* (feet-amsl)
MW-4	10/13/03	3,679.64	39.01	48.75	9.74		3,639.66
MW-4	12/11/03		38.92	47.32	8.40		3,639.88
MW-4	12/15/03		38.84	47.16	8.32		3,639.97
MW-4	02/18/04		38.48	46.62	8.14		3,640.35
MW-4	03/12/04		39.09	47.51	8.42		3,639.71
MW-4	03/29/04		38.59	45.62	7.03		3,640.35
MW-4	04/29/04		39.94	44.23	4.29		3,639.27
MW-4	05/03/04		38.55	46.33	7.78		3,640.31
MW-4	07/12/04		39.49	46.24	6.75		3,639.48
MW-4	12/09/04		37.03	44.15	7.12		3,641.90
MW-4	02/16/05		36.28	43.01	6.73		3,642.69
MW-4	03/31/05		36.45	42.62	6.17		3,642.57
MW-4	05/13/05		36.37	43.25	6.88		3,642.58
MW-4	05/26/05		36.51	42.79	6.28		3,642.50
MW-4	06/28/05		36.47	43.26	6.79		3,642.49
MW-4	08/15/05		36.79	42.80	6.01		3,642.25
MW-4	11/14/05		37.35	42.24	4.89		3,641.80
MW-4	01/23/06		37.80	42.66	4.86		3,641.35
MW-4	03/02/06		37.43	41.97	4.54		3,641.76
MW-4	06/01/06		38.16	43.90	5.74		3,640.91
MW-4	08/14/06		39.01	44.12	5.11		3,640.12
MW-4	11/28/06		38.37	43.91	5.54		3,640.72
MW-4	12/12/06		38.35	43.06	4.71		3,640.82
MW-4	01/09/07		37.86	44.18	6.32		3,641.15
MW-4	02/08/07		38.28	44.93	6.65		3,640.70
MW-4	02/27/07		38.40	44.38	5.98	9.00	3,640.64
MW-4	03/09/07		38.34	43.32	4.98		3,640.80
MW-4	03/13/07		38.34	43.35	5.01	3.50	3,640.80
MW-4	03/15/07		38.30	43.38	5.08	5.00	3,640.83
MW-4	03/23/07		38.38	43.37	4.99		3,640.76
MW-4	03/28/07		38.37	43.42	5.05		3,640.77
MW-4	04/12/07		38.71	42.96	4.25		3,640.51
MW-4	04/18/07		38.00	43.14	5.14		3,641.13
MW-4	05/23/07		39.87	42.73	2.86		3,639.48
MW-4	06/20/07		38.90	42.52	3.62		3,640.38
MW-4	06/28/07		38.92	42.34	3.42		3,640.38
MW-4	07/18/07		38.99	42.36	3.37		3,640.31
MW-4	08/15/07		39.00	42.33	3.33		3,640.31
MW-4	08/22/07		38.97	42.27	3.30		3,640.34
MW-4	08/28/07		39.12	41.89	2.77		3,640.24
MW-4	09/19/07		38.89	42.32	3.43		3,640.41
MW-4	09/25/07		39.07	41.64	2.57		3,640.31
MW-4	10/09/07		39.12	41.74	2.62		3,640.26
MW-4	10/17/07		39.12	41.66	2.54		3,640.27
MW-4	10/26/07		39.10	41.42	2.32		3,640.31
MW-4	11/05/07		38.94	42.60	3.66		3,640.33
MW-4	11/12/07		39.27	41.09	1.82		3,640.19
MW-4	12/05/07		39.04	41.98	2.94		3,640.31



TABLE 1
GROUNDWATER ELEVATIONS AND
PHASE SEPARATED HYDROCARBON (PSH) THICKNESS
PLAINS PIPELINE, L.P.
HOBBS JUNCTION MAINLINE
NMOCD REF. # AP-054
LEA COUNTY, NEW MEXICO - SRS# 2003-00017
Talon/LPE Project Number PLAINS047SPL

Sample Location	Date	Top of Casing Elevation (feet-amsl)	Depth to PSH (feet-btoc)	Depth to Water (feet-btoc)	PSH Thickness (feet)	PSH Recovered (gallons)	Corrected Groundwater Elevation* (feet-amsl)
MW-5	10/13/03	3,679.26	40.35	43.02	2.67		3,638.64
MW-5	12/11/03		38.95	47.81	8.86		3,639.42
MW-5	12/15/03		38.91	47.72	8.81		3,639.47
MW-5	02/18/04		38.61	47.44	8.83		3,639.77
MW-5	03/29/04		38.76	46.15	7.39		3,639.76
MW-5	04/29/04		38.55	47.41	8.86		3,639.82
MW-5	05/03/04		38.52	47.46	8.94		3,639.85
MW-5	07/12/04		39.24	47.72	8.48		3,639.17
MW-5	12/09/04		36.99	45.01	8.02		3,641.47
MW-5	02/16/05		36.24	44.48	8.24		3,642.20
MW-5	02/22/05		36.20	44.50	8.30		3,642.23
MW-5	03/31/05		36.38	44.38	8.00		3,642.08
MW-5	05/13/05		36.43	44.29	7.86		3,642.04
MW-5	05/26/05		36.66	43.50	6.84		3,641.92
MW-5	06/28/05		36.58	44.45	7.87		3,641.89
MW-5	08/15/05		36.93	43.52	6.59		3,641.67
MW-5	11/14/05		37.45	43.27	5.82		3,641.23
MW-5	01/23/06		37.85	43.90	6.05		3,640.81
MW-5	03/02/06		37.46	43.41	5.95		3,641.21
MW-5	06/01/06		38.74	43.32	4.58		3,640.06
MW-5	08/14/06		38.92	45.05	6.13		3,639.73
MW-5	11/28/06		38.39	44.35	5.96		3,640.27
MW-5	12/12/06		38.32	44.91	6.59		3,640.28
MW-5	01/09/07		38.47	43.56	5.09		3,640.28
MW-5	02/08/07		38.28	44.42	6.14		3,640.37
MW-5	02/27/07		38.36	45.29	6.93	10.00	3,640.21
MW-5	03/09/07		38.44	45.22	6.78		3,640.14
MW-5	03/13/07		38.36	45.08	6.72	6.00	3,640.23
MW-5	03/15/07		38.37	45.09	6.72	5.00	3,640.22
MW-5	03/23/07		38.33	45.15	6.82		3,640.25
MW-5	03/28/07		38.35	45.17	6.82		3,640.23
MW-5	04/12/07		39.69	41.87	2.18		3,639.35
MW-5	04/18/07		40.31	42.84	2.53		3,638.70
MW-5	05/23/07		39.96	40.60	0.64		3,639.24
MW-5	06/20/07		39.38	42.16	2.78		3,639.60
MW-5	06/28/07		39.87	40.41	0.54		3,639.34
MW-5	07/18/07		39.95	40.35	0.40		3,639.27
MW-5	08/22/07		39.85	40.20	0.35		3,639.38
MW-5	08/28/07		39.20	42.98	3.78		3,639.68
MW-5	09/19/07		38.97	43.67	4.70		3,639.82
MW-5	09/25/07		39.14	42.87	3.73		3,639.75
MW-5	10/09/07		40.07	40.29	0.22		3,639.17
MW-5	10/17/07		39.01	43.06	4.05		3,639.85
MW-5	11/05/07		39.07	43.02	3.95		3,639.80
MW-5	12/05/07		39.13	42.26	3.13		3,639.82

TABLE 1
GROUNDWATER ELEVATIONS AND
PHASE SEPARATED HYDROCARBON (PSH) THICKNESS
PLAINS PIPELINE, L.P.
HOBBS JUNCTION MAINLINE
NMOC REF. # AP-054
LEA COUNTY, NEW MEXICO - SRS# 2003-00017
Talon/LPE Project Number PLAINS047SPL

Sample Location	Date	Top of Casing Elevation (feet-amsl)	Depth to PSH (feet-btoc)	Depth to Water (feet-btoc)	PSH Thickness (feet)	PSH Recovered (gallons)	Corrected Groundwater Elevation* (feet-amsl)
MW-6	10/13/03	3,680.63	40.04	50.12	10.08		3,639.58
MW-6	12/11/03		40.01	48.43	8.42		3,639.78
MW-6	12/15/03		39.92	48.33	8.41		3,639.87
MW-6	02/18/04		39.63	47.81	8.18		3,640.18
MW-6	03/12/04		39.68	47.51	7.83		3,640.17
MW-6	03/29/04		39.67	46.50	6.83		3,640.28
MW-6	04/29/04		40.18	44.76	4.58		3,639.99
MW-6	05/03/04		39.66	46.63	6.97		3,640.27
MW-6	07/12/04		40.52	47.68	7.16		3,639.39
MW-6	12/09/04		38.11	45.06	6.95		3,641.83
MW-6	02/16/05		36.25	44.44	8.19		3,643.56
MW-6	02/22/05		37.25	44.44	7.19		3,642.66
MW-6	03/31/05		37.52	44.15	6.63		3,642.45
MW-6	05/13/05		37.46	44.75	7.29		3,642.44
MW-6	05/26/05		37.71	43.31	5.60		3,642.36
MW-6	06/28/05		37.62	44.18	6.56		3,642.35
MW-6	08/15/05		38.09	42.77	4.68		3,642.07
MW-6	11/14/05		38.64	43.31	4.67		3,641.52
MW-6	01/23/06		39.08	42.67	3.59		3,641.19
MW-6	03/02/06		38.85	41.45	2.60		3,641.52
MW-6	06/01/06		40.06	41.84	1.78		3,640.39
MW-6	08/14/06		40.19	44.64	4.45		3,640.00
MW-6	11/28/06		39.36	44.31	4.95		3,640.78
MW-6	12/12/06		39.32	43.81	4.49		3,640.86
MW-6	01/09/07		39.71	42.41	2.70		3,640.65
MW-6	02/08/07		39.30	44.49	5.19		3,640.81
MW-6	02/27/07		39.41	44.54	5.13	7.00	3,640.71
MW-6	03/09/07		39.40	44.47	5.07		3,640.72
MW-6	03/13/07		39.40	44.47	5.07	4.00	3,640.72
MW-6	03/15/07		39.40	44.50	5.10	4.50	3,640.72
MW-6	03/23/07		39.41	44.42	5.01		3,640.72
MW-6	03/28/07		39.45	44.80	5.35		3,640.65
MW-6	04/12/07		40.33	41.37	1.04		3,640.20
MW-6	04/18/07		40.61	40.83	0.22		3,640.00
MW-6	05/23/07		40.50	40.90	0.40		3,640.09
MW-6	06/20/07		40.58	41.25	0.67		3,639.98
MW-6	06/28/07		40.24	42.01	1.77		3,640.21
MW-6	07/18/07		39.94	43.74	3.80		3,640.31
MW-6	08/15/07		40.51	41.06	0.55		3,640.07
MW-6	08/22/07		40.56	40.81	0.25		3,640.05
MW-6	08/28/07		40.30	42.31	2.01		3,640.13
MW-6	09/19/07		39.78	44.04	4.26		3,640.42
MW-6	09/25/07		39.84	44.15	4.31		3,640.36
MW-6	10/09/07		39.82	44.15	4.33		3,640.38
MW-6	10/17/07		40.55	40.83	0.28		3,640.05
MW-6	10/26/07		39.98	43.54	3.56		3,640.29
MW-6	11/05/07		39.88	43.98	4.10		3,640.34
MW-6	11/12/07		39.91	43.99	4.08		3,640.31
MW-6	12/05/07		39.98	43.97	3.99		3,640.25



TABLE 1
GROUNDWATER ELEVATIONS AND
PHASE SEPARATED HYDROCARBON (PSH) THICKNESS
PLAINS PIPELINE, L.P.
HOBBS JUNCTION MAINLINE
NMOCD REF. # AP-054
LEA COUNTY, NEW MEXICO - SRS# 2003-00017
Talon/LPE Project Number PLAINS047SPL

Sample Location	Date	Top of Casing Elevation (feet-amsl)	Depth to PSH (feet-btoc)	Depth to Water (feet-btoc)	PSH Thickness (feet)	PSH Recovered (gallons)	Corrected Groundwater Elevation* (feet-amsl)
MW-7	01/23/04	3,679.85		39.64			3,640.21
MW-7	04/29/04			39.29			3,640.56
MW-7	05/12/04			39.29			3,640.56
MW-7	06/03/04			39.27			3,640.58
MW-7	07/12/04			40.42			3,639.43
MW-7	07/19/04			40.68			3,639.17
MW-7	11/08/04			38.66			3,641.19
MW-7	03/31/05			37.07			3,642.78
MW-7	05/13/05			37.10			3,642.75
MW-7	05/23/05			37.09			3,642.76
MW-7	05/26/05			37.13			3,642.69
MW-7	06/28/05			37.16			3,642.69
MW-7	08/15/05			37.32			3,642.45
MW-7	08/17/05			37.26			3,642.59
MW-7	11/14/05			37.40			3,642.45
MW-7	01/23/06			38.12			3,641.73
MW-7	03/02/06			37.49			3,642.36
MW-7	06/01/06			38.40			3,641.45
MW-7	08/14/06			39.50			3,640.35
MW-7	11/28/06			38.61			3,641.24
MW-7	12/12/06			38.62			3,641.23
MW-7	01/09/07			38.22			3,641.63
MW-7	02/08/07			38.43			3,641.42
MW-7	02/27/07			38.67			3,641.18
MW-7	03/09/07			38.67			3,641.18
MW-7	03/13/07			38.65			3,641.20
MW-7	03/15/07			38.64			3,641.21
MW-7	03/23/07			38.51			3,641.34
MW-7	03/28/07			38.60			3,641.25
MW-7	04/12/07			38.75			3,641.10
MW-7	04/18/07			38.73			3,641.12
MW-7	05/23/07			38.70			3,641.15
MW-7	06/20/07			38.81			3,641.04
MW-7	07/18/07			38.90			3,640.95
MW-7	09/19/07			38.87			3,640.98
MW-7	11/02/07			38.96			3,640.89
MW-7	11/16/07			38.90			3,640.95
MW-7	12/05/07			38.99			3,640.86



TABLE 1
GROUNDWATER ELEVATIONS AND
PHASE SEPARATED HYDROCARBON (PSH) THICKNESS
PLAINS PIPELINE, L.P.
HOBBS JUNCTION MAINLINE
NMOCD REF. # AP-054
LEA COUNTY, NEW MEXICO - SRS# 2003-00017
Talon/LPE Project Number PLAINS047SPL

Sample Location	Date	Top of Casing Elevation (feet-amsl)	Depth to PSH (feet-btoc)	Depth to Water (feet-btoc)	PSH Thickness (feet)	PSH Recovered (gallons)	Corrected Groundwater Elevation* (feet-amsl)
MW-8	01/23/04	3,679.07		39.56			3,639.51
MW-8	04/29/04			39.33			3,639.74
MW-8	05/12/04			39.34			3,639.73
MW-8	06/03/04			39.32			3,639.75
MW-8	07/12/04			40.13			3,638.94
MW-8	07/19/04			40.32			3,638.75
MW-8	11/08/04			39.60			3,639.47
MW-8	03/31/05			37.11			3,641.96
MW-8	05/13/05			37.16			3,641.91
MW-8	05/23/05			37.16			3,641.91
MW-8	05/26/05			37.19			3,641.88
MW-8	06/28/05			37.23			3,641.84
MW-8	08/15/05			37.40			3,641.67
MW-8	08/17/05			37.34			3,641.73
MW-8	11/14/05			37.52			3,641.55
MW-8	01/23/06			38.23			3,640.84
MW-8	03/02/06			37.63			3,641.44
MW-8	06/01/06			38.90			3,640.17
MW-8	08/14/06			39.34			3,639.73
MW-8	11/28/06			38.71			3,640.36
MW-8	12/12/06			38.73			3,640.34
MW-8	01/09/07			38.71			3,640.36
MW-8	02/08/07			38.55			3,640.52
MW-8	02/21/07			38.78			3,640.29
MW-8	02/27/07			38.79			3,640.28
MW-8	03/09/07			38.78			3,640.29
MW-8	03/13/07			38.78			3,640.29
MW-8	03/15/07			38.76			3,640.31
MW-8	03/23/07			38.62			3,640.45
MW-8	03/28/07			38.74			3,640.33
MW-8	04/12/07			38.90			3,640.17
MW-8	04/18/07			38.88			3,640.19
MW-8	05/23/07			38.86			3,640.21
MW-8	06/20/07			38.96			3,640.11
MW-8	07/18/07			39.05			3,640.02
MW-8	09/19/07			38.99			3,640.08
MW-8	11/02/07			39.06			3,640.01
MW-8	11/16/07			39.06			3,640.01
MW-8	12/05/07			39.09			3,639.98

TABLE 1
GROUNDWATER ELEVATIONS AND
PHASE SEPARATED HYDROCARBON (PSH) THICKNESS
PLAINS PIPELINE, L.P.
HOBBS JUNCTION MAINLINE
NMOCD REF. # AP-054
LEA COUNTY, NEW MEXICO - SRS# 2003-00017
Talon/LPE Project Number PLAINS047SPL

