

ANNUAL MONITORING REPORT

YEAR(S): 2007



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ENVIRONMENTAL CONSULTING ENGINEERING DRILLING CONSTRUCTION EMERGENCY RESPONSE KIMBROUGH SWEET 8" NMOCD REF. # AP-0029 2007 ANNUAL GROUNDWATER MONITORING REPORT LEA COUNTY, NEW MEXICO PLAINS SRS #2000-10757

Section 3, Township 18 South, Range 37 East

Prepared for:

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

Prepared by:

Talon/LPE

March 28, 2008

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

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

Camille Reynolds Remediation Coordinatol Plains All American

CC: Larry Johnson, NMOCD, Hobbs, NM

Enclosures

Kimbrough Sweet 8" 2007 Annual Groundwater Monitoring Report

Plains Marketing, L.P. Houston, Texas

Talon/LPE PROJECT NO. PLAINS045SPL

Prepared by:

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Shanna L. Smith Project Manager

Kyle Waggoner

Regional Manager

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

March 2008

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Camille Reynolds	Remediation Coordinator	Plains All American Pipeline	3112 West U.S. Hwy 82 Lovington, NM 88260	cjreynolds@paalp.com
Jeff Dann	Senior Environmental Specialist	Plains All American Pipeline	P. O. Box 4648 Houston, TX 77210-4648	jpdann@paalp.com
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NMOCD - New Mexico Oil Conservation Division NMSLO - New Mexico State Land Office

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ANNUAL GROUNDWATER MONITORING REPORT

1.0 Introduction

The Kimbrough Sweet 8" site is located approximately 7 miles northwest of Hobbs, Lea County, New Mexico, on property owned by the state of New Mexico. There are no residences, groundwater wells, or surface water bodies within a 1,000-foot radius of the site. The initial release occurred from the 8" steel pipeline on October 25, 2000. At the time of the release, the pipeline was under the ownership of EOTT Energy Pipeline. Subsequently, EOTT changed its name to Link Energy in October 2003, and Plains Pipeline, L.P. (Plains) purchased the assets of Link Energy on April 1, 2004. Initial reports estimated that 60 barrels (bbls) of crude oil were released and impacted approximately 15,613 feet of surface area. Approximately 22 bbls of crude oil were initially recovered.

On February 5, 2007, Talon/LPE was retained by Plains to assume remediation activities at the Kimbrough 8" Sweet release site. Remediation activities at the site were previously conducted by Environmental Plus, Inc. (EPI).

2.0 Previous Groundwater Investigation/Remediation

A total of eleven groundwater monitor wells have been installed in the vicinity of the release (see Figure 1). With New Mexico Oil Conservation Division (NMOCD) approval and landowner concurrence, groundwater monitor wells MW-1, MW-2, MW-3, and MW-4 were installed in January 2002. Ground monitor wells MW-5, MW-7, MW-8, and MW-9 were installed in July 2004, and MW-6, MW-10, and MW-11 were installed in December 2004.

PSH recovery operations have been performed at the site since January 2002. A summary of the historical groundwater and PSH gauging is provided as Table 1. Approximately 3,970 gallons (95 bbls) of phase-separated hydrocarbon (PSH) have been recovered to date.

3.0 Groundwater Gradient and PSH Thickness

Based on gauging data collected during 2007, groundwater elevations measured at the site generally varied by less than five feet during the course of the calendar year. Additionally, groundwater elevations at the site indicate "mounding" of the potentiometric surface in the vicinity of the release, which results in a variable apparent groundwater flow direction across the site. The overall groundwater gradient across the site appears to trend generally to the east. Based on available data, the groundwater gradient slope is 0.007 ft/ft. Groundwater gradient maps are presented as Figures 2a through 2d.

During 2007 gauging events, PSH thickness measurements from readings from the monitor wells ranged from "not-present" to a maximum of 9.59 feet (MW-2). Due to continual product recovery operations, the PSH affected monitor wells appear to exhibit inconsistent PSH thickness readings. PSH thickness measurements for selected dates are presented as Figures 3a through 3d.

4.0 **PSH Recovery**

Six skimmer pumps were installed in June 2007. In 2007, approximately 875 gallons (21 bbls) of crude oil were recovered from the subsurface and reintroduced into the Plains pipeline system at Lea Station. The total volume of PSH recovered as of December 31, 2007, is approximately 3,967 gallons (95 bbls).

5.0 Groundwater Sampling

Based on NMOCD recommendations, monitor wells MW-1, MW-3, and MW-4 were sampled and analyzed semi-annually for benzene, toluene, ethylbenzene and total xylenes (BTEX) and annually for poly-aromatic hydrocarbons (PAH). Due to the BTEX concentrations exhibited at MW-3 and MW-4, these wells were also sampled during the fourth quarter. Monitor well MW-10 was sampled and analyzed quarterly for BTEX and annually for PAH.

Groundwater sampling events occurred on April 2, June 13, September 13, and December 3, 2007. During the sampling events that occurred on April 2 and September 13, groundwater samples collected from MW-1, MW-3, MW-4, and MW-10 were submitted for quantification of BTEX using SW-846 Method 8021B. In addition, groundwater samples from the April 2, 2007 sampling event were submitted for quantification of PAH using EPA/SW-846 Methods 610 and 8270C. Monitor wells MW-3 and MW-4 exhibited elevated BTEX constituents in the third sampling quarter. Therefore, both were again sampled on December 3, 2007, and analyzed for BTEX. On June 13 and December 3, 2007, the groundwater sample collected from monitor well MW-10 was submitted for quantification of BTEX by SW-846 Method 8021B.

Groundwater samples were not collected from monitor wells MW-2, MW-5 through MW-9, and MW-11 during 2007, due to the presence of PSH. These monitor wells will be added to the quarterly sampling/analysis when PSH is no longer present.

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
РАН	0.030

April 2, 2007

During the April 2, 2007 sampling event, groundwater samples collected from monitor wells MW-1, MW-3, MW-4, and MW-10 were submitted for quantification of BTEX and PAH. Analytical results indicate that BTEX constituents were detected above the laboratory reporting limits in monitor well MW-3. The benzene concentration in monitor well MW-3 (0.369 mg/L) exceeded the NMWQCC ground water standard. PAH constituents were reported below the NMWQCC groundwater standards for all monitor wells sampled (MW-1, MW-3, MW-4, and MW-10).

June 13, 2007

On June 13, 2007, groundwater samples collected from monitor well MW-10 were submitted for quantification of BTEX. Analytical results indicate that BTEX constituents were not detected above the laboratory reporting limits in monitor well MW-10. The remaining wells were not sampled during this event.

September 13, 2007

During the September 13, 2007 sampling event, groundwater samples collected from monitor wells MW-1, MW-3, MW-4, and MW-10 were submitted for quantification of BTEX. Analytical results indicate that BTEX constituents were detected above the laboratory reporting limits in monitor wells MW-3 and MW-4. The BTEX constituent concentrations exceeded the NMWQCC groundwater standard in monitor well MW-3 (benzene at 18.43 mg/L, toluene at 0.9471 mg/L, and total xylenes at 2.9391 mg/L).

December 3, 2007

On December 3, 2007, groundwater samples collected from monitor wells MW-3, MW-4 and MW-10 were submitted for quantification of BTEX. Analytical results indicate that BTEX constituents were detected above the laboratory reporting limit in monitor wells MW-3, MW-4 and MW-10. The benzene concentration exceeded the NMWQCC groundwater standard in monitor well MW-3 (3.898 mg/L).

7.0 **Recommendations**

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

- 1) Gauge the monitor wells weekly to record water and PSH levels.
- 2) Operate and maintain the existing skimmer recovery system to achieve maximum PSH recovery.
- 3) Monitor well MW-1 will be sampled and analyzed for BTEX semi-annually and PAH annually.

- 4) Monitor well MW-3, MW-4, and MW-10 will be sampled and analyzed for BTEX quarterly unless the BTEX concentrations decline to less than laboratory reporting limits. At which time, monitor well MW-3 and/or MW-4 will be sampled and analyzed for BTEX semi-annually.
- 5) Monitor wells MW-2, MW-5, MW-6, MW-7, MW-8, MW-9, and MW-11 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) One additional monitor well will be proposed in 2008 to address down-gradient delineation of the dissolve-phase plume. Upon approval from the SLO, the monitor well will be installed east or down-gradient of monitor well MW-3.

Appendix A Drawings

Figure 1 – Site Plan

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Figure 2a – Groundwater Gradient Map (04/02/2007)

Figure 2b – Groundwater Gradient Map (06/13/2007)

Figure 2c – Groundwater Gradient Map (09/13/2007)

Figure 2d – Groundwater Gradient Map (12/03/2007)

Figure 3a – PSH Thickness & Groundwater Concentration Map (04/02/2007)

Figure 3b – PSH Thickness & Groundwater Concentration Map (06/13/2007)

Figure 3c – PSH Thickness & Groundwater Concentration Map (09/13/2007)

Figure 3d – PSH Thickness & Groundwater Concentration Map (12/03/2007)



















APPENDIX B

Tables

- Table 1 Summary of Groundwater Elevations and Phase Separated Thickness

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Table 2 – Summary of Groundwater Analytical Results Table 3 – Summary of Groundwater Polycyclic Aromatic Hydrocarbon (PAH) Analytical Results



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Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation	PSH Recovered
		feet amsl*	feet btoc*	feet btoc	feet	feet amsl	gallons
	01/24/02		Well Insta	lled 24 January 2	2002		
	10/04/02	3,723.13		51.26		3,671.87	
	12/11/02			51.43		3,671.70	
	02/20/03			51.62		3,671.51	
	02/11/04			52.45		3,670.68	
	08/16/04			53.15		3,669.98	
	03/22/05			52.70		3,670.43	
	03/31/05			52.65		3,670.48	
}	04/22/05		L	52.69		3,670.44	
	05/12/05			52.73		3,670.40	
	05/25/05			52.73		3,670.40	
	06/28/05			52.81		3,670.32	
	07/25/05			52.91		3,670.22	
	08/22/05			52.98		3,670.15	
	11/14/05			53.18		3,669.95	
MW-1	11/30/05			53.47		3,669.66	
	02/06/06			53.67		3,669.46	
	03/01/06			53.21		3,669.92	
	05/02/06			52.34		3,670.79	
	05/25/06		-	51.45		3,671.68	
	08/10/06			53.45		3,669.68	
	11/29/06			53.60		3,669.53	
	12/06/06			53.63		3,669.50	
	01/10/07			53.71		3,669.42	
	02/08/07			53.58		3,669.55	
	03/01/07	[]		53.91		3,669.22	
	03/06/07	l		53.62		3,669.51	
	03/14/07			53.85		3,669.28	
	04/02/07			53.67		3,669.46	
	04/09/07			53.89		3,669.24	
	04/16/07			53.92		3,669.21	
	05/01/07			53.93		3,669.20	
	05/21/07			53.99		3,669.14	
	06/13/07			53.90		3,669.23	
	06/26/07			53.92		3,669.21	
	07/18/07			54.02		3,669.11	
	09/13/07	L		54.13		3,669.00	
	10/24/07	ļ	<u> </u>	54.19	·	<u>3,6</u> 68.94	
	12/03/07	I		54.32		3,668.81	
	01/08/02		Well Inst	alled 8 January 2	2002		
	01/09/02	3,722.90	49.20	53.60	4.40	3,673.26	
MW-2	10/04/02		49.21	56.33	7.12	3,672.98	
1VI VV-2	11/11/02		49.25	56.30	7.05	3,672.95	
	12/11/02		49.25	56.34	7.09	3,672.94	
	02/20/03		49.57	56.30	6.73	3,672.66	



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Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation	PSH Recovered
		feet amsl*	feet btoc*	feet btoc	feet	feet amsl	gallons
M	03/26/03		49.66	58.09	8.43	3,672.40	
	04/08/03		49.68	58.11	8.43	3,672.38	
	04/23/03		50.00	56.90	6.90	3,672.21	
	04/24/03		49.75	58.10	8.35	3,672.32	
	04/25/03		49.78	57.95	8.17	3,672.30	
	05/03/03		49.77	58.10	8.33	3,672.30	
	05/06/03		49.75	58.08	8.33	3,672.32	
	06/09/03		49.83	58.13	8.30	3,672.24	
	06/30/03		49.95	58.04	8.09	3,672.14	
	04/12/04		50.58	58.91	8.33	3,671.49	
	06/04/04		50.85	57.62	6.77	3,671.37	
	06/21/04		50.74	59.01	8.27	3,671.33	
	10/21/04		50.59	58.20	7.61	3,671.55	
	03/22/05		51.02	55.90	4.88	3,671.39	
	03/31/05		51.02	55.90	4.88	3,671.39	
	04/22/05		50.98	56.50	5.52	3,671.37	
	05/25/05		51.23	55.61	4.38	3,671.23	
	07/25/05		51.11	57.74	6.63	3,671.13	
	11/30/05		51.50	58.85	7.35	3,670.67	
	02/06/06		51.64	56.19	4.55	3,670.81	
	03/01/06		51.67	59.20	7.53	3,670.48	
	05/02/06		51.91	58.86	6.95	3,670.30	
MW-2	05/25/06		51.19	58.62	7.43	3,670.97	
	08/10/06		51.45	59.00	7.55	3,670.70	
	11/29/06		51.63	59.18	7.55	3,670.52	
	12/06/06		51.67	59.11	7.44	3,670.49	
	01/10/07		51.78	58.03	6.25	3,670.50	
	03/01/07		52.41	60.05	7.64	3,669.73	
	03/06/07		52.92	61.25	8.33	3,669.15	
	03/14/07		52.14	60.43	8.29	3,669.93	
	04/02/07		51.93	59.22	7.29	3,670.24	
{	04/09/07		52.95	58.44	5.49	3,669.40	
	04/16/07		51.92	59.09	7.17	3,670.26	6.00
	05/01/07		50.58	60.17	9.59	3,671.36	
	05/21/07		57.42	59.03	1.61	3,665.32	
	06/26/07		52.68	57.24	4.56	3,669.76	
	06/28/07		52.64	56.53	3.89	3,669.87	
	07/18/07		52.55	57.79	5.24	3,669.83	
	08/21/07		52.50	57.65	5.15	3,669.89	
	08/30/07		52.51	57.50	4.99	3,669.89	
	09/13/07		52.40	58.20	5.80	3,669.92	
	10/09/07		53.11	57.17	4.06	3,669.38	
ļ	10/17/07		52.81	56.67	3.86	3,669.70	
ļ	10/24/07		52.76	57.88	5.12	3,669.63	
	11/02/07		53.01	56.52	3.51	3,669.54	



