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QUARTERLY MONITORING REPORTS

2011

Basin Environmental Service Technologies, LLC

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QUARTERLY MONITORING REPORT October - December 2011

LOVINGTON GATHERING WTI Unit Letter "H" (SE/NE), Section 6, Township 17 South, Range 37 East Latitude 32° 51' 56.0" North, Longitude 103° 17' 07.2" West Lea County, New Mexico Plains SRS Number: 2006-0142 NMOCD Reference Number: 1RP-838

Prepared for:



Plains Marketing, LP 333 Clay Street, Suite 1600 Houston, Texas 77002

Prepared By:

Basin Environmental Service Technologies, LLC P. O. Box 301 Lovington, New Mexico 88260

January 2012

Ben J. Arguijo Project Manager

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1.0 INTRODUCTION

Basin Environmental Service Technologies, LLC (Basin), on behalf of Plains Pipeline, LP (Plains), is pleased to submit this *Quarterly Monitoring Report* in compliance with the New Mexico Oil Conservation Division (NMOCD) request of April 5, 2011, requiring submittal of a Quarterly Monitoring Report within thirty (30) days of the end of each calendar quarter. This report is intended to be viewed as a complete document with text, figures, tables, and appendices. This report presents the results of the quarterly groundwater monitoring event conducted in the fourth quarter (October - December) of 2011 only.

2.0 SITE DESCRIPTION & BACKGROUND INFORMATION

The legal description of the site is Unit Letter "H" (SE/NE), Section 6, Township 17 South, Range 37 East. The geographic coordinates of the release site are 32° 51' 56.0" North latitude and 103° 17' 07.2" West longitude. A "Site Location Map" is provided as Figure 1.

On April 21, 2006, Basin responded to a pipeline release on behalf of Plains to repair the pipeline and excavate the impacted soil. The Lovington Gathering WTI Pipeline was repaired utilizing a pipeline clamp, and the visually stained soil was excavated and placed on plastic sheeting to mitigate any further hydrocarbon impact to the underlying soil. Approximately twelve (12) barrels of crude oil was released from the pipeline, and eight (8) barrels were recovered, resulting in a net loss of four (4) barrels of crude oil. The excavated area was fenced in and is characterized by a Plains pipeline right-of-way adjacent to an idled Plains pump station. The release occurred in a pasture containing various oil and gas production facilities. The release resulted in a visibly stained surface area covering approximately thirty (30) feet in length by twenty (27) feet in width. Excavation activities conducted during the initial response and subsequent remediation of the site covered an area approximately five (5) to six (6) feet in depth. Excavated soil was placed on a six (6)-mil ploy-liner for future remedial action. Utilizing olfactory, visual, and photo-ionization detector (PID) technology, it was determined that Volatile Organic Compounds (VOC's) remained in the sidewalls and floor of the excavation.

In July 2006, a soil investigation was conducted to further delineate the horizontal and vertical extent of the on-site hydrocarbon impact. Eleven (11) soil borings were advanced to a depth of thirty (30) to seventy-five (75) feet below ground surface (bgs). Based on the laboratory results of the soil samples collected during advancement of the soil borings, three (3) groundwater monitor wells (MW-1, MW-2, and MW-3) were installed to evaluate the status of the groundwater.

Based on the laboratory results from the initial groundwater sampling event (October 5, 2006), four (4) additional monitor wells were installed in November 2006. During the installation of the groundwater monitor wells (MW-1 through MW-7), there was no visual evidence of PSH in any of the collected soil samples. Laboratory analytical results of the selected soil samples did not indicate benzene, toluene, ethylbenzene, and total xylenes (BTEX) or total petroleum hydrocarbon (TPH) concentrations above the appropriate laboratory method detection limit (MDL), with the exception of soil samples collected from monitor well MW-3, which exhibited a TPH concentration of 2,080 mg/Kg and 121 mg/Kg, at fifty-five (55) and seventy-five (75) feet bgs, respectively.

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Laboratory analytical results of groundwater sampling at monitor well MW-7 indicated additional monitor wells were required to fully delineate the down-gradient boundary of the dissolved-phase plume. On February 7, 2007, monitor well MW-8 was installed down-gradient of monitor well MW-7. Laboratory analytical results of soil samples collected during the installation of monitor well MW-8 indicated benzene and BTEX concentrations were less than the appropriate laboratory MDL and the NMOCD regulatory standard of 10 mg/Kg and 50 mg/Kg for benzene and BTEX, respectively. Laboratory analytical results indicate TPH concentrations were less than the laboratory MDL and twenty-five (25) feet bgs. Soil samples collected at fifty (50) and seventy-five (75) feet bgs exhibited a TPH concentration of 14 mg/Kg (below NMOCD standards) and 101 mg/Kg, respectively.

On August 13, 2007, monitor well MW-9 was installed to further delineate the down-gradient boundary of the dissolved-phase plume. Laboratory analytical results of the soil samples collected during the installation of monitor well MW-9 indicated benzene, BTEX, and TPH concentrations were less than the appropriate laboratory MDL and NMOCD regulatory standard in the five (5) laboratory submitted soil samples.

On October 28, 2009, monitor well MW-10 was installed to further delineate the down-gradient boundary of the dissolved-phase plume. Laboratory analytical results of soil samples collected during the installation of monitor well MW-10 indicated benzene, BTEX, and TPH concentrations were less than NMOCD regulatory standards in the seven (7) laboratory submitted soil samples.

Currently, there are ten (10) groundwater monitoring wells on-site: MW-1 which is up-gradient of the release site; MW-4 and MW-5, which are cross-gradient; and MW-2, MW-3, and MW-6 through MW-10, which are down-gradient of the release site.