Sample Location	Date	Top of Casing Elevation (feet-amsl)	Depth to PSH (feet-btoc)	Depth to Water (feet-btoc)	PSH Thickness (feet)	PSH Recovered (gallons)	Corrected Groundwater Elevation* (feet-amsl)
MW-9	01/23/04	3,678.76		39.91			3,638.85
MW-9	04/29/04			39.68			3,639.08
MW-9	05/12/04			39.69			3,639.07
MW-9	06/03/04			39.67			3,639.09
MW-9	07/12/04			40.34			3,638.42
MW-9	07/19/04			40.44			3,638.32
MW-9	11/08/04			38.84			3,639.92
MW-9	03/31/05			37.48			3,641.28
MW-9	05/13/05			37.54			3,641.22
MW-9	05/23/05			37.55			3,641.21
MW-9	05/26/05			37.59			3,641.17
MW-9	06/28/05			37.64			3,641.12
MW-9	08/15/05			37.82			3,640.94
MW-9	08/17/05			37.77			3,640.99
MW-9	11/14/05			37.95			3,640.81
MW-9	01/23/06			38.65			3,640.11
MW-9	03/02/06			38.05			3,640.71
MW-9	06/01/06			38.73			3,640.03
MW-9	08/14/06			39.57			3,639.19
MW-9	11/28/06			39.12			3,639.64
MW-9	12/12/06			53.10			3,625.66
MW-9	01/09/07			39.14			3,639.62
MW-9	02/08/07			38.97			3,639.79
MW-9	02/21/07			39.22			3,639.54
MW-9	02/27/07			39.21			3,639.55
MW-9	03/09/07			39.21			3,639.55
MW-9	03/13/07			39.20			3,639.56
MW-9	03/15/07			39.20			3,639.56
MW-9	03/23/07			39.04			3,639.72
MW-9	03/28/07			39.16			3,639.60
MW-9	04/12/07			39.36			3,639.40
MW-9	04/18/07			39.30			3,639.46
MW-9	05/22/07			39.31			3,639.45
MW-9	06/20/07			39.40			3,639.36
MW-9	07/18/07			39.49			3,639.27
MW-9	09/19/07			39.45			3,639.31
MW-9	11/02/07			39.51			3,639.25
MW-9	11/16/07			39.48			3,639.28
MW-9	12/05/07			39.51			3,639.25

TABLE 1
GROUNDWATER ELEVATIONS AND
PHASE SEPARATED HYDROCARBON (PSH) THICKNESS
PLAINS PIPELINE, L.P.
HOBBS JUNCTION MAINLINE
NMOCD REF. # AP-054
LEA COUNTY, NEW MEXICO - SRS# 2003-00017
Talon/LPE Project Number PLAINS047SPL

Sample Location	Date	Top of Casing Elevation (feet-amsl)	Depth to PSH (feet-btoc)	Depth to Water (feet-btoc)	PSH Thickness (feet)	PSH Recovered (gallons)	Corrected Groundwater Elevation* (feet-amsl)
MW-10	01/23/04	3,678.36		39.89			3,638.47
MW-10	04/29/04			39.74			3,638.62
MW-10	05/12/04			39.74			3,638.62
MW-10	06/03/04			39.74			3,638.62
MW-10	07/12/04			40.24			3,638.12
MW-10	07/19/04			40.33			3,638.03
MW-10	11/08/04			38.76			3,639.60
MW-10	03/31/05			37.46			3,640.90
MW-10	05/13/05			37.58			3,640.78
MW-10	05/23/05			37.58			3,640.78
MW-10	05/26/05			37.62			3,640.74
MW-10	06/28/05			37.70			3,640.66
MW-10	08/15/05			37.87			3,640.49
MW-10	08/17/05			37.02			3,641.34
MW-10	11/14/05			38.02			3,640.34
MW-10	01/23/06			38.73			3,639.63
MW-10	03/02/06			38.16			3,640.20
MW-10	06/01/06			38.81			3,639.55
MW-10	08/14/06			39.51			3,638.85
MW-10	11/28/06			39.19			3,639.17
MW-10	12/12/06			39.21			3,639.15
MW-10	01/09/07			39.21			3,639.15
MW-10	02/08/07			39.10			3,639.26
MW-10	02/21/07			39.33			3,639.03
MW-10	02/27/07			39.29			3,639.07
MW-10	03/09/07			39.24			3,639.12
MW-10	03/13/07			39.29			3,639.07
MW-10	03/15/07			39.30			3,639.06
MW-10	03/23/07			39.11			3,639.25
MW-10	03/28/07			39.24			3,639.12
MW-10	04/12/07			39.46			3,638.90
MW-10	04/18/07			39.41			3,638.95
MW-10	04/18/07			39.31			3,639.05
MW-10	06/20/07			39.48			3,638.88
MW-10	07/18/07			39.59			3,638.77
MW-10	09/19/07			39.51			3,638.85
MW-10	11/02/07			39.50			3,638.86
MW-10	11/16/07			39.91			3,638.45
MW-10	12/05/07			39.52			3,638.84



TABLE 1
GROUNDWATER ELEVATIONS AND
PHASE SEPARATED HYDROCARBON (PSH) THICKNESS
PLAINS PIPELINE, L.P.
HOBBS JUNCTION MAINLINE
NMOCD REF. # AP-054
LEA COUNTY, NEW MEXICO - SRS# 2003-00017
Talon/LPE Project Number PLAINS047SPL

Sample Location	Date	Top of Casing Elevation (feet-amsl)	Depth to PSH (feet-btoc)	Depth to Water (feet-btoc)	PSH Thickness (feet)	PSH Recovered (gallons)	Corrected Groundwater Elevation* (feet-amsl)
MW-11	01/23/04	3,678.03		41.40			3,636.63
MW-11	04/29/04			41.07			3,636.96
MW-11	05/12/04			39.57			3,638.46
MW-11	06/03/04			39.61			3,638.42
MW-11	07/12/04			40.04			3,637.99
MW-11	07/19/04			40.10			3,637.93
MW-11	11/08/04			38.66			3,639.37
MW-11	03/31/05			37.25			3,640.78
MW-11	05/13/05			37.40			3,640.63
MW-11	05/23/05			37.34			3,640.69
MW-11	05/26/05			31.45			3,646.58
MW-11	06/28/05			37.54			3,640.49
MW-11	08/15/05			37.60			3,640.43
MW-11	08/17/05			37.61			3,640.42
MW-11	11/14/05			37.80			3,640.23
MW-11	01/23/06			38.58			3,639.45
MW-11	03/02/06			37.97			3,640.06
MW-11	06/01/06			39.15			3,638.88
MW-11	08/14/06			39.33			3,638.70
MW-11	11/28/06			39.00			3,639.03
MW-11	12/12/06			39.06			3,638.97
MW-11	01/09/07			39.06			3,638.97
MW-11	02/08/07			38.91			3,639.12
MW-11	02/21/07			39.11			3,638.92
MW-11	02/27/07			44.87			3,633.16
MW-11	03/09/07			39.17			3,638.86
MW-11	03/13/07			39.13			3,638.90
MW-11	03/15/07			39.16			3,638.87
MW-11	03/23/07			39.01			3,639.02
MW-11	03/28/07			39.05			3,638.98
MW-11	04/12/07			39.34			3,638.69
MW-11	04/18/07			39.25			3,638.78
MW-11	05/22/07			39.24			3,638.79
MW-11	06/20/07			39.30			3,638.73
MW-11	07/18/07			39.42			3,638.61
MW-11	09/19/07			39.55			3,638.48
MW-11	11/02/07			39.37			3,638.66
MW-11	11/16/07			39.46			3,638.57
MW-11	12/05/07			39.47			3,638.56

TABLE 1
GROUNDWATER ELEVATIONS AND
PHASE SEPARATED HYDROCARBON (PSH) THICKNESS
PLAINS PIPELINE, L.P.
HOBBS JUNCTION MAINLINE
NMOCD REF. # AP-054
LEA COUNTY, NEW MEXICO - SRS# 2003-00017
Talon/LPE Project Number PLAINS047SPL

Sample Location	Date	Top of Casing Elevation (feet-amsl)	Depth to PSH (feet-btoc)	Depth to Water (feet-btoc)	PSH Thickness (feet)	PSH Recovered (gallons)	Corrected Groundwater Elevation* (feet-amsl)
MW-12	01/23/04	3,679.63	39.49	45.30	5.81		3,639.56
MW-12	03/23/04		38.89	47.39	8.50		3,639.89
MW-12	03/29/04		38.86	47.33	8.47		3,639.92
MW-12	04/29/04		38.86	48.57	9.71		3,639.80
MW-12	05/03/04		38.83	46.63	7.80		3,640.02
MW-12	07/12/04		39.58	47.53	7.95		3,639.26
MW-12	12/09/04		37.50	44.28	6.78		3,641.45
MW-12	02/16/05		36.68	43.87	7.19		3,642.23
MW-12	03/31/05		36.95	42.97	6.02		3,642.08
MW-12	05/13/05		36.83	43.97	7.14		3,642.09
MW-12	05/26/05		36.95	43.71	6.76		3,642.00
MW-12	06/28/05		36.97	44.14	7.17		3,641.94
MW-12	08/15/05		37.25	43.60	6.35		3,641.75
MW-12	11/14/05		37.73	43.51	5.78		3,641.32
MW-12	01/23/06		38.08	44.34	6.26		3,640.92
MW-12	03/02/06		37.71	43.82	6.11		3,641.31
MW-12	06/01/06		38.87	44.25	5.38		3,640.22
MW-12	08/14/06		39.11	45.85	6.74		3,639.85
MW-12	11/28/06		38.64	44.91	6.27		3,640.36
MW-12	12/12/06		38.63	44.92	6.29		3,640.37
MW-12	01/09/07		38.41	44.87	6.46		3,640.57
MW-12	02/08/07		nd	42.02	na		3,636.01
MW-12	03/09/07		38.67	45.13	6.46		3,640.31
MW-12	03/13/07		38.64	45.14	6.50	7.00	3,640.34
MW-12	03/15/07		38.64	45.16	6.52	6.00	3,640.34
MW-12	03/23/07		38.68	45.14	6.46		3,640.30
MW-12	03/28/07		38.68	45.19	6.51		3,640.30
MW-12	04/12/07		39.22	44.25	5.03		3,639.91
MW-12	04/18/07		39.96	44.68	4.72		3,639.20
MW-12	05/22/07		39.51	43.75	4.24		3,639.70
MW-12	06/20/07		39.42	43.40	3.98		3,639.81
MW-12	06/28/07		39.47	43.06	3.59		3,639.80
MW-12	07/18/07		39.65	42.80	3.15		3,639.67
MW-12	08/15/07		39.27	43.96	4.69		3,639.89
MW-12	08/22/07		39.50	42.90	3.40		3,639.79
MW-12	08/28/07		39.78	42.04	2.26		3,639.62
MW-12	09/19/07		39.39	43.31	3.92		3,639.85
MW-12	09/25/07		39.29	43.67	4.38		3,639.90
MW-12	10/09/07		39.14	44.79	5.65		3,639.93
MW-12	10/17/07		39.57	42.72	3.15		3,639.75
MW-12	10/26/07		39.21	41.22	2.01		3,640.22
MW-12	11/05/07		39.13	44.61	5.48		3,639.95
MW-12	11/12/07		39.33	44.70	5.37		3,639.76
MW-12	12/05/07		39.34	44.87	5.53		3,639.74



TABLE 1
GROUNDWATER ELEVATIONS AND
PHASE SEPARATED HYDROCARBON (PSH) THICKNESS
PLAINS PIPELINE, L.P.
HOBBS JUNCTION MAINLINE
NMOCD REF. # AP-054
LEA COUNTY, NEW MEXICO - SRS# 2003-00017
Talon/LPE Project Number PLAINS047SPL

Sample Location	Date	Top of Casing Elevation (feet-amsl)	Depth to PSH (feet-btoc)	Depth to Water (feet-btoc)	PSH Thickness (feet)	PSH Recovered (gallons)	Corrected Groundwater Elevation* (feet-amsl)
MW-13	01/23/04	3,681.42		39.67			3,641.75
MW-13	04/29/04			39.58			3,641.84
MW-13	05/12/04			41.05			3,640.37
MW-13	06/03/04			41.05			3,640.37
MW-13	07/12/04			42.18			3,639.24
MW-13	07/19/04			42.44			3,638.98
MW-13	11/08/04			40.24			3,641.18
MW-13	03/31/05			38.79			3,642.63
MW-13	05/13/05			38.83			3,642.59
MW-13	05/23/05			38.82			3,642.60
MW-13	05/26/05			38.87			3,642.55
MW-13	06/28/05			38.63			3,642.79
MW-13	08/15/05			39.07			3,642.35
MW-13	08/17/05			39.02			3,642.40
MW-13	11/14/05			39.15			3,642.27
MW-13	01/23/06			39.84			3,641.58
MW-13	03/02/06			39.28			3,642.14
MW-13	06/01/06			40.73			3,640.69
MW-13	08/14/06			41.22			3,640.20
MW-13	11/28/06			40.38			3,641.04
MW-13	12/12/06			40.37			3,641.05
MW-13	01/09/07			40.36			3,641.06
MW-13	02/08/07			42.02			3,639.40
MW-13	02/27/07			40.41			3,641.01
MW-13	03/09/07			40.42			3,641.00
MW-13	03/13/07			40.42			3,641.00
MW-13	03/15/07			40.44			3,640.98
MW-13	03/23/07			40.25			3,641.17
MW-13	03/28/07			40.35			3,641.07
MW-13	04/12/07			40.55			3,640.87
MW-13	04/18/07			40.48			3,640.94
MW-13	05/23/07			40.48			3,640.94
MW-13	06/20/07			40.60			3,640.82
MW-13	07/18/07			40.68			3,640.74
MW-13	09/19/07			39.55			3,641.87
MW-13	11/02/07			40.58			3,640.84
MW-13	11/16/07			40.43			3,640.99
MW-13	12/05/07			40.75			3,640.67



TABLE 1
GROUNDWATER ELEVATIONS AND
PHASE SEPARATED HYDROCARBON (PSH) THICKNESS
PLAINS PIPELINE, L.P.
HOBBS JUNCTION MAINLINE
NMOC REF. # AP-054
LEA COUNTY, NEW MEXICO - SRS# 2003-00017
Talon/LPE Project Number PLAINS047SPL

Sample Location	Date	Top of Casing Elevation (feet-amsl)	Depth to PSH (feet-btoc)	Depth to Water (feet-btoc)	PSH Thickness (feet)	PSH Recovered (gallons)	Corrected Groundwater Elevation* (feet-amsl)
MW-14	06/03/04	3,679.00	39.16	42.87	3.71		3,639.47
MW-14	07/12/04		39.29	46.46	7.17		3,638.99
MW-14	07/19/04		39.45	46.59	7.14		3,638.84
MW-14	08/26/04		38.92	45.94	7.02		3,639.38
MW-14	12/09/04		37.11	43.08	5.97		3,641.29
MW-14	02/16/05		36.62	42.53	5.91		3,641.79
MW-14	03/31/05		36.34	43.32	6.98		3,641.96
MW-14	05/13/05		36.45	43.34	6.89		3,641.86
MW-14	05/26/05		36.48	45.27	8.79		3,641.64
MW-14	06/28/05		36.54	44.83	8.29		3,641.63
MW-14	08/15/05		37.14	41.59	4.45		3,641.42
MW-14	11/14/05		37.55	41.70	4.15		3,641.04
MW-14	01/23/06		37.85	42.74	4.89		3,640.66
MW-14	03/02/06		37.58	41.71	4.13		3,641.01
MW-14	06/01/06		38.84	41.75	2.91		3,639.87
MW-14	08/14/06		0.00	39.00	39.00		3,675.10
MW-14	11/28/06		38.30	43.55	5.25		3,640.18
MW-14	12/12/06		38.24	44.02	5.78		3,640.18
MW-14	01/09/07		38.21	42.26	4.05		3,640.39
MW-14	02/08/07		38.18	44.27	6.09		3,640.21
MW-14	02/27/07		38.26	44.32	6.06	9.00	3,640.13
MW-14	03/09/07		38.27	44.41	6.14		3,640.12
MW-14	03/13/07		38.20	44.21	6.01		3,640.20
MW-14	03/15/07		38.22	44.20	5.98	6.00	3,640.18
MW-14	03/23/07		38.28	44.22	5.94		3,640.13
MW-14	03/28/07		38.25	44.27	6.02		3,640.15
MW-14	04/12/07		39.41	40.64	1.23		3,639.47
MW-14	04/18/07		39.69	40.01	0.32		3,639.28
MW-14	05/23/07		39.71	40.02	0.31		3,639.26
MW-14	06/20/07		38.96	41.88	2.92		3,639.75
MW-14	06/28/07		39.05	41.85	2.80		3,639.67
MW-14	07/18/07		39.58	39.91	0.33		3,639.39
MW-14	08/15/07		39.63	39.87	0.24		3,639.35
MW-14	08/22/07		39.54	40.15	0.61		3,639.40
MW-14	08/28/07		39.39	41.62	2.23		3,639.39
MW-14	09/19/07		39.07	41.79	2.72		3,639.66
MW-14	09/25/07		39.34	40.94	1.60		3,639.50
MW-14	10/09/07		39.44	41.15	1.71		3,639.39
MW-14	10/17/07		39.61	39.80	0.19		3,639.37
MW-14	10/26/07		39.56	39.88	0.32		3,639.41
MW-14	11/05/07		39.08	42.21	3.13		3,639.61
MW-14	11/12/07		38.95	43.05	4.10		3,639.64
MW-14	12/05/07		38.99	43.75	4.76		3,639.53