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Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation	PSH Recovered
		feet ams1*	feet btoc*	feet btoc	feet	feet amsl	gallons
MW-2	11/12/07		53.02	56.51	3.49	3,669.53	
MI ***-2	12/03/07		52.74	57.37	4.63	3,669.70	
	01/24/02		Well Ir	stalled 24 Janua	ry 2002		
	10/04/02	3,720.60		49.77		3,670.83	
	12/11/02			49.93		3,670.67	
	02/20/03			50.13		3,670.47	
	02/11/04			50.98		3,669.62	
	08/16/04			51.64		3,668.96	
	03/22/05			51.14		3,669.46	
	03/31/05			51.16		3,669.44	
MW-3	04/22/05			51.18		3,669.42	
	05/12/05			51.26		3,669.34	
	05/25/05			51.26		3,669.34	
	06/28/05			51.38		3,669.22	
	07/25/05			51.48		3,669.12	
	08/22/05			51.52		3,669.08	
	11/14/05			51.63		3,668.97	
	11/30/05			51.92		3,668.68	
	02/06/06			52.15		3,668.45	
	03/01/06			51.77		3,668.83	
	05/02/06			53.90		3,666.70	
	05/25/06			53.48		3,667.12	
	08/10/06	с. т.е		51.45	2*	3,669.15	
	11/29/06			51.67		3,668.93	
	12/06/06		· · · · · · · · · · · · · · · · · · ·	51.70		3,668.90	
	01/10/07			51.80		3,668.80	
	02/08/07			52.14		3,668.46	
	03/01/07		··· · ·	52.40		3,668.20	
	03/06/07			51.96		3,668.64	
	03/14/07			52.43		3,668.17	
	04/02/07			52.22		3,668.38	
	04/09/07			52.45		3,668.15	
	04/16/07			52.48		3,668.12	
	05/01/07			52.61		3,667.99	
	05/21/07			52.55		3,668.05	
	06/13/07			52.46		3,668.14	
	06/26/07			52.50		3,668.10	
	07/18/07			52.59		3,668.01	
	09/13/07			52.69		3,667.91	
	10/24/07			52.80		3,667.80	
	12/03/07			52.89		3.667.71	



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Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation	PSH Recovered
		feet amsl*	feet btoc*	feet btoc	feet	feet amsl	gallons
	01/24/02		Well Ir	stalled 24 Janua	ry 2002		
	10/04/02	3,721.03		49.35		3,671.68	
	12/11/02			49.50		3,671.53	
	02/20/03			49.69		3,671.34	
	02/11/04			50.51		3,670.52	
	08/16/04			50.91		3,670.12	
	03/22/05			50.67		3,670.36	
	03/31/05			50.70		3,670.33	
	04/22/05			50.71		3,670.32	
	05/12/05			50.80		3,670.23	
	05/25/05			50.80		3,670.23	
	06/28/05			50.92		3,670.11	
MW-4	07/25/05			51.02		3,670.01	
	08/22/05			51.06		3,669.97	
	11/14/05			51.15		3,669.88	
	11/30/05			51.43		3,669.60	
	02/06/06			51.68		3,669.35	
	03/01/06			51.21		3,669.82	
	05/02/06			51.88		3,669.15	
	05/25/06			50.17		3,670.86	
[08/10/06			51.96		3,669.07	
[11/29/06			52.16		3,668.87	
	12/06/06			52.19		3,668.84	
	01/10/07			52.27		3,668.76	
	02/08/07			51.65		3,669.38	
	03/01/07			51.97		3,669.06	
	03/06/07			52.45		3,668.58	
	03/14/07			51.93		3,669.10	
	04/02/07			51.73		3,669.30	
	04/09/07			51.95		3,669.08	
	04/16/07			51.46		3,669.57	
ļ	05/01/07			52.04		3,668.99	
	05/21/07			52.05		3,668.98	
	06/13/07			51.96		3,669.07	
	06/26/07			51.96		3,669.07	
	07/18/07			52.09		3,668.94	
ļ	09/13/07			52.20		3,668.83	
	10/24/07			52.25		3,668.78	
	12/03/07			52.36		3,668.67	
	07/28/04		Well I	nstalled 28 July	2004		
ļ	08/16/04	3,723.58	51.65	59.86	8.21	3,671.11	
MW-5	03/22/05		51.46	59.00	7.54	3,671.37	
	03/31/05		51.46	59.00	7.54	3,671.37	
	04/22/05		52.62	55.95	3.33	3,670.63	
	05/25/05		52.18	56.23	4.05	3,671.00	



TABLE 1 SUMMARY OF GROUNDWATER ELEVATIONS AND PHASE SEPARATED HYDROCARBON THICKNESS PLAINS PIPELINE, L.P. KIMBROUGH SWEET 8'' NMOCD REF. # AP-0029 LEA COUNTY, NM - SRS# 2000-10757 Talon/LPE Project Number PLAINS045SPL

Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation	PSH Recovered
		feet amsl*	feet btoc*	feet btoc	feet	feet amsi	gallons
	07/25/05		52.06	57.97	5.91	3,670.93	
	11/30/05		52.17	60.20	8.03	3,670.61	
	02/06/06		52.44	60.51	8.07	3,670.33	
	03/01/06		52.45	60.53	8.08	3,670.32	
	05/02/06		52.68	59.94	7.26	3,670.17	
	05/25/06		52.30	59.89	7.59	3,670.52	
	08/10/06		52.33	60.28	7.95	3,670.46	
	11/29/06		52.45	60.24	7.79	3,670.35	
	12/06/06		52.44	60.19	7.75	3,670.37	
	01/10/07		52.48	58.87	6.39	3,670.46	
	03/01/07		52.75	60.48	7.73	3,670.06	
	03/06/07		52.70	60.48	7.78	3,670.10	
	03/14/07		51.85	61.25	9.40	3,670.79	
	04/02/07		52.70	60.55	7.85	3,670.10	
MWS	04/09/07		52.74	60.50	7.76	3,670.06	
MW-5	04/16/07		52.74	60.55	7.81	3,670.06	7.00
	05/01/07		52.81	60.49	7.68	3,670.00	
	05/21/07		52.85	60.57	7.72	3,669.96	
	06/26/07		53.90	55.68	1.78	3,669.50	
	06/28/07		54.07	54.71	0.64	3,669.45	
	07/18/07		53.80	56.97	3.17	3,669.46	
	08/21/07		54.19	54.47	0.28	3,669.36	
	08/30/07		52.90	60.12	7.22	3,669.96	
	09/13/07		53.11	58.74	5.63	3,669.91	
	10/09/07		54.39	54.79	0.40	3,669.15	
	10/17/07		53.10	60.32	7.22	3,669.76	
	10/24/07		54.10	55.55	1.45	3,669.34	
	11/02/07		54.38	54.71	0.33	3,669.17	
	11/12/07		53.16	60.33	7.17	3,669.70	
	12/03/07		53.65	58.43	4.78	3,669.45	
	12/08/04		Well in	nstalled 8 Decem	ber 2004		
	12/15/04	3,721.68	49.49	56.62	7.13	3,671.48	
	03/22/05		49.55	56.86	7.31	3,671.40	
	03/31/05		49.55	56.86	7.31	3,671.40	
	04/22/05		50.82	51.66	0.84	3,670.78	
	05/25/05		50.61	53.11	2.50	3,670.82	
MW-6	06/28/05		49.83	57.69	7.86	3,671.06	
Í	07/25/05		50.30	55.50	5.20	3,670.86	
	11/30/05	[50.33	58.35	8.02	3,670.55	
	02/06/06		50.65	58.80	8.15	3,670.22	
	03/01/06		50.63	58.64	8.01	3,670.25	
	05/02/06		50.82	58.10	7.28	3,670.13	
	05/25/06		50.21	58.12	7.91	3,670.68	

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Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation	PSH Recovered
		feet amsl*	feet btoc*	feet btoc	feet	feet amsl	gallons
	08/10/06		50.47	59.55	9.08	3,670.30	
	11/29/06		50.63	58.33	7.70	3,670.28	
	12/06/06		50.60	58.33	7.73	3,670.31	
	01/10/07		50.71	57.36	6.65	3,670.31	
	02/08/07		50.71	58.38	7.67	3,670.20	
	02/19/07		58.36	58.87	0.51	3,663.27	
	03/01/07		50.89	58.45	7.56	3,670.03	
	03/06/07		50.86	58.58	7.72	3,670.05	
	03/14/07		52.80	58.51	5.71	3,668.31	
	04/02/07		50.86	58.54	7.68	3,670.05	
	04/09/07		50.87	58.56	7.69	3,670.04	
	04/16/07		50.92	58.54	7.62	3,670.00	6.00
MW-6	05/01/07		50.91	58.57	7.66	3,670.00	
	05/21/07		50.96	58.62	7.66	3,669.95	
	06/26/07		52.20	53.25	1.05	3,669.38	
	06/28/07		52.10	53.10	1.00	3,669.48	
	07/18/07		51.89	54.61	2.72	3,669.52	
	08/21/07		52.32	52.56	0.24	3,669.34	
	08/30/07		51.23	57.72	6.49	3,669.80	
	09/13/07		51.88	54.85	2.97	3,669.50	
	10/09/07		52.45	52.65	0.20	3,669.21	
	10/17/07		51.61	58.61	7.00	3,669.37	
	10/24/07		51.24	58.30	7.06	3,669.73	
	11/02/07		52.04	54.86	2.82	3,669.36	
	11/12/07		52.10	54.91	2.81	3,669.30	
	12/03/07		51.78	56.60	4.82	3,669.42	
	07/28/04		Well I	nstalled 28 July 2	2004		
	08/16/04	3,722.74	52.14	52.70	0.56	3,670.54	
	10/21/04		51.00	55.23	4.23	3,671.32	
	03/22/05		50.78	57.48	6.70	3,671.29	
	03/31/05		50.78	57.48	6.70	3,671.29	
	04/22/05		51.92	57.31	5.39	3,670.28	
	05/25/05		51.78	53.44	1.66	3,670.79	
	06/28/05		51.53	55.39	3.86	3,670.82	
MW-7	07/25/05		52.07	53.35	1.28	3,670.54	
	11/30/05		51.50	58.48	6.98	3,670.54	
	02/06/06		51.75	58.71	6.96	3,670.29	
	03/01/06		52.10	57.31	5.21	3,670.12	
	05/02/06		52.35	56.91	4.56	3,669.93	
	05/25/06		52.79	58.60	5.81	3,669.37	
	08/10/06		51.56	58.61	7.05	3,670.48	
	11/29/06		51.76	58.86	7.10	3,670.27	
	12/06/06		51.78	58.91	7.13	3,670.25	



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Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation	PSH Recovered
		feet amsl*	feet btoc*	feet btoc	feet	feet ams	gallons
	01/10/07		51.86	56.96	5.10	3,670.37	
	02/08/07		51.92	58.85	6.93	3,670.13	
	02/19/07		52.35	56.42	4.07	3,669.98	
	03/01/07		52.21	58.13	5.92	3,669.94	
	03/06/07		52.14	58.56	6.42	3,669.96	
	03/14/07		52.07	58.86	6.79	3,669.99	
	04/02/07		52.03	59.06	7.03	3,670.01	
	04/09/07		52.09	59.11	7.02	3,669.95	
	04/16/07		52.08	59.16	7.08	3,669.95	5.00
	05/01/07		52.16	58.82	6.66	3,669.91	
	05/21/07		52.14	59.11	6.97	3,669.90	
MW-7	06/26/07		52.20	58.98	6.78	3,669.86	
	06/28/07		52.20	58.73	6.53	3,669.89	
	07/18/07		52.24	58.77	6.53	3,669.85	
	08/21/07		52.30	58.79	6.49	3,669.79	
	08/30/07		52.30	58.83	6.53	3,669.79	
	09/13/07		52.35	58.89	6.54	3,669.74	
	10/09/07		52.37	58.96	6.59	3,669,71	
	10/17/07		52.40	59.02	6.62	3,669.68	
	10/24/07		52.39	58.98	6.59	3,669.69	
	11/02/07		52.47	59.05	6.58	3,669.61	
	11/12/07		52.49	57.99	5.50	3,669.70	
ĺ	12/03/07		52.57	59.12	6.55	3,669.52	
	07/30/04		Well In	stalled 30 July 2	004		
ľ	08/16/04	3,722.85	53.96	54.41	0.45	3,668.85	
	10/21/04		51.15	54.38	3.23	3,671.38	
	03/22/05		50.78	57.15	6.37	3,671.43	
ľ	03/31/05		50.78	57.15	6.37	3,671.43	
	04/22/05		51.90	57.08	5.18	3,670.43	
	05/25/05		51.99	52.15	0.16	3,670.84	
	06/28/05		50.04	57.31	7.27	3,672.08	
	07/25/05		51.82	54.14	2.32	3,670.80	
	11/30/05		51.47	58.47	7.00	3,670.68	
NI W -8	02/06/06		51.75	57.80	6.05	3,670.50	
	03/01/06		51.91	57.90	5.99	3,670.34	
	05/02/06		52.26	56.95	4.69	3,670.12	
	05/25/06		51.47	57.61	6.14	3,670.77	
ĺ	08/10/06		52.28	54.69	2.41	3,670.33	
	11/29/06		51.98	57.22	5.24	3,670.35	
	12/06/06		52.48	55.71	3.23	3,670.05	
	01/10/07		51.84	57.01	5.17	3,670.49	
	02/08/07		52.10	58.61	6.51	3,670.10	
	02/19/07		52.48	56.67	4.19	3,669.95	