3.0 FIELD ACTIVITIES

3.1 Groundwater Recovery Efforts

Basin began manual, bi-weekly recovery of hydrocarbon-impacted groundwater from monitor well MW-9 in November 2009 to control the down-gradient migration of the dissolved-phase plume. Bi-weekly recovery from monitor well MW-10 commenced in April 2011 at the behest of the NMOCD. All recovered fluids are disposed of at an NMOCD- approved disposal facility near Lovington, New Mexico.

3.2 Groundwater Monitoring

A quarterly groundwater monitoring event was conducted on November 9, 2011 (4Q2011), to assess the levels and extent of dissolved-phase constituents and phase-separated hydrocarbons (PSH). The groundwater monitoring event consisted of measuring static water levels in the ten (10) on-site monitor wells, checking for the presence of PSH, and purging and sampling of each well exhibiting sufficient recharge. Monitor wells were purged using a PVC bailer of a minimum of three (3) well volumes of water, or until the wells were dry. Groundwater was allowed to recharge, and samples were obtained using disposable Teflon bailers. Water samples were stored in clean, glass containers provided by the laboratory and placed on ice in the field. Purge water

was collected in a trailer-mounted polystyrene tank and disposed of at an NMOCD-approved disposal facility near the site.

Diminished well volume and recharge in monitor well MW-2 attributable to the use of a largecapacity irrigation well (Goff Dairy Well) on property adjacent to the release site precluded sample collection from the monitor well during the quarterly monitoring event.

Per NMOCD request, monthly monitoring events were conducted at MW-10 and five (5) locations (Goff Dairy Well, Goff Dairy - Ctr. Pivot Well, Goff Dairy - Ctr. Pivot Beginning, Goff Dairy - Ctr. Pivot End, and JW Well) on property adjacent to the release site (Goff Dairy #9 Pivot) on October 31, November 9, and December 14, 2011. Monthly monitoring of monitor well MW-9 commenced on December 14, 2011.

Winterization of the JW Well precluded sampling of the well during the December 2011 monthly sampling event. Diversion of the Goff Dairy Well into a nearby stock tank prior to the December 2011 sampling event rendered sampling of the Goff Dairy - Ctr. Pivot Beginning and Goff Dairy - Ctr. Pivot End unnecessary, as the locations were no longer representative of commingled water from the Goff Dairy and Goff Dairy - Ctr. Pivot Wells.

A yearly monitoring event for polyaromatic hydrocarbons (PAH) was conducted on December 15, 2011. Based on sampling criteria provided by the NMOCD, only monitor well MW-10 was subject to PAH monitoring during the 2011 calendar year.

Locations of the groundwater monitoring wells and the inferred groundwater gradient, which was constructed from groundwater elevation measurements collected during the 4Q2011 sampling event, are depicted in Figure 2, "Inferred Groundwater Gradient Map – 4Q2011". The groundwater gradient map indicates a general gradient of approximately 0.0063 feet/foot to the southeast, as measured between monitor wells MW-1 and MW-10. The corrected groundwater elevation ranged between 3,715.23 and 3,719.80 feet above mean sea level in monitor wells MW-10 and MW-5, respectively. Groundwater elevation data is provided as Table 1, "Groundwater Elevation Data - 4Q2011".

No PSH was detected in any of the on-site monitor wells during the 4Q2011 reporting period.

4.0 LABORATORY RESULTS

Groundwater samples collected from the on-site monitor wells, the Goff Dairy irrigation wells, and the Goff Dairy Center Pivot during the monthly, quarterly, and yearly sampling events were delivered to Xenco Laboratories in Odessa, Texas, for determination of BTEX and/or PAH constituent concentrations by EPA Methods SW846-8021b and SW846 8270C, respectively. Laboratory analytical results were compared to NMOCD regulatory limits based on the New Mexico groundwater standards found in Section 20.6.2.3103 of the New Mexico Administrative Code (NMAC). Table 2 summarizes the "Concentrations of BTEX, Fluoride & Chromium in Groundwater". Table 3 summarizes the "Concentrations of Semi-Volatile Compounds in Groundwater".

4.1 Quarterly Monitoring Data

Data collected during the 4Q2011 groundwater monitoring event is summarized below. Groundwater contaminant concentrations are depicted in Figure 3, "Groundwater Concentration Map - 4Q2011".

- Benzene concentrations ranged from less than the laboratory MDL in the groundwater samples collected from monitor wells MW-1, MW-4, MW-5, MW-7, MW-8 and MW-10 to 0.00356 mg/L in the groundwater sample collected from monitor well MW-6. Benzene concentrations were less than the New Mexico Water Quality Control Commission (NMWQCC) regulatory standard of 0.010 mg/L in all submitted groundwater samples.
- Toluene concentrations were both less than the laboratory MDL and less than the NMWQCC regulatory standard of 0.750 mg/L in all submitted groundwater samples.
- Ethylbenzene concentrations were both less than the laboratory MDL and less than the NMWQCC regulatory standard of 0.750 mg/L in all submitted groundwater samples.
- Total xylene concentrations ranged from less than the laboratory MDL in the groundwater samples collected from monitor wells MW-1, MW-4, MW-5, MW-7, MW-8 and MW-10 to 0.0388 mg/L in the groundwater sample collected from monitor well MW-6. Total xylene concentrations were less than the NMWQCC regulatory standard of 0.620 mg/L in all submitted groundwater samples.

4.2 Monthly Monitoring Data

Data collected during the October 2011, November 2011, and December 2011 monthly monitoring events is summarized below. Groundwater contaminant concentrations for the October and December monitoring events are depicted in Figures 4 and 5, "Groundwater Concentration Map - October 2011" and "Groundwater Concentration Map - December 2011", respectively. Groundwater contaminant concentrations for the November sampling event are included in Figure 3, "Groundwater Concentration Map - 4Q2011".