TABLE 1
GROUNDWATER ELEVATIONS AND
PHASE SEPARATED HYDROCARBON (PSH) THICKNESS
PLAINS PIPELINE, L.P.
HOBBS JUNCTION MAINLINE
NMOCD REF. # AP-054
LEA COUNTY, NEW MEXICO - SRS# 2003-00017
Talon/LPE Project Number PLAINS047SPL

Sample Location	Date	Top of Casing Elevation (feet-amsl)	Depth to PSH (feet-btoc)	Depth to Water (feet-btoc)	PSH Thickness (feet)	PSH Recovered (gallons)	Corrected Groundwater Elevation* (feet-amsl)
MW-15	06/03/04	3,674.92		36.22			3,638.70
MW-15	07/12/04			36.77			3,638.15
MW-15	07/19/04			36.90			3,638.02
MW-15	11/08/04			35.10			3,639.82
MW-15	03/31/05			33.92			3,641.00
MW-15	05/13/05			34.00			3,640.92
MW-15	05/23/05			35.34			3,639.58
MW-15	05/26/05			35.38			3,639.54
MW-15	06/28/05			35.46			3,639.46
MW-15	08/15/05			34.32			3,640.60
MW-15	08/17/05			34.29			3,640.63
MW-15	11/14/05			34.47			3,640.45
MW-15	01/23/06			35.17			3,639.75
MW-15	03/02/06			34.60			3,640.32
MW-15	06/01/06			37.18			3,637.74
MW-15	08/10/06			35.62			3,639.30
MW-15	11/28/06			35.63			3,639.29
MW-15	12/12/06			36.92			3,638.00
MW-15	01/09/07			36.93			3,637.99
MW-15	02/27/07		35.16	35.67	0.51	10.00	3,639.71
MW-15	03/09/07		35.16	35.92	0.76		3,639.68
MW-15	03/13/07		35.65	36.01	0.36		3,639.23
MW-15	03/15/07		35.64	36.20	0.56		3,639.22
MW-15	03/23/07		35.68	36.14	0.46		3,639.19
MW-15	03/28/07		35.70	36.21	0.51		3,639.17
MW-15	04/12/07		35.75	36.51	0.76		3,639.09
MW-15	04/18/07		35.70	36.46	0.76		3,639.14
MW-15	05/22/07		35.70	37.04	1.34		3,639.09
MW-15	06/20/07		35.90	37.52	1.62		3,638.86
MW-15	07/18/07		35.60	38.10	2.50		3,639.07
MW-15	08/15/07		35.47	38.56	3.09		3,639.14
MW-15	08/22/07		35.48	38.58	3.10		3,639.13
MW-15	08/28/07		35.59	38.15	2.56		3,639.07
MW-15	09/19/07		35.78	36.98	1.20		3,639.02
MW-15	09/25/07		36.43	37.27	0.84		3,638.41
MW-15	10/09/07		35.61	37.99	2.38		3,639.07
MW-15	10/17/07		35.49	38.36	2.87		3,639.14
MW-15	10/26/07		35.47	38.71	3.24		3,639.13
MW-15	11/05/07		35.46	39.89	4.43		3,639.02
MW-15	11/12/07		35.37	39.18	3.81		3,639.17
MW-15	12/05/07		35.31	39.75	4.44		3,639.17

TABLE I
GROUNDWATER ELEVATIONS AND
PHASE SEPARATED HYDROCARBON (PSH) THICKNESS
PLAINS PIPELINE, L.P.
HOBBS JUNCTION MAINLINE
NMOCD REF. # AP-054
LEA COUNTY, NEW MEXICO - SRS# 2003-00017
Talon/LPE Project Number PLAINS047SPL

Sample Location	Date	Top of Casing Elevation (feet-amsl)	Depth to PSH (feet-btgc)	Depth to Water (feet-btgc)	PSH Thickness (feet)	PSH Recovered (gallons)	Corrected Groundwater Elevation* (feet-amsl)
MW-16	06/03/04	3,676.86		37.66			3,639.20
MW-16	07/12/04			38.35			3,638.51
MW-16	07/19/04			38.57			3,638.29
MW-16	11/08/04			36.38			3,640.48
MW-16	03/31/05			35.29			3,641.57
MW-16	05/13/05			35.31			3,641.55
MW-16	05/23/05			35.18			3,641.68
MW-16	05/26/05			34.04			3,642.82
MW-16	06/28/05			34.11			3,642.75
MW-16	08/15/05			35.61			3,641.25
MW-16	08/17/05			35.56			3,641.30
MW-16	11/14/05			35.73			3,641.13
MW-16	01/23/06			36.45			3,640.41
MW-16	03/02/06			35.85			3,641.01
MW-16	06/01/06			35.82			3,641.04
MW-16	08/14/06			37.50			3,639.36
MW-16	11/28/06			37.94			3,638.92
MW-16	12/12/06			35.65			3,641.21
MW-16	01/09/07			35.67			3,641.19
MW-16	03/09/07			36.00			3,640.86
MW-16	03/13/07			36.98			3,639.88
MW-16	03/15/07			36.96			3,639.90
MW-16	03/23/07			36.84			3,640.02
MW-16	03/28/07			36.96			3,639.90
MW-16	04/12/07			37.14			3,639.72
MW-16	04/18/07			37.03			3,639.83
MW-16	05/23/07			37.08			3,639.78
MW-16	06/20/07			37.16			3,639.70
MW-16	07/18/07			37.28			3,639.58
MW-16	09/19/07			37.27			3,639.59
MW-16	11/02/07			37.30			3,639.56
MW-16	11/16/07			37.32			3,639.54
MW-16	12/05/07			37.36			3,639.50



TABLE 1
GROUNDWATER ELEVATIONS AND
PHASE SEPARATED HYDROCARBON (PSH) THICKNESS
PLAINS PIPELINE, L.P.
HOBBS JUNCTION MAINLINE
NMOCD REF. # AP-054
LEA COUNTY, NEW MEXICO - SRS# 2003-00017
Talon/LPE Project Number PLAINS047SPL

Sample Location	Date	Top of Casing Elevation (feet-amsl)	Depth to PSH (feet-btoc)	Depth to Water (feet-btoc)	PSH Thickness (feet)	PSH Recovered (gallons)	Corrected Groundwater Elevation* (feet-amsl)
MW-17	06/03/04	3,679.01	39.66	42.05	2.39		3,639.11
MW-17	07/12/04		39.39	46.94	7.55		3,638.87
MW-17	07/19/04		39.50	46.97	7.47		3,638.76
MW-17	08/26/04		39.04	46.59	7.55		3,639.22
MW-17	12/09/04		37.11	44.60	7.49		3,641.15
MW-17	02/16/05		37.00	41.07	4.07		3,641.60
MW-17	03/31/05		36.49	44.13	7.64		3,641.76
MW-17	05/13/05		36.52	44.24	7.72		3,641.72
MW-17	05/26/05		36.72	44.28	7.56		3,641.53
MW-17	06/28/05		36.95	44.76	7.81		3,641.28
MW-17	08/15/05		37.25	42.35	5.10		3,641.25
MW-17	11/14/05		37.69	42.33	4.64		3,640.86
MW-17	01/23/06		38.15	43.41	5.26		3,640.33
MW-17	03/02/06		37.59	43.25	5.66		3,640.85
MW-17	06/01/06		38.95	42.48	3.53		3,639.71
MW-17	08/14/06		39.10	44.41	5.31		3,639.38
MW-17	11/28/06		38.49	44.04	5.55		3,639.97
MW-17	12/12/06		38.42	44.33	5.91		3,640.00
MW-17	01/09/07		38.42	43.07	4.65		3,640.13
MW-17	02/08/07		38.38	44.95	6.57		3,639.97
MW-17	02/27/07		38.51	45.22	6.71	11.00	3,639.83
MW-17	03/09/07		38.41	45.11	6.70		3,639.93
MW-17	03/13/07		38.39	45.02	6.63		3,639.96
MW-17	03/15/07		38.41	45.01	6.60	6.00	3,639.94
MW-17	03/23/07		38.43	45.11	6.68		3,639.91
MW-17	03/28/07		38.43	45.26	6.83		3,639.90
MW-17	04/12/07		39.06	43.82	4.76		3,639.47
MW-17	04/18/07		39.13	44.32	5.19		3,639.36
MW-17	05/23/07		39.41	43.65	4.24		3,639.18
MW-17	06/20/07		39.52	41.72	2.20		3,639.27
MW-17	06/28/07		39.79	40.75	0.96		3,639.12
MW-17	07/18/07		39.82	40.81	0.99		3,639.09
MW-17	08/15/07		39.92	40.18	0.26		3,639.06
MW-17	08/22/07		39.87	40.17	0.30		3,639.11
MW-17	08/28/07		39.90	40.39	0.49		3,639.06
MW-17	09/25/07		39.78	40.17	0.39		3,639.19
MW-17	10/09/07		39.92	40.38	0.46		3,639.04
MW-17	10/17/07		39.83	40.17	0.34		3,639.15
MW-17	10/26/07		39.91	40.03	0.12		3,639.09
MW-17	11/05/07		39.17	43.19	4.02		3,639.44
MW-17	11/12/07		39.89	40.04	0.15		3,639.11
MW-17	12/05/07		39.75	41.97	2.22		3,639.04

TABLE I
GROUNDWATER ELEVATIONS AND
PHASE SEPARATED HYDROCARBON (PSH) THICKNESS
PLAINS PIPELINE, L.P.
HOBBS JUNCTION MAINLINE
NMOCD REF. # AP-054
LEA COUNTY, NEW MEXICO - SRS# 2003-00017
Talon/LPE Project Number PLAINS047SPL

Sample Location	Date	Top of Casing Elevation (feet-amsl)	Depth to PSH (feet-btoc)	Depth to Water (feet-btoc)	PSH Thickness (feet)	PSH Recovered (gallons)	Corrected Groundwater Elevation* (feet-amsl)
MW-18	11/28/06			35.64			
MW-18	12/12/06			35.65			
MW-18	01/09/07			35.62			
MW-18	02/08/07			35.50			
MW-18	03/09/07			35.70			
MW-18	03/13/07			35.71			
MW-18	03/15/07			35.70			
MW-18	03/23/07			35.57			
MW-18	03/28/07			36.65			
MW-18	04/12/07			35.83			
MW-18	04/18/07			35.84			
MW-18	05/22/07			35.86			
MW-18	06/20/07			35.86			
MW-18	07/18/07			35.98			
MW-18	09/19/07	3,679.01		35.94			3,643.07
MW-18	11/02/07			35.97			3,643.04
MW-18	12/05/07			36.04			3,642.97
MW-19	11/28/06			35.55			
MW-19	12/12/06			35.55			
MW-19	01/09/07			35.57			
MW-19	02/08/07			35.43			
MW-19	03/09/07			35.65			
MW-19	03/13/07			35.65			
MW-19	03/15/07			35.66			
MW-19	03/23/07			35.48			
MW-19	03/28/07			35.54			
MW-19	04/12/07			35.77			
MW-19	04/18/07			35.72			
MW-19	05/23/07			35.71			
MW-19	06/20/07			35.81			
MW-19	07/18/07			35.90			
MW-19	09/19/07	3,674.96		35.87			3,639.09
MW-19	11/02/07			35.90			3,639.06
MW-19	11/16/07			35.96			3,639.00
MW-19	12/05/07			36.56			3,638.40

TABLE I
GROUNDWATER ELEVATIONS AND
PHASE SEPARATED HYDROCARBON (PSH) THICKNESS
PLAINS PIPELINE, L.P.
HOBBS JUNCTION MAINLINE
NMOCD REF. # AP-054
LEA COUNTY, NEW MEXICO - SRS# 2003-00017
Talon/LPE Project Number PLAINS047SPL

Sample Location	Date	Top of Casing Elevation (feet-amsl)	Depth to PSH (feet-btoc)	Depth to Water (feet-btoc)	PSH Thickness (feet)	PSH Recovered (gallons)	Corrected Groundwater Elevation* (feet-amsl)
MW-20	11/28/06			35.61			
MW-20	12/12/06			35.63			
MW-20	01/09/07			35.67			
MW-20	02/08/07			35.53			
MW-20	03/09/07			35.75			
MW-20	03/13/07			35.73			
MW-20	03/15/07			35.70			
MW-20	03/23/07			35.60			
MW-20	03/28/07			35.67			
MW-20	04/12/07			35.87			
MW-20	04/18/07			35.81			
MW-20	05/23/07			35.80			
MW-20	06/20/07			35.90			
MW-20	07/18/07			36.01			
MW-20	09/19/07	3,674.38		35.99			3,638.39
MW-20	11/02/07			36.01			3,638.37
MW-20	12/05/07			35.97			3,638.41
MW-21	12/05/07	3,674.38		36.34			3,638.04
MW-22	12/05/07	3,674.07		36.08			3,637.99
Klein Irrigation Well	10/31/03	Well sampled but groundwater depth not measured.					
	11/08/04	Well sampled but groundwater depth not measured.					
	03/31/05	Well sampled but groundwater depth not measured.					
	03/02/06	Well sampled but groundwater depth not measured.					
	06/01/06	Well sampled but groundwater depth not measured.					
	08/14/06	Well not scheduled for sampling.					
	01/09/07	Well not scheduled for sampling.					

Total manual recovery 159.50
Approximate system recovery 3.80 bbls

PSH - Phase Separated Hydrocarbons na - not applicable

amsl - above mean sea level

btoc - below top of casing

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



TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
PLAINS PIPELINE, L.P.
HOBBS JUNCTION MAINLINE
NMOCD REF. # AP-054
LEA COUNTY, NEW MEXICO - SRS# 2003-00017
Talon/LPE Project Number PLAINS047SPL

All concentrations are in mg/L

Sample Location	Sample Date	Benzene	Ethyl-benzene	m,p-Xylenes	o-Xylene	Toluene
MW-1	03/28/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	06/20/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	09/19/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	12/05/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-2	03/28/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	06/20/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	09/19/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	12/05/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-3	03/28/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	06/20/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	09/19/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	12/05/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-4	03/28/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	06/20/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	09/19/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	12/05/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-5	03/28/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	06/20/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	09/19/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	12/05/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-6	03/28/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	06/20/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	09/19/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	12/05/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-7	03/28/07	<0.001	<0.001	<0.001	<0.001	<0.001
	06/20/07	Sampling not required in second quarter				
	09/19/07	<0.001	<0.001	<0.002	<0.001	<0.001
	12/05/07	Sampling not required in fourth quarter				



TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
PLAINS PIPELINE, L.P.
HOBBS JUNCTION MAINLINE
NMOCD REF. # AP-054
LEA COUNTY, NEW MEXICO - SRS# 2003-00017
Talon/LPE Project Number PLAINS047SPL

All concentrations are in mg/L

Sample Location	Sample Date	Benzene	Ethyl-benzene	m,p-Xylenes	o-Xylene	Toluene
MW-8	03/28/07	0.0113	<0.001	<0.001	<0.001	<0.001
	06/20/07	Sampling not required in second quarter				
	09/19/07	0.0052	<0.001	<0.002	<0.001	<0.001
	12/05/07	Sampling not required in fourth quarter				
MW-9	03/28/07	<0.001	<0.001	<0.001	<0.001	<0.001
	06/20/07	Sampling not required in second quarter				
	09/19/07	<0.001	<0.001	<0.002	<0.001	<0.001
	12/05/07	Sampling not required in fourth quarter				
MW-10	03/28/07	6.22	0.453	0.349	0.177	0.552
	06/20/07	4.648	0.3300	<0.1000	<0.0500	<0.0500
	09/19/07	<0.001	<0.001	<0.002	<0.001	<0.001
	12/05/07	7.375	0.5106	<0.0400	<0.0200	<0.0400
MW-11	03/28/07	17.5	1.88	1.09	0.363	0.728
	06/20/07	17.86	1.836	1.125	0.3620	1.420
	09/19/07	18.35	1.3990	0.6450	0.1770	0.5280
	12/05/07	17.89	1.290	0.7575	0.2535	1.365
MW-12	03/28/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	06/20/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	09/19/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	12/05/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-13	03/28/07	<0.001	<0.001	<0.001	<0.001	<0.001
	06/20/07	Sampling not required in second quarter				
	09/19/07	<0.001	<0.001	<0.002	<0.001	<0.001
	12/05/07	Sampling not required in fourth quarter				

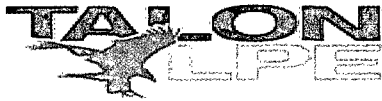


TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
PLAINS PIPELINE, L.P.
HOBBS JUNCTION MAINLINE
NMOCD REF. # AP-054
LEA COUNTY, NEW MEXICO - SRS# 2003-00017
Talon/LPE Project Number PLAINS047SPL