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Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation	PSH Recovered
		feet amsi*	feet bloc*	feet btoc	feet	feet amsi	gallons
	03/01/07		52.25	57.13	4.88	3,670.11	
	03/06/07		52.17	57.92	5.75	3,670.11	
	03/14/07		52.06	58.21	6.15	3,670.18	
	04/02/07		52.07	58.42	6.35	3,670.15	
	04/09/07		52.08	58.49	6.41	3,670.13	
	04/16/07		52.11	58.54	6.43	3,670.10	5.00
	05/01/07		52.17	58.40	6.23	3,670.06	
	05/21/07		52.19	58.51	6.32	3,670.03	
	06/26/07		53.10	54.80	1.70	3,669.58	
MW-8	06/28/07		53.09	54.52	1.43	3,669.62	
	07/18/07		52.52	57.55	5.03	3,669.83	
	08/21/07		52.96	55.52	2.56	3,669.63	
	08/30/07		53.20	55.17	1.97	3,669.45	
	09/13/07		52.90	55.67	2.77	3,669.67	
	10/09/07		52.41	57.00	4.59	3,669.98	
	10/17/07		52.80	56.87	4.07	3,669.64	
	10/24/07		52.78	57.10	4.32	3,669.64	
	11/02/07		53.52	53.71	0.19	3,669.31	
	12/03/07		52.61	58.39	5.78	3,669.66	
	07/30/04		Well I	nstalled 30 July 2	2004		
	08/16/04	3,722.80	53.92	54.65	0.73	3,668.81	
	10/21/04		50.95	53.99	3.04	3,671.55	
	03/22/05		51.04	54.53	3.49	3,671.41	
	03/31/05		51.04	54.53	3.49	3,671.41	
	04/22/05		51.71	51.77	0.06	3,671.08	
	05/25/05		51.70	52.22	0.52	3,671.05	
	06/28/05		50.95	55.84	4.89	3,671.36	
	07/25/05		51.74	52.89	1.15	3,670.95	
	11/30/05		51.24	57.92	6.68	3,670.89	
	02/06/06		51.47	58.25	6.78	3,670.65	
MW.0	03/01/06		51.99	56.32	4.33	3,670.38	
11111-5	05/02/06		52.12	56.23	4.11	3,670.27	
	05/25/06		51.42	55.99	4.57	3,670.92	
	08/10/06		51.41	58.20	6.79	3,670.71	
	11/29/06		51.56	58.24	6.68	3,670.57	
	12/06/06		51.61	58.30	6.69	3,670.52	
	01/10/07		51.63	57.17	5.54	3,670.62	
	02/08/07		51.72	58.31	6.59	3,670.42	
	02/19/07		52.31	56.42	4.11	3,670.08	
	03/01/07		51.95	57.59	5.64	3,670.29	
Ì	03/06/07		51.89	58.01	6.12	3,670.30	
	03/14/07		51.82	58.24	6.42	3,670.34	
	04/02/07		51.81	58.33	6.52	3.670.34	



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Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation	PSH Recovered
	04/00/07	icci ditsi.	E1 00	50.40	(50	2 (70.07	ganons
	04/09/07		51.88	58.40	0.52	3,070.27	6.00
	05/01/07		51.00	58.43	0.37	3,070.20	0.00
	05/01/07		51.93	58.09	6.10	3,070.23	
	06/26/07		52.04	58 52	6.48	3,070.17	
	06/28/07		52.04	58.50	6.46	3,670,11	
	07/18/07		51.03	58.41	6.48	3,670,22	
MW-0	08/21/07		52.03	58 50	6 17	3,670.12	
141 44-2	08/30/07		53.15	53.45	0.47	3,070.12	
	00/12/07		52.13	57.43	5.42	3,009.02	
	10/00/07		52.24	50 40	5.45	3,070.02	
	10/09/07		53 21	20.40 50.50	5.21	3,070.02	
	11/02/07		52.20	<u> </u>	5.44	3,008.97	
	11/02/07		52.30	52 55	0.16	3,009.88	
	12/03/07		52 42	33.33 58.14	5.72	3,009.39	
	12/05/07		32.42	38.14	3.72	3,009.81	
	12/07/04	2 702 60	well it	isialled / Decem	der 2004	2 671 45	
	12/15/04	3,723.02		52.17		3,0/1.45	
	03/22/05		·····	52.28		3,0/1.34	
	03/31/05			52.31		3,0/1.31	
	04/22/05			52.36		3,0/1.20	
	05/12/05			52.41		3,0/1.21	
	05/25/05			52.42		3,0/1.20	
	07/28/05			52.52		3,0/1.10	
ŀ	0//23/03			52.01		3,0/1.01	
ł	11/14/05			52.07		3,070.95	
-	11/14/03			52.05		3,070.80	
ŀ	02/06/06			53.05		3,070.37	
ł	03/01/06			53.29		3,070.33	
MW-10	05/02/06			53 47		3 670 15	·
ŀ	05/02/06			53.08		3 670 54	
ŀ	08/10/06			53.07		3 670 55	
ŀ	11/29/06			53.29		3 670 33	
ŀ	12/06/06			53.22		3 670 30	
- - - - - - - -	01/10/07			53.38		3 670 24	
	02/08/07			53.24		3.670.38	
	03/01/07			53.73		3,669,89	
	03/06/07	├ 		53,51		3.670.11	
	03/14/07			53.52		3.670.10	·
ľ	04/02/07	I		53,35		3.670.27	
ŀ	04/09/07			53.57		3.670.05	
	04/16/07			53.58		3.670.04	
	05/01/07			53.63		3,669.99	



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TABLE 1 SUMMARY OF GROUNDWATER ELEVATIONS AND PHASE SEPARATED HYDROCARBON THICKNESS PLAINS PIPELINE, L.P. KIMBROUGH SWEET 8'' NMOCD REF. # AP-0029 LEA COUNTY, NM - SRS# 2000-10757 Talon/LPE Project Number PLAINS045SPL

Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	to PSH Depth to Water PSH Thickness		Depth to PSH Depth to Water PSH Thickness		Corrected Relative Groundwater Elevation	PSH Recovered
		feet amsi*	feet btoc*	feet bloc	leet	feet amsi	gallons		
	05/21/07			53.65		3,669.97			
MW-10	06/13/07			53.57		3,670.05			
	06/26/07			53.60		3,670.02			
	07/18/07			53.69		3,669.93			
	09/13/07			53.79		3,669.83			
	10/24/07			53.86		3,669.76			
	12/03/07			53.98		3,669.64			
	12/07/04		Well i	nstalled 7 Decem	1ber 2004				
	12/15/04	3,722.03	50.49	55.54	5.05	3,671.04			
	03/22/05		50.33	56.71	6.38	3,671.06			
	03/31/05		50.33	56.71	6.38	3,671.06			
	04/22/05		50.34	56.95	6.61	3,671.03			
	05/25/05		51.34	53.06	1.72	3,670.52			
	06/28/05		50.67	57.07	6.40	3,670.72			
	07/25/05		51.06	55.54	4.48	3,670.52			
	11/30/05		51.11	57.79	6.68	3,670.25			
MW-11	02/03/06		51.35	58.06	6.71	3,670.01			
	03/01/06		51.39	58.16	6.77	3,669.96			
	05/02/06		51.54	58.25	6.71	3,669.82			
	05/25/06		51.12	57.97	6.85	3,670.23			
	08/10/06		51.10	57.97	6.87	3,670.24			
	11/29/06		51.32	58.24	6.92	3,670.02			
	12/06/06		52.33	53.48	1.15	3,669.59			
	01/10/07		51.37	57.98	6.61	3,670.00			
	02/08/07		51.47	58.49	7.02	3,669.86			
	02/19/07		51.57	58.38	6.81	3,669.78			
	03/01/07		51.61	58.38	6.77	3,669.74			
	03/06/07		51.57	58.39	6.82	3,669.78			
	03/14/07		51.57	58.34	6.77	3,669.78			
	04/02/07		51.62	58.41	6.79	3,669.73			
	04/09/07		52.63	58.38	5.75	3,668.83			
	04/16/07		51.64	58.38	6.74	3,669.72			
	05/01/07		51.68	58.39	6.71	3,669.68			
	05/21/07		51.90	58.62	6.72	3,669.46			
	06/26/07		51.80	58.44	6.64	3,669.57			
	06/28/07		51.80	58.38	6.58	3,669.57			
	07/18/07		51.76	58.31	6.55	3,669.62			
	10/24/07		51.94	58.26	6.32	3,669.46			
	11/02/07		52.00	58.32	6.32	3,669.40			
	11/12/07		52.01	58.30	6.29	3,669.39			
	12/03/07		52.58	56.55	3.97	3,669.05			

Total manual recovery

Approximate system recovery in barrels (bbls)

35.00 0.83

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



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TABLE 2 SUMMARY OF GROUNDWATER ANALYTICAL RESULTS PLAINS PIPELINE, L.P. KIMBROUGH SWEET 8'' NMOCD REF. #AP-0029 LEA COUNTY, NEW MEXICO - SRS# 2000-10757 Talon/LPE Project Number PLAINS045SPL

All concentrations are in mg/L

Sample Location	Sample Date	Benzene	Ethyl- benzene	m,p- Xylenes	o-Xylene	Toluene						
	04/02/07	< 0.001	<0.001 <0.001 <0.001 <0.001									
MW 1	06/13/07		Sampling n	ot required in s	econd quarter							
101 00 - 1	09/13/07	<0.001	< 0.001	< 0.002	<0.001	< 0.001						
	12/03/07		Sampling n	ot required in f	ourth quarter	•						
	04/02/07	Not sar	npled Due to Pr	esence of Phase	Separated Hydi	ocarbons						
MW-2	06/13/07	Not sar	npled Due to Pr	esence of Phase	Separated Hydr	ocarbons						
	09/13/07	Not sar	npled Due to Pr	esence of Phase	Separated Hydi	ocarbons						
	12/03/07	Not san	npled Due to Pr	esence of Phase	Separated Hydi	ocarbons						
	04/02/07	0.369 0.00116 0.00904 0.0526 0										
MW 3	06/13/07	Sampling not required in second quarter										
101 00 -5	09/13/07	18.43	0.2083	1.956	0.9831	0.9471						
	12/03/07	3.898	< 0.0100	0.2633	< 0.0100	< 0.0200						
	04/02/07	< 0.001	<0.001	< 0.001	< 0.001	< 0.001						
MW 4	06/13/07		Sampling n	ot required in so	cond quarter							
IVI VV -4	09/13/07	0.0018	< 0.001	< 0.002	< 0.001	< 0.001						
	12/03/07	0.0082	< 0.001	< 0.002	< 0.001	<0.002						
	04/02/07	Not sampled Due to Presence of Phase Separated Hydrocarbons										
MW 5	06/13/07	Not sampled Due to Presence of Phase Separated Hydrocarbons										
101 00 - 5	09/13/07	Not sampled Due to Presence of Phase Separated Hydrocarbons										
	12/03/07	Not sampled Due to Presence of Phase Separated Hydrocarbons										
	04/02/07	Not sampled Due to Presence of Phase Separated Hydrocarbons										
MW 6	06/13/07	Not sampled Due to Presence of Phase Separated Hydrocarbons										
141 44 -0	09/13/07	Not san	Not sampled Due to Presence of Phase Separated Hydrocarbons									
	12/03/07	Not san	pled Due to Pro	esence of Phase	Separated Hydr	ocarbons						
	04/02/07	Not san	pled Due to Pro	esence of Phase	Separated Hydr	ocarbons						
MW-7	06/13/07	Not sampled Due to Presence of Phase Separated Hydrocarbons										
141 44 - 7	09/13/07	Not sampled Due to Presence of Phase Separated Hydrocarbons										
	12/03/07	Not sampled Due to Presence of Phase Separated Hydrocarbons										
	04/02/07	Not sampled Due to Presence of Phase Separated Hydrocarbons										
MW-8	06/13/07	Not sampled Due to Presence of Phase Separated Hydrocarbons										
141 44 -0	09/13/07	Not sampled Due to Presence of Phase Separated Hydrocarbons										
	12/03/07	Not sampled Due to Presence of Phase Separated Hydrocarbons										
	04/02/07	Not sampled Due to Presence of Phase Separated Hydrocarbons										
MW-9	06/13/07	Not sampled Due to Presence of Phase Separated Hydrocarbons										
	09/13/07	Not sampled Due to Presence of Phase Separated Hydrocarbons										
	12/03/07	Not san	pled Due to Pre	esence of Phase	Separated Hydr	ocarbons						
MW-10	04/02/07	< 0.001	< 0.001	<0.001	<0.001	< 0.001						
	06/13/07	< 0.001	<0.001	< 0.001	< 0.001	< 0.001						
	09/13/07	< 0.001	< 0.001	< 0.002	< 0.001	<0.001						
	12/03/07	0.0032	< 0.001	< 0.002	< 0.001	<0.002						
MW-11	04/02/07	Not san	pled Due to Pre	esence of Phase	Separated Hydr	ocarbons						
	06/13/07	Not sampled Due to Presence of Phase Separated Hydrocarbons										
	09/13/07	Not sampled Due to Presence of Phase Separated Hydrocarbons										
	12/03/07	Not san	pled Due to Pre	sence of Phase	Separated Hydr	ocarbons						
NMWQCC F	temedial Limits	0.010	0.750	Total Xyle	enes 0.620	0.750						