• Monitor Well MW-9:

Benzene concentrations ranged from less than the laboratory MDL in December 2011 to 0.00179 mg/L in November 2011. Toluene and ethylbenzene concentrations were less than the appropriate laboratory MDL in all submitted groundwater samples. Total xylene concentrations ranged from less than the laboratory MDL in December 2011 to 0.00349 mg/L in November 2011. Benzene, toluene, ethylbenzene, and total xylene concentrations were less than NMWQCC regulatory standards in all submitted groundwater samples.

• Monitor Well MW-10:

Benzene concentrations ranged from less than the laboratory MDL in November 2011 to 0.053 mg/L in October 2011. Toluene concentrations ranged from less than the laboratory MDL in October 2011 and November 2011 to 0.00226 mg/L

in December 2011. Ethylbenzene concentrations ranged from less than the laboratory MDL in November 2011 to 0.0944 mg/L in October 2011. Total xylene concentrations ranged from less than the laboratory MDL in November 2011 to 9.0966 mg/L in October 2011. Benzene concentrations exceeded NMWQCC regulatory standards in October 2011. Toluene, ethylbenzene, and total xylene concentrations were less than NMWQCC regulatory standards in all submitted groundwater samples.

- Goff Dairy Well:
 - Benzene, toluene, and total xylene concentrations were less than the laboratory MDL in all submitted groundwater samples. Ethylbenzene concentrations ranged from less than the laboratory MDL in October 2011 and November 2011 to 0.00111 mg/L in December 2011. Benzene, toluene, ethylbenzene, and total xylene concentrations were less than NMWQCC regulatory standards in all submitted groundwater samples.
- Goff Dairy Ctr. Pivot Well:
 - Benzene, toluene, ethylbenzene, and total xylene concentrations were both less than the appropriate laboratory MDL and less than NMWQCC regulatory standards in all submitted groundwater samples.
- Goff Dairy Ctr. Pivot Beginning:
 - Benzene, toluene, ethylbenzene, and total xylene concentrations were both less than the appropriate laboratory MDL and less than NMWQCC regulatory standards in all submitted groundwater samples.
- Goff Dairy Ctr. Pivot End:
 - Benzene, toluene, ethylbenzene, and total xylene concentrations were both less than the appropriate laboratory MDL and less than NMWQCC regulatory standards in all submitted groundwater samples.
- JW Well:
 - Benzene, toluene, ethylbenzene, and total xylene concentrations were both less than the appropriate laboratory MDL and less than NMWQCC regulatory . standards in all submitted groundwater samples.

4.3 Yearly Monitoring Data

A yearly monitoring event for polyaromatic hydrocarbons (PAH) was conducted at monitor well MW-10 on December 15, 2011. PAH constituent concentrations were both less than the appropriate laboratory MDL and NMOCD regulatory standards in all submitted groundwater samples.

ANTICIPATED ACTIONS

Quarterly monitoring and groundwater sampling of monitor wells MW-1 through MW-8 will continue throughout the 2012 calendar year. Monthly monitoring of monitor wells MW-9 and MW-10 and the Goff Dairy and Goff Dairy - Ctr. Pivot Wells will continue throughout the 2012 calendar year. Monthly monitoring of the Goff Dairy - Ctr. Pivot Beginning, Goff Dairy - Ctr. Pivot End, and JW Well will recommence as warranted.

Pursuant to the July - September 2011 Quarterly Monitoring Report, dated July 2011, and correspondence from an NMOCD representative, dated August 1, 2011, bi-weekly recovery of hydrocarbon-impacted groundwater from monitor wells MW-9 and MW-10 to control the down-gradient migration of the dissolved-phase plume will continue throughout the 2012 calendar year.

Quarterly monitoring reports will be submitted within thirty (30) days of the end of each calendar quarter, unless or until directed otherwise by the NMOCD. A cumulative *Annual Monitoring Report* for the 2011 reporting period will be submitted to the NMOCD by April 1, 2012.

LIMITATIONS

Basin Environmental Service Technologies, LLC, has prepared this *Quarterly Monitoring Report* to the best of its ability. No other warranty, expressed or implied, is made or intended. Basin has examined and relied upon documents referenced in the report and on oral statements made by certain individuals. Basin has not conducted an independent examination of the facts contained in referenced materials and statements. Basin has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Basin has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin notes that the facts and conditions referenced in this report may change over time, and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Plains Marketing, LP. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of Basin Environmental Service Technologies, LLC, and/or Plains Marketing, LP.

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DISTRIBUTION

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Tables

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TABLE 1

GROUNDWATER ELEVATION DATA - 4Q2011

PLAINS MARKETING, LP LOVINGTON GATHERING WTI LEA COUNTY, NEW MEXICO PLAINS SRS NO: 2006-142 NMOCD REF NO: 1RP-838

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW-1	05/27/11	3,806.60	-	87.80	-	3,718.80
MW-2	05/27/11	3,807.31	-	88.10	-	3,719.21
MW-3	05/27/11	3,807.19	-	88.10	-	3,719.09
MW-4	05/27/11	3,807.67	-	88.20	-	3,719.47
MW-5	05/27/11	3,807.30	-	87.50	_	3,719.80
MW-6	05/27/11	3,807.08	-	88.40	-	3,718.68
MW-7	05/27/11	3,807.05	-	88.00		3,719.05
MW-8	05/27/11	3,806.89	-	88.36	-	3,718.53
MW-9	05/27/11	3,807.02	-	89.15	-	3,717.87
MW-10	05/27/11	3,806.08		90.85	-	3,715.23

- = Not applicable.