All concentrations are in mg/L

Sample Location	Sample Date	Benzene	Ethyl-benzene	m,p-Xylenes	o-Xylene	Toluene
MW-14	03/28/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	06/20/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	09/19/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	12/05/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-15	03/28/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	06/20/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	09/19/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	12/05/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-16	03/28/07	0.0120	<0.001	<0.001	<0.001	<0.001
	06/20/07	0.0013	<0.0010	<0.0020	<0.0010	<0.0010
	09/19/07	<0.0010	<0.0010	<0.0020	<0.0010	<0.001
	12/05/07	0.0034	<0.0010	<0.0020	<0.0010	<0.0020
MW-17	03/28/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	06/20/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	09/19/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
	12/05/07	Not sampled Due to Presence of Phase Separated Hydrocarbons				
MW-18	03/28/07	0.00210	<0.001	<0.001	<0.001	<0.001
	06/20/07	<0.0010	<0.0010	<0.0020	<0.0010	<0.0010
	09/19/07	<0.0010	<0.0010	<0.0020	<0.0010	<0.0010
	12/05/07	0.0039	<0.0010	<0.0020	<0.0010	<0.0020
MW-19	03/28/07	0.00130	<0.001	<0.001	<0.001	<0.001
	06/20/07	<0.0010	<0.0010	<0.0020	<0.0010	<0.0010
	09/19/07	<0.0010	<0.0010	<0.0020	<0.0010	<0.0010
	12/05/07	0.002	<0.0010	<0.0020	<0.0010	<0.0020
MW-20	03/28/07	20.7	1.61	0.872	0.400	1.39
	06/20/07	20.17	1.624	0.4090	<0.0500	<0.0500
	09/19/07	31.67	1.850	0.2510	<0.1000	<0.1000
	12/05/07	31.41	1.749	0.2220	<0.1000	<0.2000
MW-21	12/05/07	Installed well				
	12/05/07	0.0590	0.0040	<0.0020	<0.0010	0.0033
MW-22	12/05/07	Installed well				
	12/05/07	0.1621	<0.0010	0.0040	<0.0010	0.0028
Klein Irrigation Well		Irrigation well not sampled				
NMWQCC Remedial Limits		0.010	0.750	Total Xylenes 0.620		0.750

¹ Bolded values are in excess of the NMWQCC Remediation Thresholds



TABLE 3
SUMMARY OF GROUNDWATER POLYCYCLIC-AROMATIC
HYDROCARBON (PAH) ANALYTICAL RESULTS
PLAINS PIPELINE, L.P.
HOBBS JUNCTION MAINLINE
NMOCD REF. # AP-054
LEA COUNTY, NEW MEXICO - SRS# 2003-00017
Talon/LPE Project Number PLAINS047SPL

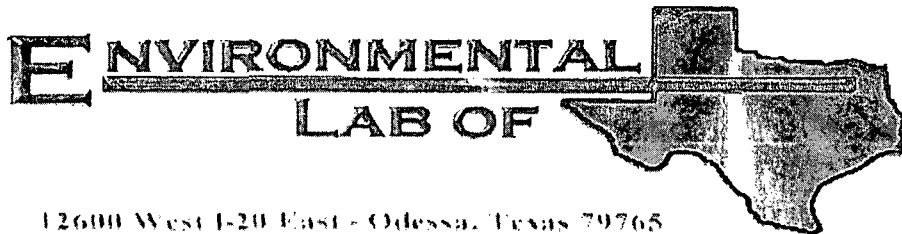
All concentrations are in mg/l.

Sample Location	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	Naphthalene	Phenanthrene	Pyrene
MW-1	03/28/07	Not sampled Due to Presence of Phase Separated Hydrocarbons															
MW-2	03/28/07	Not sampled Due to Presence of Phase Separated Hydrocarbons															
MW-3	03/28/07	Not sampled Due to Presence of Phase Separated Hydrocarbons															
MW-4	03/28/07	Not sampled Due to Presence of Phase Separated Hydrocarbons															
MW-5	03/28/07	Not sampled Due to Presence of Phase Separated Hydrocarbons															
MW-6	03/28/07	Not sampled Due to Presence of Phase Separated Hydrocarbons															
MW-7	03/28/07	<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-8	03/28/07	<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-9	03/28/07	<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	03/28/07	<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	0.015	<0.005	<0.005
MW-11	03/28/07	<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	0.058	<0.005	<0.005
MW-12	03/28/07	Not sampled Due to Presence of Phase Separated Hydrocarbons															
MW-13	03/28/07	<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	03/28/07	Not sampled Due to Presence of Phase Separated Hydrocarbons															
MW-15	03/28/07	Not sampled Due to Presence of Phase Separated Hydrocarbons															
MW-16	03/28/07	<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	03/28/07	Not sampled Due to Presence of Phase Separated Hydrocarbons															
MW-18	03/28/07	<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-19	03/28/07	<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-20	03/28/07	<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	0.056	<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



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: Hobbs Junction Mainline 8"

Project Number: 2003-00017

Location: Hobbs Junction Mainline 8"

Lab Order Number: 7C29012

Report Date: 04/06/07

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

Project: Hobbs Junction Mainline 8"
Project Number: 2003-00017
Project Manager: Camille Reynolds

Fax: (432) 687-4914

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-7	7C29012-01	Water	03/28/07 11:27	03-29-2007 08:45
MW-8	7C29012-02	Water	03/28/07 11:14	03-29-2007 08:45
MW-9	7C29012-03	Water	03/28/07 11:04	03-29-2007 08:45
MW-10	7C29012-04	Water	03/28/07 10:52	03-29-2007 08:45
MW-11	7C29012-05	Water	03/28/07 15:24	03-29-2007 08:45
MW-13	7C29012-06	Water	03/28/07 16:31	03-29-2007 08:45
MW-16	7C29012-07	Water	03/28/07 15:52	03-29-2007 08:45
MW-18	7C29012-08	Water	03/28/07 16:06	03-29-2007 08:45
MW-19	7C29012-09	Water	03/28/07 16:22	03-29-2007 08:45
MW-20	7C29012-10	Water	03/28/07 15:38	03-29-2007 08:45

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

Project: Hobbs Junction Mainline 8"
Project Number: 2003-00017
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-7 (7C29012-01) Water									
Benzene	ND	0.00100	mg/L	1	ED70412	04/04/07	04/05/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		109 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		89.6 %	80-120		"	"	"	"	
MW-8 (7C29012-02) Water									
Benzene	0.0113	0.00100	mg/L	1	ED70412	04/04/07	04/05/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		109 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		86.8 %	80-120		"	"	"	"	
MW-9 (7C29012-03) Water									
Benzene	ND	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)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		101 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		82.2 %	80-120		"	"	"	"	
MW-10 (7C29012-04) Water									
Benzene	6.22	0.0200	mg/L	20	ED70506	04/05/07	04/06/07	EPA 8021B	
Toluene	0.552	0.0200	"	"	"	"	"	"	
Ethylbenzene	0.453	0.0200	"	"	"	"	"	"	
Xylene (p/m)	0.349	0.0200	"	"	"	"	"	"	
Xylene (o)	0.177	0.0200	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		112 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		89.0 %	80-120		"	"	"	"	

Environmental Lab of Texas
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Page 2 of 8

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

Project: Hobbs Junction Mainline 8"
Project Number: 2003-00017
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-11 (7C29012-05) Water									
Benzene	17.5	0.0500	mg/L	50	ED70506	04/05/07	04/06/07	EPA 8021B	
Toluene	0.728	0.0500	"	"	"	"	"	"	
Ethylbenzene	1.88	0.0500	"	"	"	"	"	"	
Xylene (p/m)	1.09	0.0500	"	"	"	"	"	"	
Xylene (o)	0.363	0.0500	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		111 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.6 %	80-120		"	"	"	"	
MW-13 (7C29012-06) Water									
Benzene	ND	0.00100	mg/L	1	ED70506	04/05/07	04/06/07	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		99.2 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		81.0 %	80-120		"	"	"	"	
MW-16 (7C29012-07) Water									
Benzene	0.0120	0.00100	mg/L	1	ED70506	04/05/07	04/06/07	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		117 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		90.4 %	80-120		"	"	"	"	
MW-18 (7C29012-08) Water									
Benzene	0.00210	0.00100	mg/L	1	ED70506	04/05/07	04/05/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	J [0.000467]	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		113 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	80-120		"	"	"	"	

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Page 3 of 8

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

Project: Hobbs Junction Mainline 8"
Project Number: 2003-00017
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-19 (7C29012-09) Water									
Benzene	0.00130	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)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		105 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		91.2 %	80-120		"	"	"	"	
MW-20 (7C29012-10) Water									
Benzene	20.7	0.100	mg/L	100	ED70506	04/05/07	04/06/07	EPA 8021B	
Toluene	1.39	0.100	"	"	"	"	"	"	
Ethylbenzene	1.61	0.100	"	"	"	"	"	"	
Xylene (p/m)	0.872	0.100	"	"	"	"	"	"	
Xylene (o)	0.400	0.100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		105 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		91.6 %	80-120		"	"	"	"	

Environmental Lab of Texas

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Page 4 of 8

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

Project: Hobbs Junction Mainline 8"
Project Number: 2003-00017
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
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Batch ED70412 - EPA 5030C (GC)

Blank (ED70412-BLK1)

Prepared & Analyzed: 04/04/07

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: <i>a,a,a</i> -Trifluorotoluene	54.9		ug/l	50.0		110	80-120			
Surrogate: 4-Bromofluorobenzene	46.7		"	50.0		93.4	80-120			

LCS (ED70412-BS1)

Prepared & Analyzed: 04/04/07

Benzene	0.0507	0.00100	mg/L	0.0500		101	80-120			
Toluene	0.0466	0.00100	"	0.0500		93.2	80-120			
Ethylbenzene	0.0473	0.00100	"	0.0500		94.6	80-120			
Xylene (p/m)	0.0877	0.00100	"	0.100		87.7	80-120			
Xylene (o)	0.0485	0.00100	"	0.0500		97.0	80-120			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	50.3		ug/l	50.0		101	80-120			
Surrogate: 4-Bromofluorobenzene	42.9		"	50.0		85.8	80-120			

Calibration Check (ED70412-CCV1)

Prepared: 04/04/07 Analyzed: 04/05/07

Benzene	52.3		ug/l	50.0		105	80-120			
Toluene	47.8		"	50.0		95.6	80-120			
Ethylbenzene	48.2		"	50.0		96.4	80-120			
Xylene (p/m)	86.7		"	100		86.7	80-120			
Xylene (o)	49.6		"	50.0		99.2	80-120			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	52.3		"	50.0		105	80-120			
Surrogate: 4-Bromofluorobenzene	44.9		"	50.0		89.8	80-120			

Matrix Spike (ED70412-MS1)

Source: 7C28008-21

Prepared: 04/04/07 Analyzed: 04/05/07

Benzene	0.0539	0.00100	mg/L	0.0500	ND	108	80-120			
Toluene	0.0508	0.00100	"	0.0500	ND	102	80-120			
Ethylbenzene	0.0495	0.00100	"	0.0500	ND	99.0	80-120			
Xylene (p/m)	0.0943	0.00100	"	0.100	ND	94.3	80-120			
Xylene (o)	0.0532	0.00100	"	0.0500	ND	106	80-120			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	55.3		ug/l	50.0		111	80-120			
Surrogate: 4-Bromofluorobenzene	48.7		"	50.0		97.4	80-120			

Environmental Lab of Texas

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Page 5 of 8

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

Project: Hobbs Junction Mainline 8"
Project Number: 2003-00017
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 ED70412 - EPA 5030C (GC)

Matrix Spike Dup (ED70412-MSD1)		Source: 7C28008-21		Prepared: 04/04/07		Analyzed: 04/05/07				
Benzene	0.0538	0.00100	mg/L	0.0500	ND	108	80-120	0.00	20	
Toluene	0.0504	0.00100	"	0.0500	ND	101	80-120	0.985	20	
Ethylbenzene	0.0510	0.00100	"	0.0500	ND	102	80-120	2.99	20	
Xylene (p/m)	0.0921	0.00100	"	0.100	ND	92.1	80-120	2.36	20	
Xylene (o)	0.0523	0.00100	"	0.0500	ND	105	80-120	0.948	20	
Surrogate: a,a,a-Trifluorotoluene	52.7		ug/l	50.0		105	80-120			
Surrogate: 4-Bromofluorobenzene	48.3		"	50.0		96.6	80-120			

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			

Environmental Lab of Texas

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

Project: Hobbs Junction Mainline 8"
Project Number: 2003-00017
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)

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: <i>a,a,o</i> -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: <i>a,a,o</i> -Trifluorotoluene	55.2		ug/l	50.0		110	80-120			
Surrogate: 4-Bromofluorobenzene	51.0		"	50.0		102	80-120			

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: <i>a,a,o</i> -Trifluorotoluene	52.3		ug/l	50.0		105	80-120			
Surrogate: 4-Bromofluorobenzene	48.0		"	50.0		96.0	80-120			

Environmental Lab of Texas

A Xenco Laboratories Company

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Client: All American E&S
1301 S. County Road 1150
Middletown, TX 79706-4476

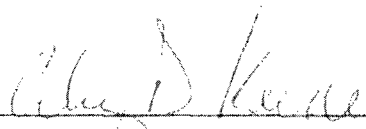
Project: Hobbs Junction Mainline 8"
Project Number: 2007-00017
Project Manager: Camille Reynolds

Fax: (432) 687-1914

Notes and Definitions

ND: Not Detected (Below 100)
NDL: Analyte Not Detected (Below 100) or below the reporting limit
NR: Not Reported
dry: Sample results reported on a dry weight basis
R.P.D.: Relative Percent Difference
LCS: Laboratory Control Spike
MS: Matrix Spike
Dup: Duplicate

Report Approved By:



Date:



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

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

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Page 8 of 8

Analytical Report 279856

for

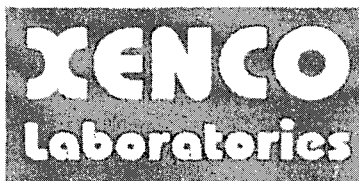
PLAINS ALL AMERICAN EH&S

Project Manager: Camille Reynolds

Hobbs Junction Mainline

SRS# 2003-00017

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



04-APR-07

Project Manager: Camille Reynolds
PLAINS ALL AMERICAN FILMS
1301 S. COUNTY ROAD 1, 300
Midland, TX 79706

Reference: XENCO Report No: 279856
Hobbs Junction Mainline
Project Address: Hobbs Junction Mainline

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: 279856. 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. 279856 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

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Certificate of Analysis Summary 279856

PLAINS ALL AMERICAN EHS, Midland, TX



Project Name: Hubbs Junction Mainline

Project ID: SRSS-20-1260-177

Date Received in Lab: May-28-2020 08:45 AM

Contact: Kristine Rosecrance

Report Date: 05/28/2020

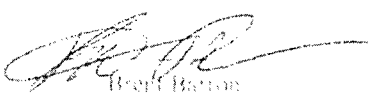
Project Location: Hubbs Junction, Midland

Project Manager: Brenda Burdette

Analysis Requested	Lab ID:	SSS-20-1260-177	Hubbs Junction	Hubbs Junction
	Field ID:	1	1	1
	Depth:			
	Matrix:	WATER	WATER	WATER
SVOA PAHs List by EPA 8270C	Sample ID:	May-28-2020 11:27	May-28-2020 11:44	May-28-2020 11:59
	Analysis ID:	May-28-2020 11:43	May-28-2020 11:58	May-28-2020 12:07
	Units: RI:	mg/L	mg/L	mg/L
	Units: RI:	mg/L	mg/L	mg/L
Acenaphthylene	ND	0.005	ND	0.005
Acenaphthene	ND	0.005	ND	0.005
Anthracene	ND	0.005	ND	0.005
Benzofluoranthene	ND	0.005	ND	0.005
Benzokerylene	ND	0.005	ND	0.005
Benzonitrile	ND	0.005	ND	0.005
Benzofluoranthene	ND	0.005	ND	0.005
Benzofluoranthene	ND	0.005	ND	0.005
Benzofluoranthene	ND	0.005	ND	0.005
Chrysene	ND	0.005	ND	0.005
Dibenz(a,h)anthracene	ND	0.005	ND	0.005
Fluoranthene	ND	0.005	ND	0.005
Fluorene	ND	0.005	ND	0.005
Indeno(1,2,3-cd)pyrene	ND	0.005	ND	0.005
Naphthalene	ND	0.005	ND	0.005
Phenanthrene	ND	0.005	ND	0.005
Pyrene	ND	0.005	ND	0.005

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XENCO Laboratories, Inc. 10000 Highway 100, Suite 100, Midland, TX 79701-4601


Brent Barton

Odessa Laboratory Director



Certificate of Analysis Summary 279856

PLAINS ALL AMERICAN EH&S, Midland, TX



Project Name: Hobbs Junction Mainline

Project ID: 808626015-007

Date Received in Lab: May 29, 2018 8:45 am

Contact: [redacted]