¹ Bolded values are in excess of the NMWQCC Remediation Thresholds



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TABLE 3 SUMMARY OF GROUNDWATER POLYCYCLIC AROMATIC HYDROCARBON (PAH) ANALYTICAL RESULTS PLAINS PIPELINE, L.P. KIMBROUGH SWEET 8" NMOCD REF. #AP-0029 LEA COUNTY, NEW MEXICO - SRS# 2000-10757 Talon/LPE Project Number PLAINS045SPL

All concentrations are in mg/L

Sample Location	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo a -anthracene	Benzo[a]-pyrene	Benzo[b]-fluoranthene	Benzo g,h,i -perylene	Benzo[j,k]-fluoranthene	Chrysene	Dibenz[a,h]-anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]-pyrene	Naphthalene	Phenanthrene	Pyrene
MW-1	04/02/07	< 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-2	04/02/07		Not sampled Due to Presence of Phase Separated Hydrocarbons														
MW-3	04/02/07	< 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-4	04/02/07	< 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-5	04/02/07		Not sampled Due to Presence of Phase Separated Hydrocarbons														
MW-6	04/02/07		Not sampled Due to Presence of Phase Separated Hydrocarbons														
MW-7	04/02/07						Not samp	led Due to	Presence of	Phase Sep	arated Hy	Irocarbons	;				
MW-8	04/02/07						Not samp	ed Due to	Presence of	Phase Sep	arated Hyo	Irocarbons					
MW-9	04/02/07		Not sampled Due to Presence of Phase Separated Hydrocarbons														
MW-10	04/02/07	< 0.005	< 0.005	< 0.005	< 0.005	<0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	<0.005
MW-11	04/02/07	Τ	Not sampled Due to Presence of Phase Separated Hydrocarbons														
NMWOCC 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



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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: Kimbrough Sweet Project Number: 2000-10757 Location: None Given

Lab Order Number: 7D03006

Report Date: 04/09/07

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

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Project: Kimbrough Sweet Project Number: 2000-10757 Project Manager: Camille Reynolds

ANALYTICAL REPORT FOR SAMPLES

Laboratory ID	Matrix	Date Sampled	Date Received
7D03006-01	Water	04/02/07 12:55	04-03-2007 10:45
7D03006-02	Water	04/02/07 13:20	04-03-2007 10:45
7D03006-03	Water	04/02/07 13:35	04-03-2007 10:45
7D03006-04	Water	04/02/07 14:15	04-03-2007 10:45
	Laboratory ID 7D03006-01 7D03006-02 7D03006-03 7D03006-04	Laboratory ID Matrix 7D03006-01 Water 7D03006-02 Water 7D03006-03 Water 7D03006-04 Water	Laboratory ID Matrix Date Sampled 7D03006-01 Water 04/02/07 12:55 7D03006-02 Water 04/02/07 13:20 7D03006-03 Water 04/02/07 13:35 7D03006-04 Water 04/02/07 14:15
Plains All American EH & S 1301 S. County Road 1150 Midland TX, 79706-4476

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Project: Kimbrough Sweet Project Number: 2000-10757 Project Manager: Camille Reynolds

Organics by GC Environmental Lab of Texas

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Analyte	Result	Reporting Limit	Units	Dilution	Barch	Prepared	Analyzed	Method	Notes
MW-1 (7D03006-01) Water					Baren				
Benzene	ND	0.00100	mg/L	 I	ED70609	04/06/07	04/07/07	EPA 8021B	
Toluene	ND	0.00100	н	n		ч	n		
Ethylbenzene	ND	0.00100	"	"	"	н	*1		
Xylene (p/m)	ND	0.00100				51	"		
Xylene (a)	ND	0.00100	18	"		"	'n	"	
Surrogate: a.a.a-Trifluorotoluene		111 %	80-12	0	"	n	"	μ	
Surrogate: 4-Bromofluorobenzene		83.8 %	80-12	0	"	"	"	"	
MW-3 (7D03006-02) Water						_			
Benzene	0.369	0.00100	mg/L	1	ED70609	04/06/07	04/07/07	EPA 8021B	
Toluene	0.0131	0.00100	**			u.	л		
Ethylbenzene	0.00116	0.00100	"	0	"	"	n		
Xylene (p/m)	0.00904	0.00100	**			**	n		
Xylene (0)	0.0526	0.00100		"		**	u		
Surrogate: a.a.a-Trifluorotoluene		133 %	80-12	0	"	"	"	11	S-04
Surrogate: 4-Bromofluorobenzene		106 %	80-12	0	"	"	"	"	
MW-4 (7D03006-03) Water						_			
Benzene	ND	0.00100	mg/L	1	ED70609	04/06/07	04/07/07	EPA 8021B	
Toluene	ND	0.00100				н	9	"	
Ethylbenzene	ND	0.00100			"	п	u.	п	
Xylene (p/m)	ND	0.00100	"		"	н	н		
Xylene (o)	ND	0.00100	"			н	9		
Surrogate; a.a.a-Trifluorotoluene		100 %	80-12	0	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		85.0 %	80-12	0	"	"	"	"	
MW-10 (7D03006-04) Water									
Benzene	ND	0.00100	mg/L	I	ED70609	04/06/07	04/07/07	EPA 8021B	
Toluene	ND	0.00100	н	0	"	**	**		
Ethylbenzene	ND	0.00100			"	*	11		
Xylene (p/m)	ND ·	0.00100			"	**	"		
Xylene (0)	ND	0.00100	"		"		**	н	
Surrogate: a.a.a-Trifluorotoluene		106 %	80-12	0	"	"	"	n	
Surrogate: 4-Bromofluorobenzene		86.4 %	80-12	0	"	"	"	"	

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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 ED70609 - EPA 5030C (GC)										
Blank (ED70609-BLK1)				Prepared &	Analyzed	: 04/06/07	·			
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100								
Ethylbenzene	ND	0.00100								
Xylene (p/m)	ND	0.00100								
Xylene (0)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	56,0		ng-l	50.0		112	80-120			
Surrogate: 4-Bromofluorobenzene	44.8		"	50.0		89.6	80-120			
LCS (ED70609-BS1)				Prepared &	Analyzed	: 04/06/07				
Benzenc	0.0526	0.00100	mg/L	0.0500		105	80-120			
Toluene	0.0491	0.00100	н	0.0500		98.2	80-120			
Ethylbenzene	0.0488	0.00100	"	0.0500		97.6	80-120			
Xylene (p/m)	0.0917	0.00100	**	0.100		91.7	80-120			
Xylene (0)	0.0525	0.00100		0.0500		105	80-120			
Surrogate: a,a,a-Trifluorotoluene	56.5		ug/l	50.0		113	80-120			
Surrogate: 4-Bromofluorobenzene	48.6		"	50.0		97.2	80-120			
Calibration Check (ED70609-CCV1)				Prepared: 0	4/06/07 A	nalyzed: 04	/07/07			
Benzene	51.9		ug/l	50.0		104	80-120			
Toluene	48.2		"	50.0		96.4	80-120			
Ethylbenzene	48.9		"	50.0		97.8	80-120			
Xylene (p/m)	88.1			100		88.1	80-120			
Xylene (o)	51.3		••	50.0		103	80-120			
Surrogate: a,a,a-Trifluorotoluene	54.8		"	50,0		110	80-120			
Surrogate: 4-Bromofluorobenzene	47.0		"	50,0		94.0	80-120			
Matrix Spike (ED70609-MS1)	Sou	rce: 7C30008-	49	Prepared: 0	4/06/07 A	nalyzed: 04	/07/07			
Benzene	0.0513	0.00100	mg/L	0.0500	ND	103	80-120			
Toluenc	0.0482	0.00100	н	0.0500	ND	96.4	80-120			
Ethylbenzene	0.0482	0.00100	"	0.0500	ND	96.4	80-120			
Xylene (p/m)	0.0878	0.00100		0.100	ND	87.8	80-120			
Xylene (o)	0.0503	0.00100	"	0.0500	ND	101	80-120			
Surrogate: a,a,a-Trifluorotoluene	54.0		ug/l	50,0		108	80-120			
Surrogate: 4-Bromofluorobenzene	45.7		"	50.0		91.4	80-120			

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Organics by GC - Quality Control

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	R	eporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch ED70609 - EPA 5030C (GC)

Matrix Spike Dup (ED70609-MSD1)	Source: 7C30008-49			Prepared: 04/06/07 Analyzed: 04			4/07/07			
Benzene	0.0507	0.00100	mg/L	0.0500	ND	101	80-120	1.96	20	
Toluene	0.0482	0.00100		0.0500	NĎ	96.4	80-120	0.00	20	
Ethylbenzene	0.0504	0.00100		0.0500	ND	101	80-120	4.66	20	
Xylene (p/m)	0.0903	0.00100		0.100	ND	90.3	80-120	2.81	20	
Xylene (o)	0.0519	0.00100	.,	0.0500	ND	104	80-120	2.93	20	
Surrogate: a,a,a-Trifluorotoluene	55.7		ug I	50.0		110	80-120			
Surrogate: 4-Bromofluorobenzene	48,4		"	50.0		96.8	80-120			

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Plains Al 1301 S. C Midland	Plains All American EH & S 1301 S. County Road 1150 Midland TX, 79706-4476		Kimbrough Sweet 2000-10757 Camille Reynolds	Fax: (432) 687-4914
		Notes and De	finitions	
S-04	The surrogate recovery for this sample is ou	tside of established control	limits due to a sample matrix effect.	
DET	Analyte DETECTED			
ND	Analyte NOT DETECTED at or above the reported	ing limit		
NR	Not Reported			
dry	Sample results reported on a dry weight basis			
RPD	Relative Percent Difference			
LCS	Laboratory Control Spike			
MS	Matrix Spike			
Dup	Duplicate			

Report Approved By:

Date: _____ 4/9/2007_

Brent Barron, Laboratory Director/Corp. Technical Director Celey D. Keene, Org. Tech Director Raland K. Tuttle, Laboratory Consultant James Mathis, QA/QC Officer Jeanne Mc Murrey, Inorg. Tech Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

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Analytical Report 280100

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PLAINS ALL AMERICAN EH&S

Project Manager: Camille Reynolds

Kimbrough Sweet 2000-10757

09-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



09-APR-07



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

Reference: XENCO Report No: 280100 Kimbrough Sweet Project Address:

Camille Reynolds:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 280100. 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. 280100 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,

BOR

Brent Barron Odessa Laboratory Director

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America

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Certificate of Analysis Summary 280100 PLAINS ALL AMERICAN EH&S, Midland, TX



Project Name: Kimbrough Sweet

Project Id: 2000-10757 Contact: Camille Reynolds Date Received in Lab: Apr-03-07 10:45 am Report Date: 09-APR-07

viact Manaa Brent Ba

Project Location:				:	Project P	Manager:	Brent Ba	arron, H	
	Lab Id:	280100-0	01	280100-0	002	280100-0	03	280100-0	004
Analysis Requested	Field Id:	MW-1	1	MW-3	-	MW-4		MW-1	0
-	Depth:								
	Matrix:	WATE	R	WATE!	R	WATE	R	WATE	R
	Sampled:	Apr-02-07	12:55	Apr-02-07 13:20		Apr-02-07	13:55	Apr-02-07	14:15
SVOA PAHs List by EPA 8270C	Extracted:	Apr-04-07	17:25	Apr-04-07	17:28	Apr-04-07	17:31	Apr-04-07 17:34	
Stort I had hist by him of to	Analyzed:	Apr-06-07 1	11:52	Apr-06-07	13:16	Apr-06-07	13:59	Apr-06-07 [4:40	
	Units/RL:	mg/L	RL	mg/L	RL.	mg/L	RL	mg/L	RL
Acenaphthene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Acenaphthylene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Anthracene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Benzo(a)anthracene		ND	0.005	ND	0.005	ND	0.005	NĎ	0.005
Benzo(a)pyrene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Benzo(b)Iluoranthene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Benzo(k)fluoranthene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Benzo(g,h,i)perylene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Chrysene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Dibenz(a,h)Anthracene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Fluoranthene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Fluorene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Indeno(1,2,3-c,d)Pyrene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Naphthalene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Phenanthrene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
Pyrene		ND	0.005	ND	0.005	ND	0.005	ND	0.005

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 fiability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Brent Barron

Odessa Laboratory Director

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- 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.

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- 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.