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PLAINS MARKETING, LP LOVINGTON GATHERING WTI LEA COUNTY, NEW MEXICO PLAINS SRS NO: 2006-142 NMOCD REF NO: 1RP-838

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PLAINS MARKETING, LP LOVINGTON GATHERING WTI LEA COUNTY, NEW MEXICO PLAINS SRS NO: 2006-142 NMOCD REF NO: 1RP-838

				METH	ODS: EPA SI	V 846-8021b			300.1	SW846-6010C
SAMPLE LOCATION	SAMPLE	BENZENE	TOULENE	ЕТНУL-	M,P-	O-XYI ENES	TOTAL	TOTAL		
	DATE	(mg/L)	(mg/L)	BENZENE (mg/L)	XYLENES (ma/L)	(mg/L)	XYLENES (mg/L)	BTEX (mg/L)	(mg/L)	(mg/L)
MW-2	12/2/2008	0:050	0.002	<0.0010	0.007	0.001	0.008	090.0		
=	3/3/2009	0.036	<0.0020	<0.0010	0.0026	<0.0010	0.0026	0.038		•
	6/18/2009	0.0097	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.010		
•	9/1/2009	0.084	<0.0020	<0.0010	0.0083	<0.0010	0.0083	0.093		•
-	12/18/2009	0.0129	<0.0020	<0.0010	0.0095	<0.0010	0.0095	0.022		
=	·3/4/2010.	0.0026	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0026	•	•
-	5/25/2010	0.0023	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0023		•
-	8/30/2010	0.0406	<0.0020	<0.0010	0.0132	<0.0010	0.0132	0.0538		
•	11/11/2010	0.0087	<0.0020	<0.0010	0.091	<0.0010	0.091	0.0997	•	•
-	3/22/2011	0.0361	<0.0020	<0.0010	0.0605	0.0011	0.0616	0.0977		
=	5/27/2011	0.00222	<0.0020	<0.0010	0.00297	<0.0010	0.00297	0.00519		
=	9/30/2011	0.179	<0.0020	0.00275	0.00345	0.00212	0.00557	0.187		
			No. WAR	1	and the second and				* - *, • · · *	
8-WM	10/5/2006	6.60	<0.0010	<0.0010	0.072	<0.0010	0.072	6.67		
=	12/28/2006	1.02	<0.0010	0.005	0.028	<0.0010	0.028	1.05	•	•
	3/16/2007	1.48	<0.0010	0.013	0.034	<0.0010	0.034	1.53		
	5/31/2007	1.66	0.010	0.034	0.029	0.012	0.041	1.75	1	-
-	9/25/2007	0.494	0.023	0.020	0.014	0.007	0.021	0.56		
-	11/30/2007	5.93	0.027	0.273	0.141	0.074	0.215	6.45	•	•
=	3/11/2008	1.159	0.107	0.177	0.066	0.139	0.205	1.65	•	•
=	6/14/2008	0.214	0.002	0.007	0.012	0.005	0.017	0.24	•	•
=	9/17/2008	0.026	<0.0020	<0.0010	0.002	<0.0010	0.002	0.03		
=	12/2/2008	0.024	<0.0020	<0.0010	0.004	0.001	0.005	0.03	•	-
-	3/3/2009	1.367	0.0305	0.0251	0.0173	0.0158	0.0331	1.46	•	
-	6/18/2009	0.0031	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
	9/1/2009	0.0073	0.0033	<0.0010	0.0028	0.0015	0.0043	0.01	•	•
	12/18/2009	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
=	3/4/2010	0.0011	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0011		
-	5/25/2010	0.0109	0.0033	<0.0010	0.0048	0.0027	0.0075	0.0217		
	8/30/2010	0.0092	0.0036	<0.0010	0.006	0.0033	0.0093	0.0221		
	11/11/2010	0.0033	<0.0020	<0.0010	0.0023	0.0013	0.0036	0.0069		•
-	3/22/2011	0.00904	0.00283	<0.0010	0.00815	0.00375	0.0119	0.0238	•	•
	1. S.	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	÷							
NMOCD CRITERI	A	0.01	0.75	0.75	TOT	AL XYLENES	0.62		1.6	0.05

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PLAINS MARKETING, LP LOVINGTON GATHERING WT LEA COUNTY, NEW MEXICO PLAINS SRS NO: 2006-142 NMOCD REF NO: 1RP-838