Report Date: 06/14/2018

Project Location: Hobbs Junction, Midland, TX

Project Manager: Brent Barton

Analysis Requested	Lab ID:	Sample ID:		Sample ID:		Sample ID:		Sample ID:	
	Field ID:	Field ID:		Field ID:		Field ID:		Field ID:	
	Depth:	Depth:		Depth:		Depth:		Depth:	
	Matrix:	Matrix:		Matrix:		Matrix:		Matrix:	
	Sampled:	May 28, 2018 10:34		May 28, 2018 10:34		May 28, 2018 10:34		May 28, 2018 10:34	
SVOA PAHs List by EPA 8270C	Extracted:	May 30, 2018 14:37		May 30, 2018 14:37		May 30, 2018 14:37		May 30, 2018 14:37	
	Analyzed:	May 30, 2018 16:51		May 30, 2018 16:51		May 30, 2018 16:51		May 30, 2018 16:51	
	Units: RL:	RL	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]fluoranthene	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[ah]anthracene	ND	0.005	ND	0.005	ND	0.005	ND	0.005	
Dibenz[ghi]perylene	ND	0.005	ND	0.005	ND	0.005	ND	0.005	
Indene[1,2,3-cd]pyrene	ND	0.005	ND	0.005	ND	0.005	ND	0.005	
Naphthalene	0.058	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	

Plains All American Energy Service Company, L.P. 10000 West Loop West, Suite 200, Houston, Texas 77063

Brent Barton

Odessa Laboratory Director



Certificate of Analysis Summary 279856

PLAINS ALL AMERICAN EH&S, Midland, TX



Project Name: Hobbs Junction Mainline

Project Id: SR05020000000000000000

Date Received in Lab: 04/28/2017 08:11:00

Contact: [redacted]

Report Date: 05/02/2017

Project Location: Hobbs Junction, Midland

Project Manager: [redacted]

Analysis Requested	Lab Id:	Mass (ug)	Sample Id:	
	Lab Id:	Mass (ug)	Sample Id:	
	Depth:			
	Matrix:	WATER	WATER	
SVOA PAHs List by EPA 8270C	Sample Id:	MR175467 1672	MR175467 1673	
	Extracted:	MR175467 1672	MR175467 1673	
	Analyzed:	MR175467 1672	MR175467 1673	
	Units (ug/L):	ug/L	ug/L	
Acenaphthene	ND	0.005	ND	0.005
Acenaphthylene	ND	0.005	ND	0.005
Anthracene	ND	0.005	ND	0.005
Benzo[a]fluoranthene	ND	0.005	ND	0.005
Benzo[a]pyrene	ND	0.005	ND	0.005
Benzo[b]fluoranthene	ND	0.005	ND	0.005
Benzo[k]fluoranthene	ND	0.005	ND	0.005
Benzo[e]pyrene	ND	0.005	ND	0.005
Chrysene	ND	0.005	ND	0.005
Dibenz[a,h]anthracene	ND	0.005	ND	0.005
Fluoranthene	ND	0.005	ND	0.005
Fluorene	ND	0.005	ND	0.005
Indeno[1,2,3-c,d]pyrene	ND	0.005	ND	0.005
Naphthalene	ND	0.005	0.056	0.005
Phenanthrene	ND	0.005	ND	0.005
Pyrene	ND	0.005	ND	0.005

Rachel Berman
Odesa Laboratory Director



Flagging Criteria



- A. 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 MQCL and above the SQL.
- I. 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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001-305-424-8886 Fax: 001-305-424-8887
001-305-424-8888 Fax: 001-305-424-8889



Form 2 - Surrogate Recoveries

Project Name: Hobbs Junction Mainline



Work Order #: 279856

Project ID: SPS-2-002-0001

Lab Batch #: 694330

Sample: 279856-002 SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY					
SVOA PAHs List by EPA 8270C	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2-Fluorobiphenyl	0.034	0.050	68	43-116	
2-Fluorophenol	0.023	0.050	46	21-100	
Nitrobenzene-d5	0.036	0.050	72	35-114	
Phenol-d6	0.012	0.050	24	10-94	
Terphenyl-D14	0.034	0.050	68	33-141	
2,4,6-Tribromophenol	0.034	0.050	68	10-123	

Lab Batch #: 694330

Sample: 279856-002 SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY					
SVOA PAHs List by EPA 8270C	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2-Fluorobiphenyl	0.037	0.050	74	43-116	
2-Fluorophenol	0.022	0.050	44	21-100	
Nitrobenzene-d5	0.034	0.050	68	35-114	
Phenol-d6	0.012	0.050	24	10-94	
Terphenyl-D14	0.033	0.050	66	33-141	
2,4,6-Tribromophenol	0.034	0.050	68	10-123	

Lab Batch #: 694330

Sample: 279856-003 SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY					
SVOA PAHs List by EPA 8270C	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2-Fluorobiphenyl	0.035	0.050	70	43-116	
2-Fluorophenol	0.024	0.050	48	21-100	
Nitrobenzene-d5	0.032	0.050	64	35-114	
Phenol-d6	0.013	0.050	26	10-94	
Terphenyl-D14	0.030	0.050	60	33-141	
2,4,6-Tribromophenol	0.031	0.050	62	10-123	

** Surrogate recoveries are calculated as follows: $\text{Recovery} = \frac{\text{Amount Found}}{\text{True Amount}} \times 100$

Control Limits are calculated as follows: $\text{Control Limits} = \frac{\text{Recovery} \pm 1.96 \times \text{SD}}{100}$

SD = Standard Deviation

Amount Found = SVOA PAHs List by EPA 8270C



Form 2 - Surrogate Recoveries

Project Name: Hobbs Junction Mainline



Work Order #: 279856

Project ID: SRS-279856-001

Lab Batch #: 694330

Sample: 279856-001 SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

SVOA PAHs List by EPA 8270C					
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.038	0.050	76	43-116	
2-Fluorophenol	0.018	0.050	36	21-100	
Nitrobenzene-d5	0.034	0.050	70	35-114	
Phenol-d6	0.042	0.050	84	40-94	
Terphenyl-D14	0.037	0.050	74	33-141	
2,4,6-Tribromophenol	0.040	0.050	80	40-123	

Lab Batch #: 694330

Sample: 279856-001 SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

SVOA PAHs List by EPA 8270C					
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.036	0.050	72	43-116	
2-Fluorophenol	0.015	0.050	30	21-100	
Nitrobenzene-d5	0.036	0.050	72	35-114	
Phenol-d6	0.041	0.050	82	40-94	
Terphenyl-D14	0.032	0.050	64	33-141	
2,4,6-Tribromophenol	0.041	0.050	82	40-123	

Lab Batch #: 694330

Sample: 279856-001 SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

SVOA PAHs List by EPA 8270C					
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.039	0.050	78	43-116	
2-Fluorophenol	0.025	0.050	50	21-100	
Nitrobenzene-d5	0.036	0.050	72	35-114	
Phenol-d6	0.043	0.050	86	40-94	
Terphenyl-D14	0.037	0.050	74	33-141	
2,4,6-Tribromophenol	0.035	0.050	70	40-123	

1.1. Surrogate recoveries for detection and quantification of each analyte.

1.2. Surrogate recoveries for each analyte.

Surrogate recoveries (D) = 100% ± 10%

1.3. Surrogate recoveries for each analyte for each sample.



Form 2 - Surrogate Recoveries

Project Name: Hobbs Junction Mainline



Work Order #: 279856

Project ID: SRSP-2003-00017

Lab Batch #: 694330

Sample: 279856-008 SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY					
SVOA PAHs List by EPA 8270C	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2-Fluorobiphenyl	0.037	0.050	74	43-116	
2-Fluorophenol	0.024	0.050	48	21-100	
Nitrobenzene-d5	0.036	0.050	72	35-114	
Phenol-d6	0.012	0.050	24	10-94	
Terphenyl-D14	0.034	0.050	68	33-141	
2,4,6-Tribromophenol	0.036	0.050	72	10-123	

Lab Batch #: 694330

Sample: 279856-008 SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY					
SVOA PAHs List by EPA 8270C	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2-Fluorobiphenyl	0.038	0.050	76	43-116	
2-Fluorophenol	0.024	0.050	48	21-100	
Nitrobenzene-d5	0.036	0.050	72	35-114	
Phenol-d6	0.012	0.050	24	10-94	
Terphenyl-D14	0.034	0.050	68	33-141	
2,4,6-Tribromophenol	0.035	0.050	70	10-123	

Lab Batch #: 694330

Sample: 279856-009 SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY					
SVOA PAHs List by EPA 8270C	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2-Fluorobiphenyl	0.035	0.050	70	43-116	
2-Fluorophenol	0.023	0.050	46	21-100	
Nitrobenzene-d5	0.033	0.050	66	35-114	
Phenol-d6	0.012	0.050	24	10-94	
Terphenyl-D14	0.031	0.050	62	33-141	
2,4,6-Tribromophenol	0.037	0.050	74	10-123	

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 \times A / B$

All results are based on MDL and validated for QC purposes



Form 2 - Surrogate Recoveries

Project Name: Hobbs Junction Mainline



Work Order #: 279856

Project ID: SRS# 2003-00017

Lab Batch #: 694330

Sample: 279856-010 SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

SVOA PAHs List by EPA 8270C	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2-Fluorobiphenyl	0.036	0.050	72	43-116	
2-Fluorophenol	0.017	0.050	34	21-100	
Nitrobenzene-d5	0.036	0.050	72	35-114	
Phenol-d6	0.013	0.050	26	10-94	
Terphenyl-D14	0.031	0.050	62	33-141	
2,4,6-Tribromophenol	0.041	0.050	82	10-123	

Lab Batch #: 694330

Sample: 493705-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

SVOA PAHs List by EPA 8270C	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2-Fluorobiphenyl	0.038	0.050	76	43-116	
2-Fluorophenol	0.037	0.050	74	21-100	
Nitrobenzene-d5	0.040	0.050	80	35-114	
Phenol-d6	0.028	0.050	56	10-94	
Terphenyl-D14	0.041	0.050	82	33-141	
2,4,6-Tribromophenol	0.039	0.050	78	10-123	

Lab Batch #: 694330

Sample: 493705-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

SVOA PAHs List by EPA 8270C	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2-Fluorobiphenyl	0.038	0.050	76	43-116	
2-Fluorophenol	0.032	0.050	64	21-100	
Nitrobenzene-d5	0.036	0.050	72	35-114	
Phenol-d6	0.024	0.050	48	10-94	
Terphenyl-D14	0.035	0.050	70	33-141	
2,4,6-Tribromophenol	0.034	0.050	68	10-123	

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 \times A / B$

All results are based on MDL and validated for Q/L purposes



Form 2 - Surrogate Recoveries

Project Name: Hobbs Junction Mainline



Work Order #: 279856

Project ID: SRS-2003-00017

Lab Batch #: 694330

Sample: 403705-1-BSD 10SD

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

SVOA PAHs List by EPA 8270C Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.030	0.050	78	43-116	
2-Fluorophenol	0.038	0.050	76	21-100	
Nitrobenzene-d5	0.041	0.050	82	35-114	
Phenol-d6	0.028	0.050	56	10-94	
Terphenyl-D12	0.042	0.050	84	23-141	
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] = $100 \times A / B$

All results are based on MDL and validated for QC purposes



BS / BSD Recoveries



Project Name: Hobbs Junction Mainline

Work Order #: 279856

Project ID: SRS# 2007-06017

Analyst: TTD

Date Analyzed: 04/02/2007

Lab Batch ID: 694330

Date Prepared: 03/30/2007

Sample: 495705-1-BKS

Matrix: Water

Units: mg/L

Batch #: 1

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
SVOA PAHs List by EPA 8270C											
Acenaphthene	ND	0.050	0.042	84	0.05	0.045	90	7	27-132	34	
Acenaphthylene	ND	0.050	0.041	82	0.05	0.043	86	5	46-108	35	
Anthracene	ND	0.050	0.044	88	0.05	0.044	88	0	47-145	25	
Benzo[a]anthracene	ND	0.050	0.045	90	0.05	0.047	94	4	33-143	28	
Benzo[a]pyrene	ND	0.050	0.043	86	0.05	0.045	90	5	65-135	28	
Benzo[b]fluoranthene	ND	0.050	0.045	90	0.05	0.046	92	2	24-159	25	
Benzo[k]fluoranthene	ND	0.050	0.043	86	0.05	0.044	88	2	25-125	25	
Benzo[e]fluoranthene	ND	0.050	0.030	60	0.05	0.033	66	10	65-135	25	1
Chrysene	ND	0.050	0.045	90	0.05	0.047	94	4	65-135	28	
Dibenz[a,h]anthracene	ND	0.050	0.034	68	0.05	0.035	70	3	30-125	25	
Fluoranthene	ND	0.050	0.043	86	0.05	0.044	88	2	47-123	25	
Phenanthrene	ND	0.050	0.042	84	0.05	0.044	88	5	48-139	25	
Indeno[1,2,3-c,d]pyrene	ND	0.050	0.033	66	0.05	0.034	68	3	27-160	25	
Naphthalene	ND	0.050	0.041	82	0.05	0.044	88	7	26-175	25	
Phenanthrene	ND	0.050	0.045	90	0.05	0.045	90	0	65-135	25	
Pyrene	ND	0.050	0.044	88	0.05	0.046	92	4	23-152	41	

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

12500 West 120 East
Odessa, Texas 79755

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Figure 6

The figure consists of nine small circular diagrams arranged vertically. Each diagram shows a cross-section of a cell or tissue. The top diagram shows a cell with a nucleus and some internal structure. The second diagram shows a similar cell but with more pronounced internal features. The third diagram shows a cell with a large central vacuole. The fourth diagram shows a cell with a prominent nucleus and some internal structure. The fifth diagram shows a cell with a large central vacuole. The sixth diagram shows a cell with a prominent nucleus and some internal structure. The seventh diagram shows a cell with a large central vacuole. The eighth diagram shows a cell with a prominent nucleus and some internal structure. The ninth diagram shows a cell with a large central vacuole.

5. 5. 5. 5. 5.

353

10/02/02

2000

100

9 E Industrial Rel.

51000000

[Faint, illegible handwritten notes]

Medford Tx, 79701

202

432-522-2133

Ex No 432-522-2180

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

e-mail ss with @talon LPE.COM

150576

CONFIDENTIAL

Lab # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	No. of Containers	Preservation & # of Containers	Notes
10	MW-20			2/23/02	1538	3	No HNO ₃ H ₂ SO ₄ HNO ₃ H ₂ SO ₄ None (1) Lysis (KHSO ₅) Other (Specify)	One 1000 ml bottle for analysis One 1000 ml bottle for analysis One 1000 ml bottle for analysis

Stress Management

Plaw C. m. b. Reynolds

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

Age Group	Percentage
18-29	85%
30-49	75%
50-69	65%
70+	55%

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[illegible]

Age Group	Percentage
18-29	85%
30-49	75%
50-69	65%
70+	55%

2000

[illegible]

11

$$\frac{1}{\sqrt{2}} \begin{pmatrix} 1 & 1 \\ 1 & -1 \end{pmatrix}$$
[illegible]

bioRxiv preprint doi: <https://doi.org/10.1101/2019.05.20.246101>; this version posted May 20, 2019. The copyright holder for this preprint (which was not certified by peer review) is the author/funder, who has granted bioRxiv a license to display the preprint in perpetuity. It is made available under aCC-BY-NC-ND 4.0 International license.