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

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(210) 509-3334	(201) 509-3335
(813) 620-2000	(813) 620-2033
(305) 823-8500	(305) 823-8555
	Phone (281) 589-0692 (214) 902 0300 (210) 509-3334 (813) 620-2000 (305) 823-8500



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Form 2 - Surrogate Recoveries



Project Name: Kimbrough Sweet

Vork Order #: 280100		Project ID: 2000-10757								
Lab Batch #: 694591	Sample: 280100-001 / SMP	GMP Batch: 1 Matrix: Water								
Units: mg/L		SU	RROGATE RF	COVERY S	STUDY					
SVOA PAHs Li	st by EPA 8270C	Amount Found [A]	True Amount B	Recovery %R [D]	Control Limits %R	Flags				
2-Eluorobiohenvi		0.024	0.050	68	43.116					
2-Fluorophenol		0.034	0.050	44	21-100					
Nitrobenzene-d5		0.022	0.050	66	35-114					
Phenol-d6		0.035	0.050	24	10-94					
Ternhenvl-D14		0.039	0.050	78	33-141					
2.4.6-Tribromophenol		0.036	0.050	72	10-123					
(04501	2 280100 002 / CMP		- 1 ha / 1	111-1-00						
Lab Batch #: 694591	Sample: 280100-0027 SMP	1P Batch: 1 Matrix: Water								
Units: mg/L		SURROGATE RECOVERY STUDY								
SVOA PAHs Li	st by EPA 8270C	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags				
Ana	lytes			[D]						
2-Fluorobiphenyl		0.036	0.050	72	43-116					
2-Fluorophenol		0.023	0.050	46	21-100					
Nitrobenzene-d5		0.035	0.050	70	35-114					
Phenol-d6		0.013	0.050	26	10-94					
Terphenyl-D14		0.038	0.050	76	33-141					
2,4,6-Tribromophenol		0.041	0.050	82	10-123					
Lab Batch #: 694591	Sample: 280100-003 / SMP	Bai	tch: []] Matri	x: Water						
Units: mg/L		SU	RROGATE RE	COVERY S	STUDY					
SVOA PAHs Li	st by EPA 8270C	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
Alla										
2-Fluorobipnenyi		0.038	0.050	76	43-116					
2-riuorophenol		0.022	0.050	44	21-100					
Phonot de		0.036	0.050	12	35-114					
Terphanul D14		0.012	0.050	24	10-94					
2.4.6 Tribromonhanol		0.033	0.050	00	55-141					
2, 4 ,0-110000000000		0.042	0.000	84	10-123					

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



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Form 2 - Surrogate Recoveries



Project Name: Kimbrough Sweet

Work Order #: 280100			Project I	D: 2000-1075	57			
Lab Batch #: 694591	Sample: 280100-004	/ SMP Bat	ich: I Matr	ix: Water				
Units: mg/L		SUI	RROGATE RI	ECOVERY	STUDY			
SVOA PAHs List Analyt	by EPA 8270C	Amount Found [A]	True Amount [B]	Recovery %R D	Control Limits %R	Flags		
2-Fluorobiphenyl		0.037	0.050	74	43-116			
2-Fluorophenol		0.024	0.050	48	21-100			
Nitrobenzene-d5		0.036	0.050	72	35-114			
Phenol-d6		0.014	0.050	28	10-94			
Terphenyl-D14		0.040	0.050	80	33-141			
2,4,6-Tribromophenol		0.039	0.050	78	10-123			
Lab Batch #: 694591	Sample: 493858-1-BI	KS/BKS Bat	ch: 1 Matr	ix: Water				
Units: mg/L		SUI	SURROGATE RECOVERY STUDY					
SVOA PAHs List	by EPA 8270C	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
Analyt	es			[D]				
2-Fluorobiphenyl		0.040	0.050	80	43-116			
2-Fluorophenol		0.033	0.050	66	21-100			
Nitrobenzene-d5		0.038	0.050	76	35-114			
Phenol-d6		0.023	0.050	46	10-94			
Terphenyl-D14		0.041	0.050	82	33-141			
2,4,6-Tribromophenol		0.045	0.050	90	10-123			
Lab Batch #: 694591	Sample: 493858-1-BL	LK / BLK Bat	ch: Matr	ix: Water				
Units: mg/L		SUI	RROGATE RI	ECOVERY S	STUDY			
SVOA PAHs List I Analyt	oy EPA 8270C es	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
2-Fluorobiphenyl		0.039	0.050	78	43-116	· · · · · · · · · · · · · · · · · · ·		
2-Fluorophenol		0.031	0.050	62	21-100			
Nitrobenzene-d5		0.038	0.050	76	35-114			
Phenol-d6		0.021	0.050	42	10-94			
Terphenyl-D14		0.044	0.050	88	33-141			
2,4,6-Tribromophenol		0.041	0.050	82	10-123			
		And a second	and the state of the second					

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / BAll results are based on MDL, and validated for QC purposes.



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Form 2 - Surrogate Recoveries



Project Name: Kimbrough Sweet

Vork Order #: 280100	Project ID: 2000-10757							
Lab Batch #: 694591 Sample: 493858-1-BS	D/BSD Batch: 1 Matrix: Water							
Units: mg/L	SU	RROGATE R	ECOVERY	STUDY				
SVOA PAHs List by EPA 8270C	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags			
Analytes			D					
2-Fluorobiphenyl	0.042	0.050	84	43-116				
2-Fluorophenol	0.032	0.050	64	21-100				
Nitrobenzene-d5	0.038	0.050	76	35-114				
Phenol-d6	0.023	0.050	46	10-94				
Terphenyl-D14	0.044	0.050	88	33-141				
2,4,6-Tribromophenol	0.046	0.050	92	10-123				

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / BAll results are based on MDL and validated for QC purposes.



BS / BSD Recoveries a a si



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Project Name: Kimbrough Sweet

Work Order #: 280100

Analyst: TTD

Date Prepared: 04/04/2007 -Batch #:

Project ID: 2000-10757 Date Analyzed: 04/05/2007

Lab Batch ID: 694591 Sample: 493858-1-E	3KS	Batch #	-					Matrix: W	Vater		
Units: mg/L		BLANF	(/BLANK S	PIKE / B	LANKS	PIKE DUPL	ICATE 1	RECOVI	ERY STUD	Å	
SVOA PAHs List by EPA 8270C	Blank Sample Result A	Spike Added [B]	Blank Spike Result	Blank Spike %R	Spike Added [E]	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes			2	5		Kesulf F	5				
Acenaphthene	QN	0.050	0.042	84	0.05	0.043	86	2	27-132	31	
Acenaphthylene	QN	0.050	0.043	86	0.05	0.043	86	0	46-108	25	
Anthracene	QN	0.050	0.044	88	0.05	0.044	88	0	47-145	25	
Benzo(a)anthracene	ŊŊ	0.050	0.042	84	0.05	0.045	66	7	33-143	25	
Benzo(a)pyrene	QN	0.050	0.043	86	0.05	0.045	06	5	65-135	25	
Benzo(b)fluoranthene	ŊŊ	0.050	0.042	84	0.05	0.045	06	7	24-159	25	
Benzo(k)fluoranthene	QN	0.050	0.044	88	0.05	0.044	88	0	25-125	25	
Benzo(g,h,i)petylene	QN	0.050	0.041	82	0.05	0.043	86	5	65-135	25	
Chrysene	QZ	0.050	0.042	84	0.05	0.044	88	5	65-135	25	
Dibenz(a,h)Anthracenc	QN	0.050	0.041	82	0.05	0.042	84	2	50-125	25	
Fluoranthene	QN	0.050	0.046	92	0.05	0.046	92	0	47-125	25	
Fluorence	QN	0.050	0.043	86	0.05	0.044	88	2	48-139	25	
Indeno(1,2,3-c,d)Pyrene	QN	0.050	0.040	80	0.05	0.042	84	ç	27-160	25	
Naphthatene	QN	0.050	0.041	82	0.05	0.042	84	2	26-175	25	
Phenanthrene	ŊŊ	0.050	0.044	88	0.05	0.044	88	0	65-135	25	
Pyrene	QN	0.050	0.042	84	0.05	0.045	90	7	23-152	31	

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



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

ont	lalon LPE	
ale/ Time	(1307 16:45	
iD#*	7003006	
als	GIL	

Sample Receipt Checklist

			c	flont Initial
Temperature of container/ cooler?	¿Yes	No	15°C	CHARLES AND FREE VIE NO. THE ALMONY & ADVISOR VIE C
Shipping container in good condition?	exes	No		and the day of particular, we are d
Custody Seals intact on shipping container/ cooler?	Yes	No	NotPresent	
Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	Capital Andreas and a state of the state of
Chain of Custody present?	Yes)	No		1. Supportant and a subset of
Sample instructions complete of Chain of Custody?	Nes,	No	na na sina na sina sina na si sina na s	\\ 680408473\\{\$***********************************
Chain of Custody signed when relinquished/ received?	Nes)	No		
Chain of Custody agrees with sample label(s)?	Yes	No	D written on Cont / Lid	ing a synchronizet i fan yn yw anwersiging state en e
Container label(s) legible and intact?	CYes	No	Not Applicable	***********
) Sample matrix/ properties agree with Chain of Custody?	Yes)	No		18 m 48 m 7 18 m 7 18 m 7 1 + 10 48 7 1 19 18
Containers supplied by ELOT?	Yes	No	an a	
2 Samples in proper container/ bottle?	Yes	No	See Below	
3 Samples properly preserved?	CYES)	No	See Below	1999 - 1999 - 1999 - 1999 - 1999 - 19
1 Sample bottles intact?	(Yes)	No	n ar na an	Land al Antifetter (*** and a set all all the set, a
5 Preservations documented on Chain of Custody?	(Yes)	No	n gang ya ya na 200 ang ay naga naga naga naga naga na na na na na na na da na bang na naga na naga na naga na	ni a'n vinn «, rendennin-vyn di .
3 Containers documented on Chain of Custody?	Y.05)	No	۵	AND
7 Sufficient sample amount for indicated test(s)?	(Yes	No	See Below	1999 - 1999 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -
3 All samples received within sufficient hold time?	(Yes)	No	See Below	
9 Subcontract of sample(s)?	Yes	No	Not Applicable	K waana ta mjang in Girif maya a jini k nam
0 VOC samples have zero headspace?	(Yes)	No	Not Applicable	

Contact

Contacted by:

the regarders with a galaxy manufacture and the resting of the rest of the rest

Date/ Time:

garding:

14 Seals on Vous not on 16 amper

prrective Action Taken:

neck all that Apply:

Γ

See attached e-mail/ fax

Client understands and would like to proceed with analysis Cooling process had begun shortly after sampling event



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Analytical Report

Prepared for:

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

Project: Kimbrough Sweet Project Number: 2000-10757 Location: Lea County

Lab Order Number: 7F15002

Report Date: 06/22/07

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Project: Kimbrough Sweet Project Number: 2000-10757 Project Manager: Camille Reynolds

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-10	7F15002-01	Water	06/13/07 16:10	06-14-2007 16:15

Plains All American EH & S 1301 S. County Road 1150 Midland TX, 79706-4476 Project: Kimbrough Sweet Project Number: 2000-10757 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-10 (7F15002-01) Water	******								
Benzene	ND	0.00100	mg/L	1	EF71907	06/19/07	06/22/07	EPA 8021B	
Toluene	ND	0.00100		"		н	U.	"	
Ethylbenzene	ND	0.00100			0	u.	0	u	
Xylene (p/m)	ND	0.00100		"		"		u .	
Xylene (o)	ND	0.00100	"	"	"		"	n	
Surrogate: a,a,a-Trifluorotoluene	······	109 %	80-12	0	"		"	"	
Surrogate: 4-Bromofluorobenzene		98.8 %	80-12	0	"	"		"	

Environmental Lab of Texas

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Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting) Inite	Spike Level	Source	%RFC	%REC	RPD	RPD Limit	Notes
	1762(11)	L.	Outs		nesun	/UNLL	I			
Batch EF71907 - EPA 5030C (GC)							<u></u>			
Blank (EF71907-BLK1)				Prepared: (06/19/07 Ar	alyzed: 06	/20/07			
Benzene	ND	0.00100	mg/L							······
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0,00100								
Xylene (0)	ND	0.00100	н							
Surrogate: a,a,a-Trifluorotoluene	51.5		ng l	50,0		103	80-120			
Surrogate: 4-Bromofluorobenzene	45.5		"	50.0		91.0	80-120			
LCS (EF71907-BS1)				Prepared: (06/19/07 Ar	nalyzed: 06	/20/0 7			
Benzene	0.0487	0.00100	mg/L	0.0500		97.4	80-120			THE PARTY OF A DESCRIPTION OF A DESCRIPTION
Toluene	0.0489	0.00100	п	0.0500		97.8	80-120			
Ethylbenzene	0.0531	0.00100		0.0500		106	80-120			
Xylene (p/m)	0.0940	0.00100	**	0.100		94.0	80-120			
Xylene (0)	0.0515	0.00100		0.0500		103	80-120			
Surrogate: a,a,a-Trifluorotoluene	50.7		ug l	50.0		101	80-120			
Surrogate: 4-Bromofluorobenzene	48.4		"	50.0		96.8	80-120			
Calibration Check (EF71907-CCV1)				Prepared: ()6/19/07 An	nalyzed: 06	/20/07			
Benzene	0.0450		mg/L	0.0500		90.0	80-120			
Toluene	0.0451			0.0500		90.2	80-120			
Ethylbenzene	0.0449			0.0500		89.8	80-120			
Xylene (p/m)	0.0817			0.100		81.7	80-120			
Xylene (0)	0.0460		"	0.0500		92.0	80-120			
Surrogate: a,a,a-Trifluorotoluene	51.4	·	ug l	50.0		103	80-120			
Surrogate: 4-Bromofluorobenzene	49.3		"	50.0		98.6	80-120			
Matrix Spike (EF71907-MS1)	Sou	rce: 7F14024-0	01	Prepared: 0)6/19/07 An	alyzed: 06	/20/07			
Benzene	0.0495	0.00100	mg/L	0.0500	0.00614	86.7	80-120			
Toluene	0.0491	0.00100		0,0500	0.00436	89.5	80-120			
Ethylbenzene	0.0488	0.00100	н	0.0500	ND	97.6	80-120			
Xylene (p/m)	0.0846	0.00100		0.100	0.000642	84.0	80-120			
Xylene (0)	0.0475	0.00100	"	0.0500	ND	95,0	80-120			
Surrogate: a,a,a-Trifluorotoluene	52.5		ug.1	50.0		105	80-120			
Surrogate: 4-Bromofluorobenzene	48.2		"	50.0		96.4	80-120			