				METH	DDS: EPA SI	<u>N</u> 846-8021b			300.1	SW846-6010C
SAMPLE LOCATION	SAMPLE	BENZENE	TOLUENE	ETHYL-	M,P-	O-XYLENES	TOTAL	TOTAL	EI LIORIDE	CHROMILIM
	DATE	(mg/L)	(mg/L)	BENZENE (ma/L)	XYLENES (ma/L)	(mg/L)	XYLENES (ma/L)	BTEX (ma/L)	(mg/L)	(mg/L)
MW-3	5/27/2011	0.0205	<0.0020	<0.0010	0.00308	0.00116	0.00424	0.0247		
	8/24/2011	0.0262	0.00333	<0.0010	0.00827	0.00312	0.0114	0.0409		
-	11/9/2011	0.00211	<0.0020	<0.0010	0.00231	0.00114	0.00345	0.00556	•	
		S. S	N. 8. 4	66 V 16 1 10 1		1 S. 1.	S. S. S. S. S. S. S.		いいのないの	A CARLES AND A CARLES
MW-4	12/28/2006	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	•	•
a	3/16/2007	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	•	
=	5/30/2007	<0.0010	0.001	<0.0010	<0.0010	<0.0010	<0.0010	0.001		
-	9/25/2007	<0.0010	0.001	<0.0010	<0.0020	<0.0010	<0.0020	0.001	•	
-	11/30/2007	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
+	3/11/2008	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
	6/14/2008	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
	9/17/2008	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
	12/2/2008	<0.0010	0.006	<0.0010	<0.0020	<0.0010	<0.0020	0.006	•	•
	3/3/2009	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
-	6/18/2009	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		
-	9/1/2009	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	-
=	12/18/2009	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•.	•
	3/4/2010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
	5/25/2010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		
-	8/30/2010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
	11/11/2010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	1
=	3/22/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
-	5/27/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	4.76	<0.0050
	8/24/2011	0.00119	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.00119		•
Ξ	11/9/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	
MW-5	12/28/2006	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		•
-	3/16/2007	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	1	•
-	5/30/2007	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	•	
	9/25/2007	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		
-	11/30/2007	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	•
-	3/11/2008	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
Ŧ	6/14/2008	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
-	9/17/2008	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
and the second second second		Same and the second	5. 5 . 5 . 5 . 5 . 5 . 5 . 5 . 5 . 5 .	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		and the second of the second			NYNGWERING.	
NMOCD CRITERI	A.	0.01	0.75	0.75	TOT	AL XYLENES	0.62		1.6	0.05

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PLAINS MARKETING, LP LOVINGTON GATHERING WTI LEA COUNTY, NEW MEXICO PLAINS SRS NO: 2006-142 NMOCD REF NO: 1RP-838

				METHC	DDS: EPA SI	V 846-8021b			300.1	SW846-6010C
SAMPLE LOCATION	SAMPLE	BENZENE	TOLUENE	ЕТНҮС-	М,Р-	O-XYLENES	TOTAL	TOTAL		CHROMIUM
	DATE	(mg/L)	(mg/L)	BENZENE	XYLENES	(mg/L)	XYLENES	BTEX	(mg/L)	(mg/L)
				(mg/L)	(mg/L)		(mg/L)	(mg/L)		
MW-5	12/2/2008	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
=	3/3/2009	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		
-	6/18/2009	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
-	9/1/2009	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
-	12/18/2009	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
	3/4/2010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
	5/25/2010	0.0014	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0014	•	1
	8/30/2010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	J	
	11/11/2010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	1	1
	3/22/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
	5/27/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
83	8/24/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	,
	11/9/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
						1. A.	Constant of the			•
- MW-6	12/28/2006	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		•
-	3/16/2007	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	•	•
1	5/30/2007	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		•
•	9/25/2007	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
	11/30/2007	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
	3/11/2008	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
-	6/14/2008	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
-	9/17/2008	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
	12/2/2008	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
=	3/3/2009	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
	6/18/2009	0.0044	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0044		•
	9/1/2009	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
	12/18/2009	0.013	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0130	-	-
	3/4/2010	0.0063	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0063	•	F
19	5/25/2010	0.0059	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0059		•
1	8/30/2010	0.0053	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0053	•	•
7	11/11/2010	0.0082	<0.0020	<0.0010	0.0035	<0.0010	0.0035	0.0117		•
=	3/22/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
							1. 1. 1. 2. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.		and the street of	8
NMOCD CRITERI	A	0.01	0.75	0.75	TOT.	AL XYLENES	0.62		1.6	0.05

PLAINS MARKETING, LP LOVINGTON GATHERING WTI LEA COUNTY, NEW MEXICO PLAINS SRS NO: 2006-142 NMOCD REF NO: 1RP-838

				METH	ODS: EPA SV	V 846-8021b			300.1	SW846-6010C
SAMPLE LOCATION	SAMPLE	BENZENE		ЕТНУС-	М,Р-	O-XYI ENES	TOTAL	TOTAL	EL LIORIDE	CHROMIUM
	DATE	(mg/L)	(mg/L)	BENZENE (ma/L)	(ma/L)	(mg/L)	(ma/l)	BTEX (ma/L)	(mg/L)	(mg/L)
9-MM	5/27/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		
-	8/24/2011	0.105	<0.0020	<0.0010	0.0597	0.00309	0.0628	0.168		•
	11/9/2011	0.00356	<0.0020	<0.0010	0.0388	<0.0010	0.0388	0.0424	•	
	「日本の				1	1. 1. 1. A.		The states of the		
7-WM	12/28/2006	0.047	<0.0010	<0.0010	0.001	- <0.0010	0.001	0.0480	•	
	3/16/2007	0.047	<0.0010	<0.0010	0.015	<0.0010	0.015	0.0620	•	
	5/31/2007	0.039	<0.0010	<0.0010	0.005	<0.0010	0.005	0.0440		
=	9/25/2007	0.037	<0.0010	<0.0010	0.030	<0.0010	0.03	0.0670	•	
	11/30/2007	0.026	<0.0020	<0.0010	0.022	<0.0010	0.022	0.0480		
-	3/11/2008	0.095	<0.0020	<0.0010	0.0032	<0.0010	0.0032	0.0982	•	
-	6/14/2008	0.138	<0.0020	<0.0010	0.016	<0.0010	0.016	0.1540		
	9/17/2008	0.353	<0.0020	<0.0010	0.003	<0.0010	0.003	0.3560	-	
	12/2/2008	0.036	<0.0020	<0.0010	0.003	0.002	0.005	0.0410	-	•
2	3/3/2009	0.0775	<0.0020	<0.0010	0.0327	<0.0010	0.0327	0.1102	•	•
1	6/18/2009	0.057	<0.0020	<0.0010	0.0329	<0.0010	0.0329	0.0899	•	
-	9/1/2009	0.012	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0120		•
44	12/18/2009	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	-
•	3/4/2010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
•	5/25/2010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
•	8/30/2010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
	11/11/2010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	•
	3/22/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
•	5/27/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		
	8/24/2011	0.00192	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.00192	•	
	11/9/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
	Sara Contraction	The second second	200 - 1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2		あれたいこと				1. St. 1982 A	
MW-8	3/16/2007	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	•
	5/31/2007	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	•	•
	9/25/2007	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
	11/30/2007	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
	3/11/2008	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
	6/14/2008	0.008	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.008	•	•
	9/17/2008	0.568	<0.0100	<0.005	<0.0100	<0.005	<0.0100	0.568		8
		Je. 6								
NMOCD CRITERI	IA	0.01	0.75	0.75	TOT	AL XYLENES	0.62		1.6	0.05