2025

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Wade

6001

Received by

1073
100

Amplitude Modulation:

Environmental Lab of Texas
Variance/ Corrective Action Report- Sample Log-In

Client: Plc. 312 / T. J. Jones
 Date/ Time: 05-24-07 09:45
 Lab ID #: 7029012
 Initials: JMM

Sample Receipt Checklist

				Client Initials
#1	Temperature of container/ cooler?	<u>(Yes)</u>	No	-3.0 °C
#2	Shipping container in good condition?	<u>(Yes)</u>	No	
#3	Custody Seals intact on shipping container/ cooler?	<u>(Yes)</u>	No	Not Present
#4	Custody Seals intact on sample bottles/ container? <i>✓OK's only</i>	<u>(Yes)</u>	No	Not Present
#5	Chain of Custody present?	<u>(Yes)</u>	No	
#6	Sample instructions complete of Chain of Custody?	<u>(Yes)</u>	No	
#7	Chain of Custody signed when relinquished/ received?	<u>(Yes)</u>	No	
#8	Chain of Custody agrees with sample label(s)?	<u>(Yes)</u>	No	ID written on Cont./ Lid
#9	Container label(s) legible and intact?	<u>(Yes)</u>	No	Not Applicable
#10	Sample matrix/ properties agree with Chain of Custody?	<u>(Yes)</u>	No	
#11	Containers supplied by ELOT?	<u>(Yes)</u>	No	
#12	Samples in proper container/ bottle?	<u>(Yes)</u>	No	See Below
#13	Samples properly preserved?	<u>(Yes)</u>	No	See Below
#14	Sample bottles intact?	<u>(Yes)</u>	No	
#15	Preservations documented on Chain of Custody?	<u>(Yes)</u>	No	
#16	Containers documented on Chain of Custody?	<u>(Yes)</u>	No	
#17	Sufficient sample amount for indicated test(s)?	<u>(Yes)</u>	No	See Below
#18	All samples received within sufficient hold time?	<u>(Yes)</u>	No	See Below
#19	Subcontract of sample(s)?	<u>(Yes)</u>	No	Not Applicable
#20	VOC samples have zero headspace?	<u>(Yes)</u>	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 284675

for

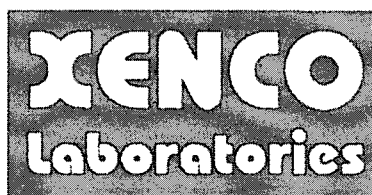
PLAINS ALL AMERICAN EH&S

Project Manager: Camille Reynolds

Junction Main Line

2003-00017

29-JUN-07



12600 West I-20 East Odessa, Texas 79765

NELAC certification numbers:
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675
Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America



29-JUN-07

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

Reference: XENCO Report No: **284675**
Junction Main Line
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 284675. 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. 284675 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

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Sample Cross Reference 284675



PLAINS ALL AMERICAN EH&S, Midland, TX

Junction Main Line

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-10	W	Jun-20-07 10:45		284675-001
MW-19	W	Jun-20-07 10:52		284675-002
MW-18	W	Jun-20-07 10:59		284675-003
MW-16	W	Jun-20-07 11:06		284675-004
MW-11	W	Jun-20-07 11:12		284675-005
MW-20	W	Jun-20-07 11:20		284675-006



Project Id: 2003-00017

Contact: Camille Reynolds

Project Location: Hobbs, NM

Certificate of Analysis Summary 284675

PLAINS ALL AMERICAN EH&S, Midland, TX



Project Name: Junction Main Line

Date Received in Lab: Thu Jun-21-07 11:30 am

Report Date: 29-JUN-07

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	284675-001	284675-002	284675-003	284675-004	284675-005	284675-006
	Field Id:	MW-10	MW-19	MW-18	MW-16	MW-11	MW-20
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
	Sampled:	Jun-20-07 10:45	Jun-20-07 10:52	Jun-20-07 10:59	Jun-20-07 11:06	Jun-20-07 11:12	Jun-20-07 11:20
BTEX by EPA 8021B	Extracted:	Jun-26-07 16:54	Jun-26-07 16:54	Jun-26-07 16:54	Jun-26-07 16:54	Jun-26-07 16:54	Jun-26-07 16:54
	Analyzed:	Jun-29-07 01:57	Jun-29-07 02:18	Jun-29-07 02:38	Jun-29-07 02:59	Jun-28-07 09:25	Jun-28-07 09:46
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
	Benzene	4.648 0.0500	ND 0.0010	ND 0.0010	0.0013 0.0010	17.86 0.0500	20.17 0.0500
	Toluene	ND 0.0500	ND 0.0010	ND 0.0010	ND 0.0010	1.420 0.0500	ND 0.0500
Ethylbenzene		0.3300 0.0500	ND 0.0010	ND 0.0010	ND 0.0010	1.836 0.0500	1.624 0.0500
	m,p-Xylene	ND 0.1000	ND 0.0020	ND 0.0020	ND 0.0020	1.125 0.1000	0.4090 0.1000
	o-Xylene	ND 0.0500	ND 0.0010	ND 0.0010	ND 0.0010	0.3620 0.0500	ND 0.0500
Total Xylenes		ND	ND	ND	ND	1.487	ND
Total BTEX		4.978	ND	ND	0.0013	22.603	22.203

This analytical report, and the entire data package, it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work, order unless otherwise agreed to in writing.

Since 1990 Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America

Brent Barron
Odessa Laboratory Director

- 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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 5332 Blackberry Drive, Suite 104, San Antonio, TX 78238
 3016 U.S. HWY 301 North - Suite 900, Tampa, FL 33619
 5757 NW 158th St, Miami Lakes, FL 33014

Phone	Fax
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(214) 902 0300	(214) 351-9139
(210) 509-3334	(201) 509-3335
(813) 620-2000	(813) 620-2033
(305) 823-8500	(305) 823-8555



Form 2 - Surrogate Recoveries



Project Name: Junction Main Line

Work Order #: 284675

Project ID: 2003-00017

Lab Batch #: 699323

Sample: 284675-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Bromofluorobenzene	0.0553	0.0500	111	80-120	

Lab Batch #: 699323

Sample: 284675-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Bromofluorobenzene	0.0517	0.0500	103	80-120	

Lab Batch #: 699323

Sample: 284675-003 / SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Bromofluorobenzene	0.0542	0.0500	108	80-120	

Lab Batch #: 699323

Sample: 284675-004 / SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Bromofluorobenzene	0.0537	0.0500	107	80-120	

Lab Batch #: 699323

Sample: 284675-005 / SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Bromofluorobenzene	0.0490	0.0500	98	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.



Form 2 - Surrogate Recoveries



Project Name: Junction Main Line

Work Order #: 284675

Project ID: 2003-00017

Lab Batch #: 699323

Sample: 284675-006 / SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Bromofluorobenzene	0.0499	0.0500	100	80-120	

Lab Batch #: 699323

Sample: 285023-007 S / MS

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Bromofluorobenzene	0.0536	0.0500	107	80-120	

Lab Batch #: 699323

Sample: 285023-007 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Bromofluorobenzene	0.0537	0.0500	107	80-120	

Lab Batch #: 699323

Sample: 496525-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Bromofluorobenzene	0.0577	0.0500	115	80-120	

Lab Batch #: 699323

Sample: 496525-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	ND	ND		80-120	*U
4-Bromofluorobenzene	0.0540	0.0500	108	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.



Blank Spike Recovery



Project Name: Junction Main Line

Work Order #: 284675

Project ID:

2003-00017

Lab Batch #: 699323

Sample: 496525-1-BKS

Matrix: Water

Date Analyzed: 06/27/2007

Date Prepared: 06/26/2007

Analyst: CELKEE

Reporting Units: mg/L

Batch #: 1

BLANK /BLANK SPIKE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Benzene	ND	0.0500	0.0528	106	70-125	
Toluene	ND	0.0500	0.0545	109	70-125	
Ethylbenzene	ND	0.0500	0.0586	117	71-129	
m,p-Xylene	ND	0.1000	0.1023	102	70-131	
o-Xylene	ND	0.0500	0.0573	115	71-133	

Blank Spike Recovery [D] = $100 * [C] / [B]$

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



Form 3 - MS / MSD Recoveries



Project Name: Junction Main Line

Work Order #: 284675

Lab Batch ID: 699323

Date Analyzed: 06/28/2007

Reporting Units: mg/L

Project ID: 2003-00017

QC- Sample ID: 285023-007 S

Batch #: 1 Matrix: Water

Date Prepared: 06/26/2007

Analyst: CELKEE

Reporting Units: mg/L		MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
BTEX by EPA 8021B Analytes		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		ND	0.0500	0.0563	113	0.0500	0.0554	111	2	70-125	25	
Toluene		ND	0.0500	0.0565	113	0.0500	0.0557	111	2	70-125	25	
Ethylbenzene		ND	0.0500	0.0591	118	0.0500	0.0580	116	2	71-129	25	
m,p-Xylene		ND	0.1000	0.1025	103	0.1000	0.1007	101	2	70-131	25	
o-Xylene		ND	0.0500	0.0578	116	0.0500	0.0575	115	1	71-133	25	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A)/B$

Relative Percent Difference $RPD = 200 \times (D-G)/(D+G)$

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

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

Environmental Lab of Texas
Variance/ Corrective Action Report- Sample Log-In

Client: Plains / Talon
Date/ Time: 6-21-07 11:30
Lab ID #: 284675
Initials: AL

Sample Receipt Checklist

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

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 289939

for

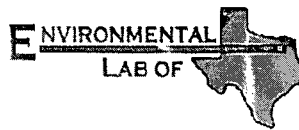
PLAINS ALL AMERICAN EH&S

Project Manager: Camille Reynolds

Hobbs Junction Mainline

2003-00017

27-SEP-07



12600 West I-20 East Odessa, Texas 79765

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**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**



27-SEP-07

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

Reference: XENCO Report No: **289939**
Hobbs Junction Mainline
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 289939. 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. 289939 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

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Sample Cross Reference 289939

PLAINS ALL AMERICAN EH&S, Midland, TX

Hobbs Junction Mainline

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-7	W	Sep-19-07 13:20		289939-001
MW-11	W	Sep-19-07 13:15		289939-002
MW-9	W	Sep-19-07 13:45		289939-003
MW-16	W	Sep-19-07 13:40		289939-004
MW-20	W	Sep-19-07 13:58		289939-005
MW-13	W	Sep-19-07 14:05		289939-006
MW-10	W	Sep-19-07 13:52		289939-007
MW-18	W	Sep-19-07 13:50		289939-008
MW-8	W	Sep-19-07 13:34		289939-009
MW-19	W	Sep-19-07 13:25		289939-010



Certificate of Analysis Summary 289939

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Id: 2003-00017
Contact: Camille Reynolds
Project Location: Lea County, NM

Project Name: Hobbs Junction Mainline

Date Received in Lab: Thu Sep-20-07 10:03 am
Report Date: 27-SEP-07

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	289939-001	289939-002	289939-003	289939-004	289939-005	289939-006
	Field Id:	MW-7	MW-11	MW-9	MW-16	MW-20	MW-13
Depth:							
Matrix:		WATER	WATER	WATER	WATER	WATER	WATER
Sampled:	Sep-19-07 13:20	Sep-19-07 13:15	Sep-19-07 13:45	Sep-19-07 13:40	Sep-19-07 13:58	Sep-19-07 14:05	
Extracted:	Sep-23-07 18:20	Sep-26-07 10:00	Sep-21-07 09:10	Sep-21-07 09:08	Sep-26-07 10:00	Sep-21-07 09:12	
Analyzed:	Sep-23-07 19:58	Sep-26-07 15:30	Sep-21-07 10:43	Sep-21-07 12:36	Sep-26-07 15:46	Sep-21-07 12:53	
Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Benzene	ND 0.0010	18.35 0.1000	ND 0.0010	ND 0.0010	31.67 0.1000	ND 0.0010	ND 0.0010
Toluene	ND 0.0010	0.5280 0.1000	ND 0.0010	ND 0.0010	ND 0.1000	ND 0.0010	ND 0.0010
Ethylbenzene	ND 0.0010	1.399 0.1000	ND 0.0010	ND 0.0010	1.850 0.1000	ND 0.0010	ND 0.0010
m,p-Xylene	ND 0.0020	0.6450 0.2000	ND 0.0020	ND 0.0020	0.2510 0.2000	ND 0.0020	ND 0.0020
o-Xylene	ND 0.0010	0.1770 0.1000	ND 0.0010	ND 0.0010	ND 0.1000	ND 0.0010	ND 0.0010
Total Xylenes	ND	0.822	ND	ND	0.251	ND	ND
Total BTEX	ND	21.099	ND	ND	33.771	ND	ND

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Brent Barron
Odessa Laboratory Director



Certificate of Analysis Summary 289939

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Id: 2003-00017
Contact: Camille Reynolds
Project Location: Lea County, NM

Project Name: Hobbs Junction Mainline

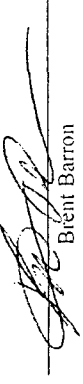
Date Received in Lab: Thu Sep-20-07 10:03 am
Report Date: 27-SEP-07

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	289939-007	289939-008	289939-009	289939-010
	Field Id:	MW-10	MW-18	MW-8	MW-19
	Depth:				
	Matrix:	WATER	WATER	WATER	WATER
	Sampled:	Sep-19-07 13:52	Sep-19-07 13:50	Sep-19-07 13:34	Sep-19-07 13:25
BTEX by EPA 8021B	Extracted:	Sep-26-07 10:00	Sep-26-07 10:00	Sep-25-07 18:20	Sep-25-07 18:20
	Analyzed:	Sep-26-07 16:03	Sep-26-07 16:20	Sep-25-07 21:20	Sep-25-07 21:36
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL
		ND 0.0010	ND 0.0010	0.0052 0.0010	ND 0.0010
Benzene		ND 0.0010	ND 0.0010	ND 0.0010	ND 0.0010
Toluene		ND 0.0010	ND 0.0010	ND 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		ND	ND	0.0052	ND

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Brent Barron
Odessa Laboratory Director



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

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(210) 509-3334	(201) 509-3335
(813) 620-2000	(813) 620-2033
(305) 823-8500	(305) 823-8555



Form 2 - Surrogate Recoveries

Project Name: Hobbs Junction Mainline

Work Order #: 289939

Project ID: 2003-00017

Lab Batch #: 704769

Sample: 289939-003 / SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	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	0.0296	0.0300	99	80-120	

Lab Batch #: 704769

Sample: 289939-004 / SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	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	0.0290	0.0300	97	80-120	

Lab Batch #: 704769

Sample: 289939-004 S / MS

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0299	0.0300	100	80-120	
4-Bromofluorobenzene	0.0304	0.0300	101	80-120	

Lab Batch #: 704769

Sample: 289939-004 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B 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	

Lab Batch #: 704769

Sample: 289939-006 / SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0314	0.0300	105	80-120	
4-Bromofluorobenzene	0.0288	0.0300	96	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.



Form 2 - Surrogate Recoveries

Project Name: Hobbs Junction Mainline

Work Order #: 289939

Project ID: 2003-00017

Lab Batch #: 704769

Sample: 499607-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0300	0.0300	100	80-120	
4-Bromofluorobenzene	0.0286	0.0300	95	80-120	

Lab Batch #: 704769

Sample: 499607-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0321	0.0300	107	80-120	
4-Bromofluorobenzene	0.0318	0.0300	106	80-120	

Lab Batch #: 705065

Sample: 289939-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0306	0.0300	102	80-120	
4-Bromofluorobenzene	0.0277	0.0300	92	80-120	

Lab Batch #: 705065

Sample: 289939-009 / SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0272	0.0300	91	80-120	

Lab Batch #: 705065

Sample: 289939-010 / SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0307	0.0300	102	80-120	
4-Bromofluorobenzene	0.0277	0.0300	92	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.



Form 2 - Surrogate Recoveries

Project Name: Hobbs Junction Mainline

Work Order #: 289939

Project ID: 2003-00017

Lab Batch #: 705065

Sample: 499756-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0286	0.0300	95	80-120	
4-Bromofluorobenzene	0.0276	0.0300	92	80-120	

Lab Batch #: 705065

Sample: 499756-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B 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	0.0281	0.0300	94	80-120	

Lab Batch #: 705065

Sample: 499756-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	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	0.0279	0.0300	93	80-120	

Lab Batch #: 705112

Sample: 289939-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	2.957	3.000	99	80-120	
4-Bromofluorobenzene	2.289	3.000	76	80-120	**

Lab Batch #: 705112

Sample: 289939-005 / SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	2.830	3.000	94	80-120	
4-Bromofluorobenzene	2.232	3.000	74	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.



Form 2 - Surrogate Recoveries

Project Name: Hobbs Junction Mainline

Work Order #: 289939

Project ID: 2003-00017

Lab Batch #: 705112

Sample: 289939-007 / SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0307	0.0300	102	80-120	
4-Bromofluorobenzene	0.0262	0.0300	87	80-120	

Lab Batch #: 705112

Sample: 289939-008 / SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0264	0.0300	88	80-120	

Lab Batch #: 705112

Sample: 499788-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0266	0.0300	89	80-120	

Lab Batch #: 705112

Sample: 499788-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0307	0.0300	102	80-120	
4-Bromofluorobenzene	0.0271	0.0300	90	80-120	

Lab Batch #: 705112

Sample: 499788-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0272	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.