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Project: Kimbrough Sweet Project Number: 2000-10757 Project Manager: Camille Reynolds

Organics by GC - Quality Control

Environmental Lab of Texas

		Reporting		Spike	Source		%REC		RPD	- <u></u>
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch EF71907 - EPA 5030C (GC)

Matrix Spike Dup (EF71907-MSD1)	Sou	rce: 7F14024-	01	Prepared:	06/19/07 An	alyzed: 0	6/20/07			
Benzene	0.0445	0.00100	mg/L	0.0500	0.00614	76.7	80-120	12.2	20	M8
Toluene	0.0454	0.00100		0.0500	0.00436	82.1	80-120	8.62	20	
Ethylbenzene	0.0445	0.00100	"	0.0500	ND	89.0	80-120	9.22	20	
Xylene (p/m)	0.0774	0.00100	"	0.100	0.000642	76.8	80-120	8.96	20	MS
Xylene (o)	0.0431	0.00100	**	0.0500	ND	86.2	80-120	9.71	20	
Surrogate: a,a,a-Trifluorotoluene	54.6		ng l	50,0		109	80-120			
Surrogate: 4-Bromofluorobenzene	49.2		"	50.0		98.4	80-120			

Environmental Lab of Texas

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Plains A 1301 S. (Midland	H American EH & S County Road 1150 TX, 79706-4476	Project: Kimbrough Sweet Project Number: 2000-10757 Project Manager: Camille Reynolds	Fax: (432) 687-4914
		Notes and Definitions	
M8	The MS and/or MSD were below the ac	ceptance limits. See Blank Spike (LCS).	
DET	Analyte DETECTED		
ND	Analyte NOT DETECTED at or above the re	eporting limit	
NR	Not Reported		
dry	Sample results reported on a dry weight basi	S	
RPD	Relative Percent Difference		
LCS	Laboratory Control Spike		
MS	Matrix Spike		
Dup	Duplicate		

Report Approved By:

Date:

Brent Barron, Laboratory Director/Corp. Technical Director Celey D. Keene, Org. Tech Director Raland K. Tuttle, Laboratory Consultant James Mathis, QA/QC Officer Jeanne Mc Murrey, Inorg. Tech Director

6/22/2007

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If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

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DRD AND ANALYSIS RE Plione: 432 Fax: 432 ct Name:	Project #: 95# 200		ormat: Readard	Analvze F	TCLP:	95 95	^н В1ЕХ 05 0 Ст БР Нд 03 ¹ НСОЗ) 102 - НСОЗ)	PH: 418 1 8015M (C4: Mg) V2 (C4: C5: Mg) V2 (C4: C5: C4: C7 (C4: C5: C4: C6 (C4: C4: C4: C4: C4 (C4: C4: C4: C4: C4: C4: C4: C4: C4: C4:		× · · · · · ·			Laboratory Commer Sampte Containers In VOCs Free of Headst	Time Touslody seals on cor Custody seals on coo 3300 Sample Mand Deliver	Time by Courier? U	Time W (C/12/) (C) Temperature Upon R
N OF CUSTODY RECC East 9765 Projec			- 218/ Report	mos. ad m	<u></u> .	of Containers Matrix	131110 ÅJ13 D140571425 9667745 =	Coco (40,23,61) (40,23,62) (40,23	, 3		 			alec 11-11-11-	Cate	6-14-67 4
CHAII 12603 West I-20 E Odessa, Texas 7			ec2-22/ 0	il somithe felo		Preservation & # 0	S	۲+20, +20, но ₃ се но ₃ се	XXX				(1		
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mental Lab	y Name /al	ierzip: MIdL	ASA Nor 432	r Signature:		F15002-	015481		NW-10				ons: comi lesu		H CLOV	NO ISLA
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Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

		variance/ Corrective Action Report- 5
	Client:	Plains/Talon
	Date/ Time:	61407 415
8	Lab ID # :	7F15002
	Initials:	a

Sample Receipt Checklist

				Client Initia
#1	Temperature of container/ cooler?	des	No	7.0 °C
#2	Shipping container in good condition?	Tes	No	
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	NotPresenD
#4	Custody Seals intact on sample bottles/ container?	les	No	Not Present
#5	Chain of Custody present?	(es)	No	
#6	Sample instructions complete of Chain of Custody?	Yes	No	
#7	Chain of Custody signed when relinquished/ received?	Cles	No	
#8	Chain of Custody agrees with sample label(s)?	¥es?	No	ID written on Cont./ Lid
#9	Container label(s) legible and intact?	1 Ves	No	Not Applicable
#10	Sample matrix/ properties agree with Chain of Custody?	Ves	No	
#11	Containers supplied by ELOT?	Yes	No	
#12	Samples in proper container/ bottle?	Yes	No	See Below
#13	Samples properly preserved?	Yes	No	See Below
#14	Sample bottles intact?	Ves	No	
#15	Preservations documented on Chain of Custody?	Yes	No	
#16	Containers documented on Chain of Custody?	Yes	No	
#17	Sufficient sample amount for indicated test(s)?	Yes	No	See Below
#18	All samples received within sufficient hold time?	¥es	No	See Below
#19	Subcontract of sample(s)?	Yes	No	-Not Applicable
#20	VOC samples have zero headspace?	Yes	No	Not Applicable

Variance Documentation

Contact:		Contacted by:	Date/ Time:
Regarding:			
			ана на кака на Кака на кака на
Corrective Action Taken:			
	a ang ang ang ang ang ang ang ang ang an		
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

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Analytical Report 289601

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for

PLAINS ALL AMERICAN EH&S

Project Manager: Camille Reynolds

Kimbrough Sweet 8'' 2002-10757

19-SEP-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



19-SEP-07

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

Reference: XENCO Report No: 289601 Kimbrough Sweet 8'' 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 289601. 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. 289601 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.

Respectfu

Brent Barron Odessa Laboratory Director

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Sample Cross Reference 289601



PLAINS ALL AMERICAN EH&S, Midland, TX

Kimbrough Sweet 8"

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-1	W	Sep-13-07 13:15		289601-001
MW-3	W	Sep-13-07 13:00		289601-002
MW-4	W	Sep-13-07 13:06		289601-003
MW-10	W	Sep-13-07 13:09		289601-004

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Project Id: 2002-10757 Contact: Camille Reynolds Project Location: Lea County, NM

Certificate of Analysis Summary 289601 PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Kimbrough Sweet 8"

Date Received in Lab: Fri Sep-14-07 09:04 am Report Date: 19-SEP-07

					Project Manager: Brent Barron, H	
	Lab fd:	289601-001	289601-002	289601-003	289601-004	
herden Darmertad	Field Id:	I-WM	MW-3	MW-4	MW-10	
naisanhay sistimuy	Depth:					
	Matrix:	WATER	WATER	WATER	WATER	
	Sampled:	Sep-13-07 13:15	Sep-13-07 13:00	Sep-13-07 13:06	Sep-13-07 13:09	
RTEX by EPA 8021B	Extracted:	Sep-17-07 15:52	Sep-17-07 15:52	Sep-17-07 15:52	Sep-17-07 15:52	
	Analyzed:	Sep-17-07 18:46	Sep-17-07 19:07	Sep-17-07 19:27	Sep-17-07 19:48	
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mự/L RL	
Benzene		ND 0.0010	18.43 0.0100	0.0018 0.0010	0100 ⁻⁰ DN	
Toluene		010070 GN	0.010.0 174-0.0100	0100'0 QN	0100.0 UN	
Ethylbenzene		ND 0.0010	0.2083 0.0100	ND 0.0010	ND 0.0010	
m,p-Xylene		ND 0.0020	1.956 0.0200	ND 0.0020	ND 0.0020	
o-Xylene		ND 0.0010	0.9831 0.0100	0100'0 GN	ND 0.0010	
Total Xylenes		QN	2.9391	DN DN	ND	and the state of t
Total BTEX		QN	22.5245	0.0018	QN	

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results opersted throughout this analytical report reports in the bay largeneu of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no varranty to the end use of the data hereby presented. Our flability 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

Page 4 of 11



- 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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5332 Blackberry Drive, Suite 104, San Antonio, TX 78238	(210) 509-3334	(201) 509-3335
2505 N. Falkenburg Rd., Tampa, FL 33619	(813) 620-2000	(813) 620-2033
5757 NW 158th St. Miami Lakes, FL 33014	(305) 823-8500	(305) 823-8555

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Form 2 - Surrogate Recoveries



Project Name: Kimbrough Sweet 8"

ork Order #: 289601		Project I	D: 2002-1075	7	
Lab Batch #: 704542 Sample: 289578-001 S	G/MS Bat	ch: 1 Matri	x: Water		
Units: mg/L	SU	RROGATE R	ECOVERY	STUDY	
BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery % R {D}	Control Limits % R	Flags
4-Bromofluorobenzene	0.0379	0.0500	76	80-120	*
Lab Batch #: 704542 Sample: 289578-001 S	GD / MSD Bat	ch: ¹ Matri	x: Water		
Units: mg/L	SU	RROGATE R	ECOVERY	STUDY	
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery % R 1D1	Control Limits %R	Flags
Anarytes	0.0414	0.0500	83	80-120	
	0.0414	0.0500	0.5	80-120	
Lab Batch #: 704542 Sample: 289601-0017 Units: mg/L	SMP Bat	RROGATE R	x: Water ECOVERY	STUDY	
BTEX by EPA 8021B	Amount Found [A]	True Amount B	Recovery % R	Control Limits % R	Flags
Analytes 4-Bromofluorobenzene	0.0826	0.1000	83	80-120	
Lab Batch # 704542 Sample: 289601-002 /	SMP Bat	ch:] Matri	ı x ∙ Water		
Units: mg/L	SU	RROGATE R	ECOVERY	STUDY	
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery % R [D]	Control Limits % R	Flags
4-Bromofluorobenzene	0.4683	0.5000	94	80-120	
Lab Batch #: 704542 Sample: 289601-003 /	SMP Bat	r. 1 Matri	x: Water	<u>]</u>	
Units: mg/L	SU	RROGATE R	ECOVERY	STUDY	
BTEX by EPA 8021B	Amount Found [A]	True Amount B]	Recovery % R	Control Limits % R	Flag
Analytes			101		
4-Bromofluorobenzene	0.0367	0.0500	73	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.



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Form 2 - Surrogate Recoveries



Project Name: Kimbrough Sweet 8"

/ork Order #:	289601			Project II	D: 2002-1075	7	
Lab Batch #:	704542	Sample: 289601-004 / SMP	Bat	eh: []] Matri:	x: Water		
Units:	mg/L	ſ	SU	RROGATE RI	ECOVERY	STUDY	
	BTEX by F	CPA 8021B ytes	Amount Found [A]	True Amount B]	Recovery % R [D]	Control Limits % R	Flags
4-Bromofluorobenz	ene		0.0353	0.0500	71	80-120	**
Lab Batch #:	704542	Sample: 499368-1-BKS / B	KS Bat	ch: Matri:	x: Water	<u> </u>	
Units:	mg/L	[SURROGATE RECOVERY STUDY				
	BTEX by H	CPA 8021B	Amount Found 1A1	True Amount [B]	Recovery %R	Control Limits % R	Flags
	Anal	ytes	11	1-1	[D]		
4-Bromofluorobenz	ene		0.0424	0.0500	85	80-120	
Lab Batch #:	704542	Sample: 499368-1-BLK / B	LK Bate	ch: Matri	x: Water	<u></u>	
Units:	mg/L		SU	RROGATE RE	COVERY	STUDY	
	BTEX by F	CPA 8021B	Amount Found [A]	True Amount B]	Recovery % R	Control Limits % R	Flags
	Anal	ytes			ןטן		s
4-Bromofluorobenze	ene		0.0406	0.0500	81	80-120	

** Surrogates outside limits; data and surrogates confirmed by reanalysis *** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / BAll results are based on MDL and validated for QC purposes.



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Project Name: Kimbrough Sweet 8"

Work Order #: 289601		Pı	oject ID:		200	2-10757
Lab Batch #: 704542 Date Analyzed: 09/17/2007 Reporting Units: mg/L	Sample: 499368- Date Prepared: 09/17/20 Batch #: 1	1-BKS 007 BLANK /I	Matri Analy BLANK SPI	ix: Water st: SHE IKE RE(COVERY	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	0.0379	76	70-125	
Toluene	ND	0.0500	0.0419	84	70-125	
Ethylbenzene	ND	0.0500	0.0451	90	71-129	
m,p-Xylene	ND	0.1000	0.0850	85	70-131	
o-Xylene	ND	0.0500	0.0432	86	71-133	

Blank Spike Recovery $[D] = 100^{+}[C]/[B]$ All results are based on MDL and validated for QC purposes.