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PLAINS MARKETING, LP LOVINGTON GATHERING WTI LEA COUNTY, NEW MEXICO PLAINS SRS NO: 2006-142 NMOCD REF NO: 1RP-838

L				METHC	DDS: EPA SV	V 846-8021b			300.1	SW846-6010C
				Ĭ	M,P.	O-XYLENES		TOTAL	FLUORIDE	CHROMIUM
(mg/L) (mg/L) (mg/L) (mg/L)	/L) (mg/L) ^{gEN}	(mg/L) dEIV (m	а Ш а	g/L)	AYLENES (mg/L)	(mg/L)	AYLENES (mg/L)	BIEX (mg/L)	(mg/L)	(mg/L)
/2008 0.234 0.046 0.	34 0.046 0.	0.046 0.	o	008	0.041	0.013	0.054	0.342	•	1
2009 0.0284 <0.0020 <0	84 <0.0020 <0	<0.0020 <0	ð	0010	0.0068	<0.0010	0.0068	0.0352	•	
/2009 0.0045 <0.0020 0.	45 <0.0020 0.	<0.0020 0.	ō	0016	0.0032	<0.0010	0.0032	0.0093		
2009 0.0013 <0.0020 0	13 <0.0020 0	<0.0020 0	0	.0011	0.0141	<0.0010	0.0141	0.0165	•	•
3/2009 <0.0010 <0.0020 <	010 <0.0020 <	<0.0020 <	v	0.0010	<0.0020	<0.0010	<0:0020	<0.0020	-	
2010 <0.0010 <0.0020 C	010 <0.0020 C	<0.0020 0		.0011	<0.0020	<0.0010	<0.0020	0.0011		
//2010 0.0012 <0.0020 (12 <0.0020 (<0.0020 (0.001	<0.0020	<0.0010	<0.0020	0.0022		•
/2010 <0.0010 <0.0020 0	010 <0.0020 0	<0.0020 0	٩	0014	<0.0020	<0.0010	<0.0020	0.0014	-	•
1/2010 <0.0010 <0.0020 <	010 <0.0020 <(<0.0020 <(۷	0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	•
/2011 <0.0010 <0.0020 <0	010 <0.0020 <0	<0.0020 <0	Å	0010	<0.0020	0.00154	0.00154	0.00154	-	•
/2011 <0.0010 <0.0020 <(010 <0.0020 <	<0.0020 <(¥	0.0010	<0.0020	0.00260	0.00260	0.00260		•
/2011 <0.0010 <0.0020 <0	010 <0.0020 <0	<0.0020 <0	Å	0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
V2011 <0.0010 <0.0020 <	010 <0.0020 <(<0.0020 <(¥	0.0010	<0.0020	<0.0010	<0.0020	<0.0020		
1711 (2015) R. 1828 (2016) R. 1828 (AND COMPANY COMES	and the second	200	STATUS.		NA BOARD	A CARLES SA	SALL AND AND AND	のないであるのである	いた時期にないない
/2007 <0.0010 <0.0010 <0	010 <0.0010 <0	<0.0010 <	¥	0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	-
0/2007 <0.0010 <0.0020 <0	010 <0.0020 <0	<0.0020 <	۷	0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
/2008 <0.0010 <0.0020 <0	<u>010 <0.0020 <0</u>	<0.0020 <	å	.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
/2008 <0.0010 <0.0020 <0	<u>010 <0.0020 <0</u>	<0.0020 <	ଟ	.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
/2008 <0.0010 <0.0020 <0	<u>010 <0.0020 <0</u>	<0.0020 <0	Å	.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
/2008 <0.0010 <0.0020 <0	010 <0.0020 <0	<0.0020 <	۷	0.0010	<0.0020	<0.0010	<0.0020	<0.0020		
2009 <0.0010 <0.0020 <	010 <0.0020 <	<0.0020 <	V	0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
/2009 <0.0010 <0.0020 <	010 <0.0020 <	<0.0020 <	V	0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
2009 0.9717 0.0641 <	17 0.0641 <	0.0641 <	v	0.0100	0.0867	0.0422	0.1289	1.1647	•	•
/2009 1.838 <0.0200 <	38 <0.0200 <	<0.0200 <	۷	0.0100	0.0537	<0.0100	0.0537	1.8917		•
//2009 0.985 <0.0020 <0	35 <0.0020 <(<0.0020 <	۲	0.0010	0.0442	<0.0010	0.0442	1.0292		
8/2009 <0.0010 <0.0020 <0	010 <0.0020 <(<0.0020 <	۷	0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
2010 0.0192 <0.0020 <	92 <0.0020 <	<0.0020 <	۲	0.0010	0.0027	<0.0010	0.0027	0.0219	-	-
//2010 0.0421 <0.0020 <	21 <0.0020 <	<0.0020 <(¥	0.0010	0.0063	<0.0010	0.0063	0.0484		•
V2010 0.1259 <0.0020 <0	59 <0.0020 <0	<0.0020 <	₽,	0010	0.0344	<0.0010	0.0344	0.1603	-	•
1/2010 0.0265 <0.0020 <0	65 <0.0020 <0	<0.0020 <	Â	.0010	0.0097	<0.0010	0.0097	0.0362		•
<u>'/2011 0.00335 <0.0020 <0</u>	335 <0.0020 <0	<0.0020 <0	Å	00100	<0.0020 -	<0.0010	<0.0020	0.00335		
/2011 0.00406 <0.0020 <	406 <0.0020 <	<0.0020 <	∣⊽	0.0010	0.00326	<0.0010	0.00326	0.00732		
/2011 <0.0010 <0.0020 <	010 <0.0020 <	<0.0020 <	ľ	0.0010	0.00237	<0.0010	0.00237	0.00237		
/2011 0.00179 <0.0020 <	179 <0.0020 <	<0.0020 <	1	0.0010	0.00349	<0.0010	0.00349	0.00528	•	•
4/2011 <0.0010 <0.0020 <	010 <0.0020 <	<0.0020 <	v	0.0010	<0.0020	<0.0010	<0.0020	<0.0020		
				No and No				at the second second	ALC DO LES	an frank and a sur
0.01 0.75	1 0.75 1	0.75		0.75	TOT	AL XYLENES (0.62		16	0.05