Blank Spike Recovery

Project Name: Hobbs Junction Mainline

Work Order #: 289939

Project ID:

2003-00017

Lab Batch #: 704769

Sample: 499607-1-BKS

Matrix: Water

Date Analyzed: 09/21/2007

Date Prepared: 09/21/2007

Analyst: JBU

Reporting Units: mg/L

Batch #: 1

BLANK /BLANK SPIKE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Benzene	ND	0.1000	0.0985	99	70-125	
Toluene	ND	0.1000	0.0977	98	70-125	
Ethylbenzene	ND	0.1000	0.0974	97	71-129	
m,p-Xylene	ND	0.2000	0.1947	97	70-131	
o-Xylene	ND	0.1000	0.0974	97	71-133	

Blank Spike Recovery [D] = $100 * [C] / [B]$

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



BS / BSD Recoveries

Project Name: Hobbs Junction Mainline

Work Order #: 289939

Analyst: SHE

Lab Batch ID: 705065

Sample: 499756-1-BKS

Date Prepared: 09/25/2007

Batch #: 1

Project ID: 2003-00017

Date Analyzed: 09/25/2007

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	0.0945	95	0.1	0.0945	95	0	70-125	25
	Toluene	ND	0.1000	0.0936	94	0.1	0.0939	94	0	70-125	25
	Ethylbenzene	ND	0.1000	0.0942	94	0.1	0.0948	95	1	71-129	25
	m,p-Xylene	ND	0.2000	0.1873	94	0.2	0.1888	94	1	70-131	25
	o-Xylene	ND	0.1000	0.0936	94	0.1	0.0944	94	1	71-133	25

Analyst: SHE

Lab Batch ID: 705112

Sample: 499788-1-BKS

Date Prepared: 09/26/2007

Batch #: 1

Date Analyzed: 09/26/2007

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	0.0965	97	0.1	0.0963	96	0	70-125	25
	Toluene	ND	0.1000	0.0963	96	0.1	0.0963	96	0	70-125	25
	Ethylbenzene	ND	0.1000	0.0957	96	0.1	0.0961	96	0	71-129	25
	m,p-Xylene	ND	0.2000	0.1902	95	0.2	0.1915	96	1	70-131	25
	o-Xylene	ND	0.1000	0.0936	94	0.1	0.0948	95	1	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: Hobbs Junction Mainline

Work Order # : 289939

Lab Batch ID: 704769

Date Analyzed: 09/21/2007

Reporting Units: mg/L

Project ID: 2003-00017

QC- Sample ID: 289939-004 S

Batch #: 1 Matrix: Water

Date Prepared: 09/21/2007

Analyst: JBU

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
BTEX by EPA 8021B Analytes	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	ND	0.1000	0.0838	84	0.1000	0.0900	90	7	70-125	25
	Toluene	ND	0.1000	0.0829	83	0.1000	0.0896	90	8	70-125	25
	Ethylbenzene	ND	0.1000	0.0850	85	0.1000	0.0920	92	8	71-129	25
	m,p-Xylene	ND	0.2000	0.1690	85	0.2000	0.1834	92	8	70-131	25
	o-Xylene	ND	0.1000	0.0844	84	0.1000	0.0923	92	9	71-133	25

Matrix Spike Percent Recovery $[D] = 100 \times (C-A)/B$

Relative Percent Difference $RPD = 200 \times (D-G)/(D+G)$

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

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

Environmental Lab of Texas

A Xenco Laboratories Company

12600 West I-20 East
Odessa, Texas 79765

PHONE: 432-563-1713
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

Sampler Signature: Caito Chung / Jeff Cramen

Fax No:

e-mail:

ssmith@TalonLPE.com

Project Name: Hobbs Junction Mainline

Project #: PLANS 047 SPL

Project Loc: Lee County, NM

PO #: 2003-00017

Report Format:

☒ Standard

☐ TRRP

☐ NPDES

(lab use only)

ORDER #: 289939

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers										Matrix	TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1005	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 80218 8030 or BTEX 8250	RCH	N.O.R.M.	RUSH TAT (Per Schedule) 24, 48, 72 hrs
								Ice	HNO3	HCl VOA	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	DV=Drinking Water SL=Sludge	CW=Groundwater S=Soil/Solid													
01 MW- 7				9/19/07	1320		2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
02 MW- 11				9/19/07	1315		2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
03 MW- 9				9/19/07	1345		2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
04 MW- 16				9/19/07	1340		2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
05 MW- 20				9/19/07	1358		2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
06 MW- 13				9/19/07	1405		2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
07 MW- 10				9/19/07	1352		2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
08 MW- 18				9/19/07	1350		2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
09 MW- 8				9/19/07	1334		2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
10 MW- 19				9/19/07	1325		2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			

ORDER #: 289939

Laboratory Comments: Sample Containers: Mac

Special Instructions:

Laboratory Comments:

Sample Containers: 3

VOCS Free of Headspace?

Labels on container(s)?

Custody seals on container(s)?

Sample Hand Delivered

by Sampler/Client Rep.?

by Courier?

UPS

DHL

FedEx

Lone Star

Temperature Upon Receipt:

0.0 °C

Received by:

Time

Date

Time

Date

Time

Date

Received by ELOI:

Time

Date

Time

Date

Relinquished by:

Time

Date

Relinquished by:

Time

Date

Relinquished by:

Time

Date

Andrew Lane

9.20.07

10:03

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Talon

Date/ Time: 9-20-07 10:03

Lab ID #: 289939

Initials: cu

Sample Receipt Checklist

Client Initials

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

Variance Documentation

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

Regarding: #8 COC states mw-# containers state # only

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 294072

for

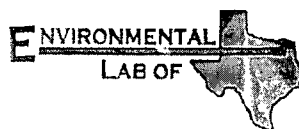
PLAINS ALL AMERICAN EH&S

Project Manager: Camille Reynolds

Junction Mainline

SRS# 2003-00017

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: **294072**
Junction Mainline
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 294072. 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. 294072 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

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



Sample Cross Reference 294072

PLAINS ALL AMERICAN EH&S, Midland, TX

Junction Mainline

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-10	W	Dec-05-07 14:07		294072-001
MW-11	W	Dec-05-07 13:52		294072-002
MW-16	W	Dec-05-07 13:25		294072-003
MW-18	W	Dec-05-07 13:35		294072-004
MW-19	W	Dec-05-07 13:41		294072-005
MW-20	W	Dec-05-07 13:50		294072-006
MW-21	W	Dec-05-07 15:00		294072-007
MW-22	W	Dec-05-07 15:15		294072-008



Certificate of Analysis Summary 294072

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Id: SRS# 2003-00017
Contact: Camille Reynolds
Project Location: Hobbs, NM

Project Name: Junction Mainline

Date Received in Lab: Thu Dec-06-07 08:00 am

Report Date: 12-DEC-07

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	Field Id:	Depth:	Matrix:	Sampled:	294072-001	294072-002	294072-003	294072-004	294072-005	294072-006
						MW-10	MW-11	MW-16	MW-18	MW-19	MW-20
						WATER	WATER	WATER	WATER	WATER	WATER
						Dec-05-07 14:07	Dec-05-07 13:52	Dec-05-07 13:25	Dec-05-07 13:35	Dec-05-07 13:41	Dec-05-07 13:50
BTEX by EPA 8021B	Extracted:					Dec-12-07 08:24	Dec-12-07 08:24	Dec-12-07 08:24	Dec-11-07 11:10	Dec-11-07 11:10	Dec-12-07 08:24
	Analyzed:					Dec-12-07 13:47	Dec-12-07 14:03	Dec-12-07 14:20	Dec-11-07 14:42	Dec-11-07 14:59	Dec-12-07 14:37
	Units/RL:					mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	Benzene					7.375	17.89	0.0034	0.0039	0.0020	31.41
	Toluene					ND	1.365	ND	ND	ND	ND
	Ethylbenzene					0.5106	1.290	ND	ND	ND	1.749
	m,p-Xylenes					ND	0.7575	ND	ND	ND	0.2220
	o-Xylene					ND	0.2535	ND	ND	ND	ND
	Xylenes, Total					ND	1.011	ND	ND	ND	0.222
	Total BTEX					7.8856	21.556	0.0034	0.0039	0.002	33.381

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility, and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work, order unless otherwise agreed to in writing.

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Brent Barron
Odessa Laboratory Director



Certificate of Analysis Summary 294072
PLAINS ALL AMERICAN EH&S, Midland, TX

Project Id: SRS# 2003-00017
Contact: Camille Reynolds
Project Location: Hobbs, NM

Date Received in Lab: Thu Dec-06-07 08:00 am
Report Date: 12-DEC-07
Project Manager: Brent Barron, II

Project Name: Junction Mainline

Analysis Requested	Lab Id:	294072-007	294072-008	
	Field Id:	MW-21	MW-22	
	Depth:			
	Matrix:	WATER	WATER	
	Sampled:	Dec-05-07 15:00	Dec-05-07 15:15	
BTEX by EPA 8021B	Extracted:	Dec-12-07 08:24	Dec-11-07 11:10	
	Analyzed:	Dec-12-07 14:53	Dec-11-07 15:49	
	Units/RL:	mg/L RL	mg/L RL	
	Benzene	0.0390 0.0010	0.1621 0.0010	
	Toluene	0.0033 0.0020	0.0028 0.0020	
Ethylbenzene		0.0040 0.0010	ND 0.0010	
m,p-Xylenes		ND 0.0020	0.0040 0.0020	
o-Xylene		ND 0.0010	ND 0.0010	
Xylenes, Total		ND	0.004	
Total BTEX		0.0663	0.1689	

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility, and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Brent Barron
Odessa Laboratory Director



Form 2 - Surrogate Recoveries

Project Name: Junction Mainline

Work Order #: 294072

Project ID: SRS# 2003-00017

Lab Batch #: 710227

Sample: 294072-004 / SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0309	0.0300	103	80-120	
4-Bromofluorobenzene	0.0241	0.0300	80	80-120	

Lab Batch #: 710227

Sample: 294072-005 / SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	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	0.0258	0.0300	86	80-120	

Lab Batch #: 710227

Sample: 294072-005 S / MS

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	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	0.0263	0.0300	88	80-120	

Lab Batch #: 710227

Sample: 294072-005 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	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 #: 710227

Sample: 294072-008 / SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0285	0.0300	95	80-120	
4-Bromofluorobenzene	0.0253	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.



Form 2 - Surrogate Recoveries

Project Name: Junction Mainline

Work Order #: 294072

Project ID: SRS# 2003-00017

Lab Batch #: 710227

Sample: 502382-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0297	0.0300	99	80-120	

Lab Batch #: 710227

Sample: 502382-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0325	0.0300	108	80-120	
4-Bromofluorobenzene	0.0264	0.0300	88	80-120	

Lab Batch #: 710227

Sample: 502382-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0286	0.0300	95	80-120	
4-Bromofluorobenzene	0.0269	0.0300	90	80-120	

Lab Batch #: 710260

Sample: 294072-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0326	0.0300	109	80-120	
4-Bromofluorobenzene	0.0261	0.0300	87	80-120	

Lab Batch #: 710260

Sample: 294072-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0263	0.0300	88	80-120	
4-Bromofluorobenzene	0.0269	0.0300	90	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.



Form 2 - Surrogate Recoveries

Project Name: Junction Mainline

Work Order #: 294072

Project ID: SRS# 2003-00017

Lab Batch #: 710260

Sample: 294072-003 / SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0309	0.0300	103	80-120	
4-Bromofluorobenzene	0.0252	0.0300	84	80-120	

Lab Batch #: 710260

Sample: 294072-006 / SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0336	0.0300	112	80-120	
4-Bromofluorobenzene	0.0255	0.0300	85	80-120	

Lab Batch #: 710260

Sample: 294072-007 / SMP

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0318	0.0300	106	80-120	
4-Bromofluorobenzene	0.0255	0.0300	85	80-120	

Lab Batch #: 710260

Sample: 502403-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	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

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	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	

** 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: Junction Mainline

Work Order #: 294072

Project ID: SRS# 2003-00017

Lab Batch #: 710260

Sample: 502403-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	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: Junction Mainline

Work Order #: 294072

Analyst: SHE

Lab Batch ID: 710227

Sample: 502382-1-BKS

Date Prepared: 12/11/2007

Batch #: 1

Project ID: SRS# 2003-00017

Date Analyzed: 12/11/2007

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY														
Units: mg/L	BTEX by EPA 8021B	Analytes	Blank Sample Result	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate Result	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag	
			[A]	[B]	[C]	[D]	[E]	[F]	[G]					
		Benzene	ND	0.1000	0.1093	109	0.1	0.1095	110	0	70-125	25		
		Toluene	ND	0.1000	0.1079	108	0.1	0.1058	106	2	70-125	25		
		Ethylbenzene	ND	0.1000	0.1110	111	0.1	0.1045	105	6	71-129	25		
		m,p-Xylenes	ND	0.2000	0.2206	110	0.2	0.2035	102	8	70-131	25		
		o-Xylene	ND	0.1000	0.1087	109	0.1	0.1004	100	8	71-133	25		

Analyst: SHE

Lab Batch ID: 710260

Sample: 502403-1-BKS

Date Prepared: 12/12/2007

Batch #: 1

Date Analyzed: 12/12/2007

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	0.1012	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: Junction Mainline

Work Order # : 294072

Lab Batch ID: 710227

Date Analyzed: 12/11/2007

Reporting Units: mg/L

Project ID: SRS# 2003-00017

QC- Sample ID: 294072-005 S

Batch #: 1 Matrix: Water

Date Prepared: 12/11/2007 Analyst: SHE

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY												
BTEX by EPA 8021B Analytes	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	0.0020	0.1000	0.1022	100	0.1000	0.1005	99	1	70-125	25	
	Toluene	ND	0.1000	0.0973	97	0.1000	0.0978	98	1	70-125	25	
	Ethylbenzene	ND	0.1000	0.0955	96	0.1000	0.0969	97	1	71-129	25	
	m,p-Xylenes	ND	0.2000	0.1869	93	0.2000	0.1900	95	2	70-131	25	
	o-Xylene	ND	0.1000	0.0945	95	0.1000	0.0963	96	1	71-133	25	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Relative Percent Difference RPD = 200*(D-G)/(D+G)

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

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



- ☐ 11381 Meadowgreen, Suite L, Houston TX 77062 281-589-0692
☐ 550N Wurbach, Suite 104, San Antonio, TX 78238 210-505-3334
☐ 11073 Morrison Lane, Suite D, Dallas, TX 75229 972-481-9999

ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

- ☐ 5757 N.W. 158th Street, Miami Lakes, FL 33014 305-823-8500
☐ 2618 South Falkenberg Rd, Riverview, FL 33559 813-620-2000

LAB ONLY:

294072

Serial #: 179638 Page 1 of 1

Company City: Talcahuano Phone: 432-522-2133 Site: Abbeys, NM
Project Name: Injection Mainline
Proj. Manager (PM): Shanna Smith
Fax Results to: ☐ PM or ☐ FAX
e-mail to: SSM:sk@talcalpe.com
Invoice to: ☐ Accounting ☐ Inc. Invoice with Final Report ☐ Invoice must have a P.O.
Bill to: PLAINS Carnille Reynolds SA# 2003-00017
Quote No.: P.O. No.: ☐ Call for a P.O.
Reg Program: CLP AFCEE TRRP DW UST State Other
Target DLS (DW CRDL TRRP CAPP MDLS See Lab PM Attached Call)
TRRP PCLs: Tier 1 Tier 2 Residential Industrial
LPST No.: (Required)
Sampler Name: Carl Kossels Signature: Carl Kossels

Sample ID	Sampling Date	Time	Depth	Matrix	Composite	# Containers	Container Size	Container Type	Preservatives
MW-10	12/5/07	1407		W	X	2	V	W/L	HCL
MW-11	12/5/07	1352		W	X	2	V		HCL
MW-16	12/5/07	1325		W	X	2	V		HCL
MW-18	12/5/07	1325		W	X	2	V		HCL
MW-19	12/5/07	1341		W	X	2	V		HCL
MW-20	12/5/07	1350		W	X	2	V		HCL
MW-21	12/5/07	1500		W	X	2	V		HCL
MW-22	12/5/07	1515		W	X	2	V		HCL

Relinquished by (Initials and Sign) JK Date & Time 12/16/07 0800
Relinquished to (Initials and Sign) Date & Time
Lab: Quintavox 12/16/07 8000 Containers Received: 16.5 gal Soiler Temperature -2.5 (not frozen)

Preservatives: Various (V), HCl pH<2 (H), H2SO4 pH<2 (S), HNO3 pH<2 (N), Ascorbic 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:
Matrix: Air (A), Product (P), Solid(S), Water (W)