- 3

Form 3 - MS / MSD Recoveries



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Project Name: Kimbrough Sweet 8"

Date Analyzed: 09/18/2007 704542 Work Order # 289601 Lab Batch ID:

Matrix: Water -Batch #:

QC- Sample ID: 289578-001 S

09/17/2007

Date Prepared:

Project ID: 2002-10757

SHE Analyst:

		MA	TRIN SPIKE	/ MATK	CLN SFIR	E DUPLICAI	LE NEVO		1001		
BTEX by EPA 8021B San San	Parent Sample Decut	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup. B	RPD *	Control Limits 97 B	Control Limits 9/ DDD	Flag
Analytes		B]	2	ID	E]	kcsan (r)	1 <u>6</u>	0/	10/		
Benzene	QN	0.0500	0.0365	73	0.0500	0.0381	76	খ	70-125	25	
Toluene	DN	0.0500	0.0403	81	0.0500	0.0426	85	5	70-125	25	
Ethylbenzene	QN	0.0500	0.0433	87	0.0500	0.0464	93	7	71-129	25	
m,p-Xylene	QN	0.1000	0.0805	81	0.1000	0.0867	87	7	70-131	25	
o-Xylene N	DN	0.0500	0.0414	83	0.0500	0.0445	89	7	71-133	25	

ND = Not Detected, J = Present Below Reporting Limit. B = Present in Blank, NR = Not Requested. I = Interference, NA = Not ApplicableN = Sec Narrative. EQL = Estimated Quantitation Limit Matrix Spike Percent Recovery [D] = 100*(C-A)/B Relative Percent Difference RPD = 200*(D-G)/(D+G)

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

Prime Arrand South	0001 KF 0001 KF <t< th=""><th>Lubertony Commerts: Satisfield and the set of the set</th></t<>	Lubertony Commerts: Satisfield and the set of the set
12600 Wost 1.20 East Odessa, Toras 73765 Project A Huly 7920 L Project	Сайо Сайо Сайо Сайо Сайо Сайо Сайо Сайо	CG # 2002 - 10757 Date 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Environmental Lab Of Iexa: A Xonco Laboratories Company Project Manager. <u>Andrea Su</u> Company Name <u>Takes Ju P</u> Company Address: <u>Mad Conk</u> Company Address: <u>Mad Conk</u> Company Address: <u>Mad Conk</u>	Sampter Signature: Car / Versets Sampter Signature: Car / Versets Readinning Doptin PU - 1 - 1 PU	Spocial Instructions: Spocial Instructions: Contrille Revealeds (PLATUS) 57 Renoughaby Reindustried Dr. (Concentration of the Concentration of the Concentra

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Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

 Talon
 Plants

 Date/Time:
 71407 9:04

 Lab ID #.
 287601

 Initials
 40

Sample Receipt Checklist

		_		Client Initials
#1	Temperature of container/ cooler?	Tes)	No	4.5 °C
#2	Shipping container in good condition?	8 es	No	
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present
#4	Custody Seals intact on sample bottles/ container?	Yes	No	Not Present
#5	Chain of Custody present?	Yes	No	
#6	Sample instructions complete of Chain of Custody?	Yês	No	
#7	Chain of Custody signed when relinquished/ received?	Yes)	No	
#8	Chain of Custody agrees with sample label(s)?	Ves	No	ID written on Cont./ Lid
#9	Container label(s) legible and intact?	Yes)	No	Not Applicable
#10	Sample matrix/ properties agree with Chain of Custody?	Yes	No	
#11	Containers supplied by ELOT?	Yes	No	
#12	Samples in proper container/ bottle?	Yes	No	See Below
#13	Samples properly preserved?	Yes	No	See Below
#14	Sample bottles intact?	Yes	No	
#15	Preservations documented on Chain of Custody?	Nes	No	
#16	Containers documented on Chain of Custody?	Yes	No	
#17	Sufficient sample amount for indicated test(s)?	les	No	See Below
#18	All samples received within sufficient hold time?	Yes	No	See Bolow
#19	Subcontract of sample(s)?	Yes	No	Not Applicable
#20	VOC samples have zero headspace?	Yes	No	Not Applicable
<u> </u>				

Variance Documentation

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Date/ Time:

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Contact:

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Regarding:

Corrective Action Taken:

Check all that Apply:

See attached e-mail/ fax

Contacted by:

Client understands and would like to proceed with analysis Cooling process had begun shortly after sampling event

Analytical Report 293900

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for

PLAINS ALL AMERICAN EH&S

Project Manager: Camille Reynolds

Kimbrough Sweet 16" SRS# 2000-10757

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: 293900 Kimbrough Sweet 16'' 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 293900. 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. 293900 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

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Sample Cross Reference 293900



PLAINS ALL AMERICAN EH&S, Midland, TX

Kimbrough Sweet 16"

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-3	W	Dec-03-07 13:53		293900-001
MW-4	W	Dec-03-07 14:00		293900-002
MW-10	W	Dec-03-07 14:05		293900-003
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11 No. 1				
24 - 9 - 54 1		2000-10757		
and the second	4	et Id: SRS#		
	ENVIRONMENTAL	Proje		

Certificate of Analysis Summary 293900 PLAINS ALL AMERICAN EH&S, Midland, TX

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Project Name: Kimbrough Sweet 16"

Date Received in Lab: Tue Dec-04-07 08:40 am Project Manager: Brent Barron, Il Report Date: 12-DEC-07 ND 0.0020 ND 0.0010 ND 0.0020 ND 0.0010 ng/L RL. 0.0032 0.0010 Dec-06-07 12:45 Dec-03-07 14:05 Dec-06-07 21:29 293900-003 01-WM WATER Q 0.0032 ND 0.0020 ND 0.0010 0100.0 UN ND mg/L RL 0.0082 0.0010 ND 0.0020 R Dec-03-07 14:00 Dec-06-07 12:45 Dec-06-07 21:13 293900-002 WATER MW-4 0.0082 mg/L RL 3.898 0.0100 ND 0.0200 ND 0.0100 0.2633 0.0200 ND 0.0100 Dec-11-07 13:30 Dec-11-07 11:10 Dec-03-07 13:53 293900-001 WATER MW-3 0.2633 4.1613 Lab Id: Field 1d: Depth: Matrix: Sampled: Extracted: Analyzed: Units/RL: BTEX by EPA 8021B Contact: Camille Reynolds Analysis Requested Project Location: Hobbs, NM Xylenes. Total Ethylbenzene m.p-Xylenes Total BTEX o-Xvlene Benzene Toluene

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Odessa Laboratory Director Brent Barron



- 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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2505 N. Falkenburg Rd., Tampa, FL 33619	(813) 620-2000	(813) 620-2033
5757 NW 158th St. Miami Lakes, FL 33014	(305) 823-8500	(305) 823-8555

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Form 2 - Surrogate Recoveries



Project Name: Kimbrough Sweet 16"

ork Order #: 293900			Project II	D: SRS# 2000	0-10757	
Lab Batch #: 710056	Sample: 293896-054 S / M	S Bate	ch: 1 Matri	ix: Water		
Units: mg/L		SUI	RROGATE RI	ECOVERY	STUDY	
BTEX by	EPA 8021B lytes	Amount Found [A]	True Amount B	Recovery %R {D]	Control Limits %R	Flags
1,4-Difluorobenzene	· · · · · · · · · · · · · · · · · · ·	0.0295	0.0300	98	80-120	
4-Bromofluorobenzene		0.0276	0.0300	92	80-120	
Lab Batch #: 710056	Sample: 293896-054 SD /	MSD Bate	ch: [[] Matri	ix: Water	STUDV	
BTEX by I	EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1.4-Difluorobenzene		0.0296	0.0300	99	80-120	
4-Bromofluorobenzene		0.0280	0.0300	93	80-120	
Lah Batch #. 710056	Sample: 293900-002 / SMI) Rati	oh: Matri	i v · Water	<u>i</u> _	There are a sub-f
Units: mg/L	[SUI	ROGATE RI	ECOVERY	STUDY	
BTEX by I	EPA 8021B lvtes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene	-J	0.0307 0.0300 102 80-120 0.0243 0.0300 81 80-120				
4-Bromofluorobenzene						
Lab Batch #: 710056	0.0243 0.0300 81 80-120 Sample: 293900-003 / SMP Batch: 1 Matrix: Water	<u></u>				
Units: mg/L	[SUF	ROGATE RI	ECOVERYS	STUDY	
BTEX by I	EPA 8021B Ivtes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluorobenzene	· · · · · · · ·	0.0322	0.0300	107	80-120	
1,4-Difluorobenzene 4-Bromofluorobenzene		0.0322	0.0300	107 86	80-120 80-120	
1.4-Difluorobenzene 4-Bromofluorobenzene Lab Batch #: 710056	Sample: 502290-1-BKS / E	0.0322 0.0258	0.0300 0.0300 ch: 1 Matri	107 86	80-120 80-120	
1.4-Difluorobenzene 4-Bromofluorobenzene Lab Batch #: 710056 Units: mg/L	Sample: 502290-1-BKS / E	0.0322 0.0258 BKS Bate SUF	0.0300 0.0300 ch: 1 Matri RROGATE RE	107 86 ix: Water ECOVERY S	80-120 80-120 STUDY	
1.4-Difluorobenzene 4-Bromofluorobenzene Lab Batch #: 710056 Units: mg/L BTEX by I	Sample: 502290-1-BKS / E EPA 8021B	0.0322 0.0258 BKS Bate SUF Amount Found [A]	0.0300 0.0300 ch: 1 Matri RROGATE RE True Amount [B]	107 86 ECOVERY S Recovery %R [D]	80-120 80-120 STUDY Control Limits %R	Flag
1.4-Difluorobenzene 4-Bromofluorobenzene Lab Batch #: 710056 Units: mg/L BTEX by I Anal 1.4-Difluorobenzene	Sample: 502290-1-BKS / E EPA 8021B lytes	0.0322 0.0258 BKS Bate SUF Amount Found [A] 0.0288	0.0300 0.0300 ch: 1 Matri RROGATE RE True Amount [B] 0.0300	107 86 ECOVERY S Recovery %R [D] 96	80-120 80-120 STUDY Control Limits %R 80-120	Flag

** 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.



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Form 2 - Surrogate Recoveries



Project Name: Kimbrough Sweet 16"

Work Order #: 293900		Project I	D: SRS# 2000	0-10757	
Lab Batch #: 710056 Sample:	502290-1-BLK / BLK Bat	tch: 1 Matr	ix: Water		
Units: mg/L	SU	RROGATE R	ECOVERY S	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	0.0261	0.0300	87	80-120	
Lab Batch #: 710056 Sample:	502290-1-BSD / BSD Bat	ch: 1 Matr	ix: Water	<u></u>	
Units: mg/L	SU	RROGATE R	ECOVERYS	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	0.0273	0.0300	91	80-120	
Lab Batch #: 710227 Sample:	293900-001 / SMP Bat	eh: 1 Matr	ix: Water		
Units: mg/L	SU	RROGATE R	ECOVERY	STUDY	
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R D	Control Limits %R	Flags
1.4-Difluorobenzene	0.0307	0.0307 0.0300 102 80-120			
4-Bromofluorobenzene	0.0307 0.0300 102 80-120 0.0269 0.0300 90 80-120				
Lab Batch #: 710227 Sample:	294072-005 S / MS Bat	0.0269 0.0300 90 80- 072-005 S / MS Batch: 1 Matrix: Water	<u></u>		
Units: mg/L	SU	RROGATE R	ECOVERYS	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 Bat	ch: ¹ Matri	ix: Water	<u>. I</u>	
Units: mg/L	SU	RROGATE RI	ECOVERY S	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	

** 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.



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Form 2 - Surrogate Recoveries



Project Name: Kimbrough Sweet 16"

Vork Order #: 293900			Project I	D: SRS# 200	0-10757	
Lab Batch #: 710227	Sample: 502382-1-BKS	/BKS Ba	atch:] Matr	ix: Water		
Units: mg/L		SU	URROGATE R	ECOVERY	STUDY	
BTEX by EF Analyt	PA 8021B tes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
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 Ba	atch: 1 Matr	ix: Water		
Units: mg/L		SI	URROGATE R	ECOVERY	STUDY	
BTEX by EF Analyt	PA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0325	0.0300	108	80-120	
4-Bromofluorobenzene		0.0264	0.0300	88	80-120	
Lab Batch #: 710227	Sample: 502382-1-BSD	/BSD B:	atch: 1 Matr	ix: Water		
Units: mg/L		SI	JRROGATE R	ECOVERY	STUDY	
BTEX by EF Analyt	PA 8021B res	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		0.0269	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.