PLAINS MARKETING, LP LOVINGTON GATHERING WTI LEA COUNTY, NEW MEXICO PLAINS SRS NO: 2006-142 NMOCD REF NO: 1RP-838

				METH	ODS: EPA SV	V 846-8021b			300.1	SW846-6010C
SAMPLE LOCATION	SAMPLE	BENZENE	TOLUENE	ETHYL.	M,P- VVI FNIFO	O-XYLENES		TOTAL	FLUORIDE	CHROMIUM
		(mg/L)	(mg/L)	(mg/L)	ATLENES (mg/L)	(mg/L)	(mg/L)	BIEX (mg/L)	(mg/L)	(mg/L)
MW-10	11/2/2009	<0.005	<0.005	<0.005	<0.010	<0.005	<0.010	<0.010	,	
11	3/4/2010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
	5/25/2010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	1	
#	8/30/2010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
H	11/11/2010	0.0350	<0.0020	<0.0010	0.0035	<0.0010	0.0035	0.0385	1	•
14	3/22/2011	0.0568	<0.0020	<0.0010	0.00333	<0.0010	0.00333	0.0601		
	5/27/2011	1.52	<0.0020	0.00107	0.0113	<0.0010	0.0113	1.53		
	7/11/2011	3.00	0.00265	0.00365	0.0248	0.00232	0.0271	3.03		
-	8/24/2011	0.654	<0.0020	0.00158	0.0177	0.00262	0.0203	0.676		
-	10/10/2011	0.183	<0.0020	<0.0010	0.121	<0.0010	0.121	0.304	•	•
-	10/31/2011	0.053	<0.0020	0.0014	0.0944	0.00222	0.0966	0.151	-	
8	11/9/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		
	12/14/2011	0.00846	0.00226	<0.0010	0.0261	<0.0010	0.0261	0.0368		
	となる。 たん たい				きゃんとく	Sec. 2 State				
Goff Dairy Well	5/27/2011	0.00125	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.00123	•	-
	7/11/2011	0.00262	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.00262	•	•
	8/24/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
1	10/10/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
	10/31/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
	11/9/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
1 1	12/14/2011	<0.0010	<0.0020	0.00111	<0.0020	<0.0010	<0.0020	0.00111	•	
	1. 2 W				e^ -					
Goff Dairy - Ctr. Pivot Well	7/7/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		
.	8/24/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
-	10/10/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
=	10/31/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
2	11/9/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
-	12/14/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	•
		きまた おはい			1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	Same and the	1		a start and a start a	
Goff Dairy - Ctr. Pivot Beg.	7/7/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
	8/24/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0:0020	<0.0020	•	•
=	10/10/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
=	10/31/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
	11/9/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	•
	小学を見ている。	Row Son							1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	۲. گار دارد در از مال
NMOCD CRITER	A	0.01	0.75	0.75	TOT	AL XYLENES (0.62		1.6	0.05

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PLAINS MARKETING, LP LOVINGTON GATHERING WTI LEA COUNTY, NEW MEXICO PLAINS SRS NO: 2006-142 NMOCD REF NO: 1RP-838

				METH	DDS: EPA S	N 846-8021b			300.1	SW846-6010C
SAMPLE LOCATION	SAMPLE	BENZENE	TOLUENE	ETHYL.	M,P.	O-XYLENES	TOTAL VVI ENES	TOTAL	FLUORIDE	CHROMIUM
		(mg/L-)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Goff Dairy - Ctr. Pivot End	7/7/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
H	8/24/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
11	10/10/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		
	10/31/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		
	11/9/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
						A A CARE		1. N. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.		
JW Well	7/14/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	P.	
	8/24/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		
14	10/10/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
	10/31/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	
	11/9/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
「「「」、「「」、「「」、「「」、「「」、「」、「」、「」、「」、「」、「」、「		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Sec. Sec. 6	小ななです。	S. B. C. S. Stars			
NMOCD CRITER	IA	0.01	0.75	0.75	TOT	AL XYLENES	0.62		1.6	0.05