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: PLAINSDH75PL
Remarks:
Sample Clean-ups are pre-approved
Hold Disposal Hold Analysis (Subcharges will apply)
Addit. P&H above mg/L W. mg/Kg S Highest Hit
TAT 5h 12h 24h 48h 3d 5d 7d 10d 21d
FL Preburn - Revised: Virgin Non-Virgin
SVOCs by 8270 8260 8261 8262 8263 8264 8265 8266 8267 8268 8269 8270 8271 8272 8273 8274 8275 8276 8277 8278 8279 8280 8281 8282 8283 8284 8285 8286 8287 8288 8289 8290 8291 8292 8293 8294 8295 8296 8297 8298 8299 8300 8301 8302 8303 8304 8305 8306 8307 8308 8309 8310 8311 8312 8313 8314 8315 8316 8317 8318 8319 8320 8321 8322 8323 8324 8325 8326 8327 8328 8329 8330 8331 8332 8333 8334 8335 8336 8337 8338 8339 8340 8341 8342 8343 8344 8345 8346 8347 8348 8349 8350 8351 8352 8353 8354 8355 8356 8357 8358 8359 8360 8361 8362 8363 8364 8365 8366 8367 8368 8369 8370 8371 8372 8373 8374 8375 8376 8377 8378 8379 8380 8381 8382 8383 8384 8385 8386 8387 8388 8389 8390 8391 8392 8393 8394 8395 8396 8397 8398 8399 8400 8401 8402 8403 8404 8405 8406 8407 8408 8409 8410 8411 8412 8413 8414 8415 8416 8417 8418 8419 8420 8421 8422 8423 8424 8425 8426 8427 8428 8429 8430 8431 8432 8433 8434 8435 8436 8437 8438 8439 8440 8441 8442 8443 8444 8445 8446 8447 8448 8449 8450 8451 8452 8453 8454 8455 8456 8457 8458 8459 8460 8461 8462 8463 8464 8465 8466 8467 8468 8469 8470 8471 8472 8473 8474 8475 8476 8477 8478 8479 8480 8481 8482 8483 8484 8485 8486 8487 8488 8489 8490 8491 8492 8493 8494 8495 8496 8497 8498 8499 8500 8501 8502 8503 8504 8505 8506 8507 8508 8509 8510 8511 8512 8513 8514 8515 8516 8517 8518 8519 8520 8521 8522 8523 8524 8525 8526 8527 8528 8529 8530 8531 8532 8533 8534 8535 8536 8537 8538 8539 8540 8541 8542 8543 8544 8545 8546 8547 8548 8549 8550 8551 8552 8553 8554 8555 8556 8557 8558 8559 8560 8561 8562 8563 8564 8565 8566 8567 8568 8569 8570 8571 8572 8573 8574 8575 8576 8577 8578 8579 8580 8581 8582 8583 8584 8585 8586 8587 8588 8589 8590 8591 8592 8593 8594 8595 8596 8597 8598 8599 8600 8601 8602 8603 8604 8605 8606 8607 8608 8609 8610 8611 8612 8613 8614 8615 8616 8617 8618 8619 8620 8621 8622 8623 8624 8625 8626 8627 8628 8629 8630 8631 8632 8633 8634 8635 8636 8637 8638 8639 8640 8641 8642 8643 8644 8645 8646 8647 8648 8649 8650 8651 8652 8653 8654 8655 8656 8657 8658 8659 8660 8661 8662 8663 8664 8665 8666 8667 8668 8669 8670 8671 8672 8673 8674 8675 8676 8677 8678 8679 8680 8681 8682 8683 8684 8685 8686 8687 8688 8689 8690 8691 8692 8693 8694 8695 8696 8697 8698 8699 8700 8701 8702 8703 8704 8705 8706 8707 8708 8709 8710 8711 8712 8713 8714 8715 8716 8717 8718 8719 8720 8721 8722 8723 8724 8725 8726 8727 8728 8729 8730 8731 8732 8733 8734 8735 8736 8737 8738 8739 8740 8741 8742 8743 8744 8745 8746 8747 8748 8749 8750 8751 8752 8753 8754 8755 8756 8757 8758 8759 8760 8761 8762 8763 8764 8765 8766 8767 8768 8769 8770 8771 8772 8773 8774 8775 8776 8777 8778 8779 8780 8781 8782 8783 8784 8785 8786 8787 8788 8789 8790 8791 8792 8793 8794 8795 8796 8797 8798 8799 8800 8801 8802 8803 8804 8805 8806 8807 8808 8809 8810 8811 8812 8813 8814 8815 8816 8817 8818 8819 8820 8821 8822 8823 8824 8825 8826 8827 8828 8829 8830 8831 8832 8833 8834 8835 8836 8837 8838 8839 8840 8841 8842 8843 8844 8845 8846 8847 8848 8849 8850 8851 8852 8853 8854 8855 8856 8857 8858 8859 8860 8861 8862 8863 8864 8865 8866 8867 8868 8869 8870 8871 8872 8873 8874 8875 8876 8877 8878 8879 8880 8881 8882 8883 8884 8885 8886 8887 8888 8889 8890 8891 8892 8893 8894 8895 8896 8897 8898 8899 8900 8901 8902 8903 8904 8905 8906 8907 8908 8909 8910 8911 8912 8913 8914 8915 8916 8917 8918 8919 8920 8921 8922 8923 8924 8925 8926 8927 8928 8929 8930 8931 8932 8933 8934 8935 8936 8937 8938 8939 8940 8941 8942 8943 8944 8945 8946 8947 8948 8949 8950 8951 8952 8953 8954 8955 8956 8957 8958 8959 8960 8961 8962 8963 8964 8965 8966 8967 8968 8969 8970 8971 8972 8973 8974 8975 8976 8977 8978 8979 8980 8981 8982 8983 8984 8985 8986 8987 8988 8989 8990 8991 8992 8993 8994 8995 8996 8997 8998 8999 9000 9001 9002 9003 9004 9005 9006 9007 9008 9009 9010 9011 9012 9013 9014 9015 9016 9017 9018 9019 9020 9021 9022 9023 9024 9025 9026 9027 9028 9029 9030 9031 9032 9033 9034 9035 9036 9037 9038 9039 9040 9041 9042 9043 9044 9045 9046 9047 9048 9049 9050 9051 9052 9053 9054 9055 9056 9057 9058 9059 9060 9061 9062 9063 9064 9065 9066 9067 9068 9069 9070 9071 9072 9073 9074 9075 9076 9077 9078 9079 9080 9081 9082 9083 9084 9085 9086 9087 9088 9089 9090 9091 9092 9093 9094 9095 9096 9097 9098 9099 9100 9101 9102 9103 9104 9105 9106 9107 9108 9109 9110 9111 9112 9113 9114 9115 9116 9117 9118 9119 9120 9121 9122 9123 9124 9125 9126 9127 9128 9129 9130 9131 9132 9133 9134 9135 9136 9137 9138 9139 9140 9141 9142 9143 9144 9145 9146 9147 9148 9149 9150 9151 9152 9153 9154 9155 9156 9157 9158 9159 9160 9161 9162 9163 9164 9165 9166 9167 9168 9169 9170 9171 9172 9173 9174 9175 9176 9177 9178 9179 9180 9181 9182 9183 9184 9185 9186 9187 9188 9189 9190 9191 9192 9193 9194 9195 9196 9197 9198 9199 9200 9201 9202 9203 9204 9205 9206 9207 9208 9209 9210 9211 9212 9213 9214 9215 9216 9217 9218 9219 9220 9221 9222 9223 9224 9225 9226 9227 9228 9229 9230 9231 9232 9233 9234 9235 9236 9237 9238 9239 9240 9241 9242 9243 9244 9245 9246 9247 9248 9249 9250 9251 9252 9253 9254 9255 9256 9257 9258 9259 9260 9261 9262 9263 9264 9265 9266 9267 9268 9269 9270 9271 9272 9273 9274 9275 9276 9277 9278 9279 9280 9281 9282 9283 9284 9285 9286 9287 9288 9289 9290 9291 9292 9293 9294 9295 9296 9297 9298 9299 9300 9301 9302 9303 9304 9305 9306 9307 9308 9309 9310 9311 9312 9313 9314 9315 9316 9317 9318 9319 9320 9321 9322 9323 9324 9325 9326 9327 9328 9329 9330 9331 9332 9333 9334 9335 9336 9337 9338 9339 9340 9341 9342 9343 9344 9345 9346 9347 9348 9349 9350 9351 9352 9353 9354 9355 9356 9357 9358 9359 9360 9361 9362 9363 9364 9365 9366 9367 9368 9369 9370 9371 9372 9373 9374 9375 9376 9377 9378 9379 9380 9381 9382 9383 9384 9385 9386 9387 9388 9389 9390 9391 9392 9393 9394 9395 9396 9397 9398 9399 9400 9401 9402 9403 9404 9405 9406 9407 9408 9409 9410 9411 9412 9413 9414 9415 9416 9417 9418 9419 9420 9421 9422 9423 9424 9425 9426 9427 9428 9429 9430 9431 9432 9433 9434 9435 9436 9437 9438 9439 9440 9441 9442 9443 9444 9445 9446 9447 9448 9449 9450 9451 9452 9453 9454 9455 9456 9457 9458 9459 9460 9461 9462 9463 9464 9465 9466 9467 9468 9469 9470 9471 9472 9473 9474 9475 9476 9477 9478 9479 9480 9481 9482 9483 9484 9485 9486 9487 9488 9489 9490 9491 9492 9493 9494 9495 9496 9497 9498 9499 9500 9501 9502 9503 9504 9505 9506 9507 9508 9509 9510 9511 9512 9513 9514 9515 9516 9517 9518 9519 9520 9521 9522 9523 9524 9525 9526 9527 9528 9529 9530 9531 9532 9533 9534 9535 9536 9537 9538 9539 9540 9541 9542 9543 9544 9545 9546 9547 9548 9549 9550 9551 9552 9553 9554 9555 9556 9557 9558 9559 9560 9561 9562 9563 9564 9565 9566 9567 9568 9569 9570 9571 9572 9573 9574 9575 9576 9577 9578 9579 9580 9581 9582 9583 9584 9585 9586 9587 9588 9589 9590 9591 9592 9593 9594 9595 9596 9597 9598 9599 9600 9601 9602 9603 9604 9605 9606 9607 9608 9609 9610 9611 9612 9613 9614 9615 9616 9617 9618 9619 9620 9621 9622 9623 9624 9625 9626 9627 9628 9629 9630 9631 9632 9633 9634 9635 9636 9637 9638 9639 9640 9641 9642 9643 9644 9645 9646 9647 9648 9649 9650 9651 9652 9653 9654 9655 9656 9657 9658 9659 9660 9661 9662 9663 9664 9665 9666 9667 9668 9669 9670 9671 9672 9673 9674 9675 9676 9677 9678 9679 9680 9681 9682 9683 9684 9685 9686 9687 9688 9689 9690 9691 9692 9693 9694 9695 9696 9697 9698 9699 9700 9701 9702 9703 9704 9705 9706 9707 9708 9709 9710 9711 9712 9713 9714 9715 9716 9717 9718 9719 9720 9721 9722 9723 9724 9725 9726 9727 9728 9729 9730 9731 9732 9733 9734 9735 9736 9737 9738 9739 9740 9741 9742 9743 9744 9745 9746 9747 9748 9749 9750 9751 9752 9753 9754 9755 9756 9757 9758 9759 9760 9761 9762 9763 9764 9765 9766 9767 9768 9769 9770 9771 9772 9773 9774 9775 9776 9777 9778 9779 9780 9781 9782 9783 9784 9785 9786 9787 9788 9789 9790 9791 9792 9793 9794 9795 9796 9797 9798 9799 9800 9801 9802 9803 9804 9805 9806 9807 9808 9809 9810 9811 9812 9813 9814 9815 9816 9817 9818 9819 9820 9821 9822 9823 9824 9825 9826 9827 9828 9829 9830 9831 9832 9833 9834 9835 9836 9837 9838 9839 9840 9841 9842 9843 9844 9845 9846 9847 9848 9849 9850 9851 9852 9853 9854 9855 9856 9857 9858 9859 9860 9861 9862 9863 9864 9865 9866 9867 9868 9869 9870 9871 9872 9873 9874 9875 9876 9877 9878 9879 9880 9881 9882 9883 9884 9885 9886 9887 9888 9889 9890 9891 9892 9893 9894 9895 9896 9897 9898 9899 9900 9901 9902 9903 9904 9905 9906 9907 9908 9909 9910 9911 9912 9913 9914 9915 9916 9917 9918 9919 9920 9921 9922 9923 9924 9925 9926 9927 9928 9929 9930 9931 9932 9933 9934 9935 9936 9937 9938 9939 9940 9941 9942 9943 9944 9945 9946 9947 9948 9949 9950 9951 9952 9953 9954 9955 9956 9957 9958 9959 9960 9961 9962 9963 9964 9965 9966 9967 9968 9969 9970 9971 9972 9973 9974 9975 9976 9977 9978 9979 9980 9981 9982 9983 9984 9985 9986 9987 9988 9989 9990 9991 9992 9993 9994 9995 9996 9997 9998 9999 10000

Rush Charges are Pre-Approved upon requesting them.
Instructions:
All XENCO Standard Terms and Conditions Apply
Containers Received: 16.5 gal Soiler Temperature -2.5 (not frozen)
Cont. Type: Glass Amp (A), Glass Clear (C), Plastic (P), Other (O)
www.xenco.com

SDBE Committed to Excellence in Service and Quality since 1990

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Plains
 Date/ Time: 12/06/01 08:00
 Lab ID #: 294072
 Initials: gmst

Sample Receipt Checklist

				Client Initials
#1	Temperature of container/ cooler?	<u>Yes</u>	No	-2.5 not frozen
#2	Shipping container in good condition?	<u>Yes</u>	No	
#3	Custody Seals intact on shipping container/ cooler?	<u>Yes</u>	No	<u>Not Present</u>
#4	Custody Seals intact on sample bottles/ container?	<u>Yes</u>	No	Not Present
#5	Chain of Custody present?	<u>Yes</u>	No	
#6	Sample instructions complete of Chain of Custody?	<u>Yes</u>	No	
#7	Chain of Custody signed when relinquished/ received?	<u>Yes</u>	No	
#8	Chain of Custody agrees with sample label(s)?	<u>Yes</u>	No	ID written on Cont./ Lid
#9	Container label(s) legible and intact?	<u>Yes</u>	No	Not Applicable
#10	Sample matrix/ properties agree with Chain of Custody?	<u>Yes</u>	No	
#11	Containers supplied by ELOT?	<u>Yes</u>	No	
#12	Samples in proper container/ bottle?	<u>Yes</u>	No	See Below
#13	Samples properly preserved?	<u>Yes</u>	No	See Below
#14	Sample bottles intact?	<u>Yes</u>	No	
#15	Preservations documented on Chain of Custody?	<u>Yes</u>	No	
#16	Containers documented on Chain of Custody?	<u>Yes</u>	No	
#17	Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No	See Below
#18	All samples received within sufficient hold time?	<u>Yes</u>	No	See Below
#19	Subcontract of sample(s)?	<u>Yes</u>	No	<u>Not Applicable</u>
#20	VOC samples have zero headspace?	<u>Yes</u>	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

Form C-141

Revised March 17, 1999

Oil Conservation Division

1220 South St. Francis Dr.

Santa Fe, NM 87505

Submit 2 Copies to appropriate

District Office in accordance

with Rule 116 on back

side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company EOTT Energy Pipeline, LP	Contact Frank Hernandez
Address 5805 East Hwy 80	Telephone No. 915-638-3799
Facility Name Hobbs Junction Mainline	Facility Type 10" Crude Oil Pipeline

Surface Owner State of NM	Mineral Owner NA	Lease No. NA
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LOCATION OF RELEASE

Unit Letter M	Section 26	Township 18S	Range 37E	Feet from South Line 15	Feet from West Line 700	Longitude W103:13:42.01	Latitude N32:42:40.85	County: Lea
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NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 50 bbl	Volume Recovered 24 bbl
Source of Release Steel Pipeline	Date and Hour of Occurrence 1/23/03-8:00 AM	Date and Hour of Discovery 1/23/03-10:45 AM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Sylvia Dickie - Hobbs NMOCD	
By Whom? Pat McCasland - EPI	Date and Hour 1/23/03-11:35 AM	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. NA	
If a Watercourse was Impacted, Describe Fully.* NA		

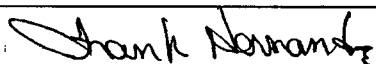
Describe Cause of Problem and Remedial Action Taken.*

Corroded pipeline (internal), repaired with clamp

Describe Area Affected and Cleanup Action Taken.*

~12500-ft² surface area affected; 50-bbl released; 24-bbl of crude recovered. Removal and disposal of contaminated soil above remedial goals was commenced by EPI.

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

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Frank Hernandez	Approved by District Supervisor:	
Title: District Environmental Supervisor	Approval Date:	Expiration Date:
Date: 1/24/03 Phone: 915-638-3799	Conditions of Approval:	☐ Attached

Attach Additional Sheets If Necessary

EOTT Energy Pipeline, LP**Site Information and Metrics****Incident Date and NMOCD Notified?****1/23/03-10:45 AM****1/23/03-11:35 AM**

SITE: Hobbs Junction Mainline		Assigned Site Reference #: 2003-00017	
Company: EOTT Energy Pipeline, LP			
Street Address: 5805 East Hwy 80			
Mailing Address: PO Box 1660			
City, State, Zip: Midland, TX 79701			
Representative: Frank Hernandez			
Representative Telephone: 915-638-3799			
Telephone:			
Fluid volume released (bbls): 50	Recovered (bbls): 24		
>25 bbls: Notify NMOCD verbally within 24 hrs and submit form C-141 within 15 days.			
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: 2003-00017			
Source of contamination: Steel Pipeline			
Land Owner, i.e., BLM, ST, Fee, Other: State of NM			
LSP Dimensions: 500-ft X 50-ft (W-E)			
LSP Area: 12500 -ft ²			
Location of Reference Point (RP):			
Location distance and direction from RP:			
Latitude: N32:42:40.85			
Longitude: W103:13:42.01			
Elevation above mean sea level: 3681 -ft amsl			
Feet from South Section Line: 15			
Feet from West Section Line: 700			
Location - Unit or 1/4 1/4: UL- M SW 1/4 of SW 1/4			
Location - Section: 26			
Location - Township: 18S			
Location - Range: 37E			
Surface water body within 1000' radius of Site: 0			
Surface water body within 1000' radius of Site: 0			
Domestic water wells within 1000' radius of Site: 0			
Domestic water wells within 1000' radius of Site: 0			
Agricultural water wells within 1000' radius of Site: 1			
Agricultural water wells within 1000' radius of Site: 0			
Public water supply wells within 1000' radius of Site: 0			
Public water supply wells within 1000' radius of Site: 0			
Depth (ft) from land surface to ground water (DG): 38			
Depth (ft) of contamination (DC): 5			
Depth (ft) to ground water (DG - DC = DtGW): 33			
1. Ground Water		2. Wellhead Protection Area	
If Depth to GW <50 feet: 20 points		If <1000' from water source, or, <200' from private domestic water source: 20 points	
If Depth to GW 50 to 99 feet: 10 points		If >1000' from water source, or, >200' from private domestic water source: 0 points	
If Depth to GW >100 feet: 0 points			
Ground water Score: 20		Wellhead Protection Area Score: 20	
Site Rank (1+2+3) = 40		Surface Water Score: 0	
Total Site Ranking Score and Acceptable Concentrations			
Parameter	20 or >	10	0
Benzene ¹	10 ppm	10 ppm	10 ppm
BTEX ¹	50 ppm	50 ppm	50 ppm
TPH	100 ppm	1000 ppm	5000 ppm

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