	Pr	oject Na	me: Kim	brough	Sweet]	[6 "					
Work Order #: 293900							Proj	ect ID: S	RS# 2000-	10757	
Analyst: SHE	Da	te Prepare	d: 12/06/200	2			Date Ar	alyzed: 1	2/06/2007		
Lab Batch ID: 710056 Sample: 502290-1-	BKS	Batch	1:#					Matrix: V	Vater		
Units: mg/L		BLAN	<th>PIKE / E</th> <th>STANK S</th> <th>PIKE DUPI</th> <th>ICATE I</th> <th>RECOVE</th> <th>RY STUD</th> <th>Å</th> <th></th>	PIKE / E	STANK S	PIKE DUPI	ICATE I	RECOVE	RY STUD	Å	
BTEX by EPA 8021B	Blank	Spike	Blank	Blank	Spike	Blank	BIk. Spk		Control	Control	
	Sample Result [A]	Added	Spike Result	Spike %R	Added	Spike Duplicate	Dup. %R	RPD %	Limits %R	Limits %RPD	Elag Di
Analytes		<u>B</u>	<u>c</u>	<u>a</u>	E	Result [F]	<u>0</u>				
Benzene	QN	0.1000	0.0870	87	0.1	0.0889	89	2	70-125	25	
Toluene	QN	0.1000	0.0872	87	0.1	0.0892	89	2	70-125	25	
Ethylbenzene	ŊŊ	0.1000	0.0907	16	0.1	0.0924	92	5	71-129	25	
im,p-Xylenes	QN	0.2000	0.1781	89	0.2	0.1813	16	2	70-131	25	
o-Xylene	ΠN	0.1000	0.0895	96	0.1	0.0918	92	3	71-133	25	
Analyst: SHE	Da	te Prepare	ed: 12/11/200	7			Date Ar	alyzed:	2/11/2007		
Lab Batch ID: 710227 Sample: 502382-1-	BKS	Batch	#: 1					Matrix: /	Vater		
Units: mg/L		BLAN	K/BLANK S	PIKE / E	SLANK S	PIKE DUPI	ICATE I	RECOVE	RY STUD	A	
BTEX by EPA 8021B	Blank Sample Result	Spike Added	Blank Spike	Blank Spike	Spike Added	Blank Spike	Blk. Spk Dup.	RPD	Control Limits	Control Limits	Flag
Analytes	V	[8]	Kesult [C]	10] 8	E	Duplicate Result [F]	G. %	%	ЖК	%KPU	
Benzene	QN	0.1000	0.1093	109	0.1	0.1095	011	0	70-125	25	
ີ ໄດໄພຄາຍ	QN	0.1000	0.1079	108	0.1	0.1058	106	0	70-125	25	
Ethylbenzene	QN	0.1000	0.1110	111	0.1	0.1045	105	9	71-129	25	
m.p-Xylenes	DN	0.2000	0.2206	110	0.2	0.2035	102	8	161-07	25	
o-Xylene	DN	0.1000	0.1087	109	0.1	0.1004	100	8	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

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BS / BSD Recoveries

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Form 3 - MS / MSD Recoveries

Project Name: Kimbrough Sweet 16"



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Project ID: SRS# 2000-10757

Matrix: Water

Batch #:

QC- Sample ID: 293896-054 S Date Prepared: 12/06/2007

Date Analyzed: 12/06/2007

Reporting Units: mg/L

Work Order # : 293900 Lab Batch ID: 710056

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY Analyst: SHE

	Dame 1						:				ſ
BTEX by EPA 8021B	Sample	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Elag B
Analytes	Result [A]	Added [B]	C	%R [D]	Added [E]	Result [F]	%R [G]	%	%В	%RPD	
Benzene	0.0054	0.1000	0.0859	81	0.1000	0.0860	81	0	70-125	25	
Toluene	QN	0.1000	0.0858	36	0.1000	0.0863	36	0	70-125	25	
Ethylbenzene	QN	0.1000	0.0892	39	0.1000	0.0900	90	-	71-129	25	
m.p-Xylenes	QN	0.2000	0.1740	87	0.2000	0.1758	88	-	70-131	25	
o-Xylene	DN	0.1000	0.0901	90	0.1000	016070	16	-	71-133	25	
Lab Batch ID: 710227 Date Analyzed: 12/11/2007	C- Sample ID: Date Prepared:	294072- 12/11/2(-005 S 307	Ba An	tch #: alyst:	l Matri SHE	x: Water				

Reporting Units: mg/L		M	ATRIX SPIKI	E / MATI	RIX SPIE	KE DUPLICAT	re reco	VERY S	STUDY		-
BTEX by EPA 8021B	Parent Sample	Spike	Spiked Sample Result	Spiked Sample	Snike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
Analytes	Result A	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	()
Benzene	0.0020	0.1000	0.1022	100	0.1000	0.1005	66	-	70-125	25	
Toluene	ŊŊ	0.1000	0.0973	26	0.1000	0.0978	98	-	70-125	25	
Ethylbenzene	QN	0.1000	0.0955	96	0.1000	0.0969	97	-	71-129	25	
m.p-Xylenes	QN	0.2000	0.1869	93	0.2000	0.1900	95	сı	70-131	25	
o-Xylene	QN	0.1000	0.0945	95	0.1000	0.0963	96	_	71-133	25	

Reporting Units: mg/L

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

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

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	eservatives: Vanous (V), HCl pH<2 (H), H2SO4 pH<2 (S) H103 pH<	22 (H). Asbc AcidSNaOP St. Teellar Bun (R) WildS	(A) ZNACENADH (Z), (Cool,	c4C) (C), None (MA), Si cont. Type: Glass Amb	ee Label (L), Olher (A), Glass Clear ((0)_(0)	Other (O)	ġ

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			un XENCO Standard Terms and Conditions	Acoly
-			Containers Received: Coole	r Temperature:
Deservatives: V	ritious (V), HCI p+42 (H), HSOA pH42 (S), HNO3 pH42 (N), ASEC A046NaOP At no. 7005133, 40mi VOA (V), 1(, 11), 500mi (S), Fedar Fag (B), Wig2	((A), ZnAcSNaCH (Z), (Cool.<40) ((W), Other Cont. 1	C), None (MA), See Label (L), Other (0) type: Glass Amb (A), Glass Clear (C).	Plastic (P), Other (O)
Methik: Air (A), P.	roduct (P., Solid(S), Water (W)	ommited to Excellence in So	ervice and Quality since 1990	www.xenco.com

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Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

	, Variance/ Corrective Actio
Client	Plums
Date/ Time.	12/4/07 8:40
Lab ID #	7.924100
Initials:	NK-

Sample Receipt Checklist

Client Initials

Date/ Time:

#1	Temperature of container/ cooler?	Yes	No	765 °C
#2 Shipping container in good condition?		YES	No	
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present
11-4	Custody Seats intact on sample bottles/ container?	208->	No	Not Present
#5	Chain of Custody present?	895	No	
#6	Sample instructions complete of Chain of Custody?	405	No	
#7	Chain of Custody signed when relinquished/ received?	205	No	
#8	Chain of Custody agrees with sample label(s)?	Jes	No	ID written on Cont./ Lid
#9	Container label(s) legible and intact?	N BAS	No	Not Applicable
#10	Sample matrix/ properties agree with Chain of Custody?	(Jes	No	
#11	Containers supplied by ELOT?	Vez	No	
#12	Samples in proper container/ bottle?	198	No	See Below
#13	Samples properly preserved?	es .	No	Sce Below
#14	Sample bottles intact?	Yes	No	
#15	Preservations documented on Chain of Custody?	Yes	No	
#16	Containers documented on Chain of Custody?	100	No	
#17	Sufficient sample amount for indicated test(s)?	YES	No	See Below
#18	All samples received within sufficient hold time?	Yes	No	See Below
#19	Subcontract of sample(s)?	Yes	No	Not Applicable
#20	VOC samples have zero headspace?	Yes,	No	Not Applicable

Contact:

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Regarding:

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Corrective Action Taken:

Check all that Apply:

See attached e-mail/ fax

Contacted by:

Client understands and would like to proceed with analysis Cooling process had begun shortly after sampling event

APPENDIX D

NMOCD C-141

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

State of New Mexico Energy Minerals and Natural Resources Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised March 17, 1999

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

Release Notification and Corrective Action

OPERATOR	🔲 Initial Report 🗌 Final Report				
Name of Company: Plains Pipeline, L.P.	Contact: Camille Reynolds				
Address	Telephone No.				
P.O. Box 3119 Midland, Texas 79702	505.396.3341 (CJReynolds@paalp.com)				
Facility Name	Facility Type				
Kimbrough Sweet #2000-10757	8" Steel Pipeline				
Surface Owner: State of New Mexico	Mineral Owner	Lease No.			

LOCATION OF RELEASE									
Unit Letter	Section	Township	Range	Feet from	North/South	Feet from	East/West	County:	
G	3	T18S	R37E	the	Line	the	Line	Lea	

Latitude: <u>32°46'48"N</u> Longitude: <u>103°14'18"W</u> NATURE OF RELEASE

NATOR	AL OF RELEASE		
Type of Release Crude Oil	Volume of Release 60 bbls barrels	Volume Recovered 22 bbls barrels	
Source of Release 8" Steel Pipeline	Date and Hour of Occurrence 10/25/2000	Date and Hour of Discovery 10/25/2000	
Was Immediate Notice Given?	If YES, To Whom? Donna Williams		
By Whom? Wayne Brunette	Date and Hour 10-25-00@5:15PM		
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 T	Taken.*		

8" Steel Pipeline: The release was caused by internal corrosion. Approximately 60 barrels of crude oil was released and approximately 22 barrels recovered and reintroduced to the system. The leak was excavated and repaired and the line placed back in service.

Describe Area Affected and Cleanup Action Taken.*

15,613 sqft 200' x 200': In 2001, the NMOCD approved a Soil and Groundwater Abatement Plan. Impacted soil down to 15'bgs was excavated, shredded, and treated. A 2-foot thick compacted clay barrier was installed in the bottom of the excavation and the treated soil used to bring to grade. Remedial Goals: TPH 8015m = 100 mg/Kg, Benzene = 10 mg/Kg, and BTEX, i.e., the mass sum of Benzene, Ethyl Benzene, Toluene, and Xylenes = 50 mg/Kg.

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

Signature:	OIL CONSERVAT	ION DIVISION
Printed Name: Camille Reynolds	Approved by District Super	rvisor:
E-mail Address: CJReynolds@paalp.com	Approval Date:	Expiration Date:
Title: District Environmental Supervisor Date: Phone: 505.396.3341	Conditions of Approval:	Attached 🔲

* Attach Additional Sheets If Necessary

1 1 1 1 1 1 1 1	Site Information	on Incid	lent Date:	NMOCD Notified:	
PLAINS and Metrics		10/2	5/2000	10-25-00@5:15PM	
SITE: Kimbrough Sweet Assigned Site Reference #: 2000-10757					
Company:	Plains Pipeline, L.F				
Street Addr	ess: P.O. Box 3119)			
Mailing Ado	dress:				
City, State,	Zip: Midland, Te	xas 79702			
Representat	ive: Camille Reynold	S			
Representat	ive Telephone: 50	5.396.3341 (C Reynolds@paalp.com)		
Telephone:	······································				
Fluid volum	ie released (bbls): 6	0 bbls	Recovered (bbls):	22 bbls	
	>25 bbls: Notify NMO	CD verbally w	ithin 24 hrs and submit form	C-141 within 15 days.	
5 25 hble	(Also app Submit form C 141 with	lies to unautho	prized releases >500 mcf Natu	ral Gas)	
Teak Spill	or Pit (ISP) Name:	Kimbroug	h Sweet	eases of 50-500 met Natural Gas)	
Source of c	ontamination: 8" Ste	el Pineline	n öweet		
Land Owner	ie BIM ST Fee	Other: Stat	e of New Mexico		
LSP Dimens	$200' \times 200'$	Other. Stat			
LSP Area:	15.613 ft^2				
Location of	Reference Point (RP		······································		
Location di	stance and direction	from RP	······································		
Latitude:	32°46'48"N				
Longitude:	103°14'18"W				
Elevation a	bove mean sea level:	3.720'	amsl		
Feet from S	outh Section Line				
Feet from W	est Section Line				
Location- U	nit or ¼¼: SW¼ c	of the NE ¹ / ₄	Unit L	etter: G	
Location- Se	ection: 3				
Location- To	ownship: T18S				
Location- R	ange: R37E			······································	
	<u> </u>			······································	
Surface wate	r body within 1000 '	radius of si	te: none		
Domestic wa	ter wells within 100	0' radius of	site: none		
Agricultural	water wells within 1	000' radius o	of site: none	1944	
Public water	supply wells within	1000' radius	of site: none		
Depth from	land surface to grou	nd water (Do	G) 50'bgs		
Depth of co	ntamination (DC) -	50'bgs			
Depth to gro	ound water (DG - DO	C = DtGW	- zero feet		
1. Gi	ound Water	2. Well	head Protection Area	3. Distance to Surface Water	
If Depth to GW <50 feet: 20		16 <10001	· · · · · · · · · · · · · · · · · · ·	<pre><200 horizontal feet: 20</pre>	
points		11 < 1000 f	rom water source,	points	
If Depth to GW 50 to 99 feet:		or;<200' from private domestic		200-100 horizontal feet: 10	
10 points water source: 20 points points					
If Depth to GW ≥ 100 feet: 0 If ≥ 1000 ' from water source, or; ≥ 1000 horizontal facts 0					
haints		>200' from private domestic water		points	
s.		source: 0 p	pints	<i>points</i>	
Ground water	Score = 20	Wellbead Pr	otection Area Score= 0	Surface Water Score= 0	
Site Rank $(1+2+3) = 20$					
Total Site Ranking Score and Acceptable Concentrations					
Parameter >19 10-19 0-9					
Benzene ¹	10 ppm		<u>10 ppm</u>	10 ppm	
BTEX	BTEX ¹ 50 ppm		50 ppm	50 ppm	
TPH	100 ppm	l	1000 ppm	5000 ppm	
1100 ppm field VOC headspace measurement may be substituted for lab analysis					

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