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Page 8 of 8

TABLE 3

CONCENTRATIONS OF SEMI-VOLATILE COMPOUNDS IN GROUNDWATER

PLAINS PIPELINE, L.P. LOVINGTON GATHERING WTI

LOVINGTON GATHERING WTI LEA COUNTY, NEW MEXICO

NMOCD REFERENCE NUMBER 1RP-838

	Pyrene.	<0.0102	
	Phenanthrene	<0.0102	
	ənəlertiriqeN	<0.0102	
	2-Wethyinaphthalene	<0.0102	1. 1. E. R.
	ənələrtitqaniyritəM-f	<0.0051	
	eneryq(bɔ-£,2,t)onebnl	<0.0102	
	Fluorene	<0.0102	
10	Fluoranthene	<0.0102	1
8270C, 35	Dibenz(a,h)anthracene	<0.0102	1. S.
EPA SW846	Shrysene	<0.0102	13 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	ənəlynəq(l,rt,g)oznəð	<0.0102	5 - F
	enertinstouff(#)ozne8	<0.0102	
	anarthrisiouff(d)oznaB	<0.0102	
	Benzo(a)pyrene	<0.0102	A BULLEY
	Benzo(a)anthracene	<0.0102	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	9n9361rtfmA	<0.0102	1. 2. 2. 2. 2.
	enelynthqsneoA	<0.0102	
	enertiriqsneoA	<0.0102	
SAMPLE DATE			
	SAMPLE LOCATION	MW-10	1. The she was a start of a

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All concentrations reported in mg/L

Page 1 of 1

Appendices

Appendix A

Laboratory Analytical Reports

Analytical Report 430928

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

11-NOV-11

Collected By: Client



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Xenco-Houston (EPA Lab code: TX00122): Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002) Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054) New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)

Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046): Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85) Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00989): Arizona (AZ0758)





11-NOV-11

Project Manager: Jason Henry PLAINS ALL AMERICAN EH&S 1301 S. COUNTY ROAD 1150 Midland, TX 79706

Reference: XENCO Report No: 430928 Lovington Gathering WTI Project Address: Lea County,NM

Jason Henry:

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 430928. 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. 430928 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 430928

PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Goff Dairy - Ctr. Pivot Well	W	10-31-11 09:00		430928-001
Goff Dairy - Ctr. Pivot Beg.	W	10-31-11 09:05		430928-002
Goff Dairy - Ctr. Pivot End	W	10-31-11 09:10		430928-003
MW-10	W	10-31-11 11:00		430928-004
Goff Diary Well	W	10-31-11 11:05		430928-005
JW Well	W	10-31-11 11:10		430928-006

CASE NARRATIVE



Client Name: PLAINS ALL AMERICAN EH&S Project Name: Lovington Gathering WTI



Project ID: 2006-142 Work Order Number: 430928 Report Date: 11-NOV-11 Date Received: 11/04/2011

Sample receipt non conformances and comments: None

Sample receipt non conformances and comments per sample:

None



Contact: Jason Henry Project Id: 2006-142

Certificate of Analysis Summary 430928 PLAINS ALL AMERICAN EH&S, Midland, TX **Project Name: Lovington Gathering WTI**



Date Received in Lab: Fri Nov-04-11 08:40 am

Report Date: 11-NOV-11

Project Location: Lea County.NM					Report Date:]	11-VOV-11	
				-	Project Manager: I	Brent Barron II	
	Lab Id:	430928-001	430928-002	430928-003	430928-004	430928-005	430928-006
Auching Demended	Field Id: C	Joff Dairy - Ctr. Pivot Well	Goff Dairy - Ctr. Pivot Beg.	Goff Dairy - Ctr. Pivot End	MW-10	Goff Diary Well	JW Well
naisanhay sisting	Depth:						
	Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
	Sampled:	Oct-31-11 09:00	Oct-31-11 09:05	Oct-31-11 09:10	Oct-31-11 11:00	Oct-31-11 11:05	Oct-31-11 11:10
BTEX by EPA 8021	Extracted:	Nov-10-11 12:55	Nov-10-11 12:55	Nov-10-11 12:55	Nov-10-11 12:55	Nov-10-11 12:55	Nov-10-11 12:55
	Analyzed:	Nov-10-11 15:53	Nov-10-11 16:16	Nov-10-11 16:39	Nov-10-11 17:02	Nov-10-11 17:25	Nov-10-11 17:48
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Benzene		ND 0.00100	ND 0.00100	00100 ⁻⁰ ON	0.0530 0.00100	ND 0:00100	ND 0.00100
Toluene		A 0.00200	ND 0.00200	ND 0.00200	ND 0.00200	ND 0.00200	ND 0.00200
Ethylbenzene		ND 0.00100	ND 0.00100	00100 ON	0.00140 0.00100	ND 0.00100	ND 0.00100
m_p-Xylenes		ND 0.00200	ND 0.00200	ND 0.00200	0.0944 0.00200	ND 0.00200	ND 0.00200
o-Xylene		ND 0.00100	ND 0.00100	ND 0.00100	0.00222 0.00100	ND 0.00100	ND 0:00100
Xylenes, Total		ND 0.00100	ND 0.00100	ND 0.00100	0.0966 0.00100	ND 0.00100	ND 0.00100
Total BTEX		ND 0.00100	ND 0.00100	ND 0.00100	0.151 0.00100	ND 0.00100	ND 0.00100

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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 in analytical report represent the best juggment of XENCO Laboratorics. XENCO Laboratorics assumes no responsibility and makes no warmany to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Brent Barron II

Odessa Laboratory Manager

Final 1.000

Flagging Criteria

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

RPD exceeded lab control limits. F

J The target analyte was positively identified below the quantitation limit and above the detection limit.

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.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit SDL Sample Detection Limit

PQL Practical Quantitation Limit MQL Method Quantitation Limit LOD Limit of Detection

LOQ Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

^ NELAC or State program does not offer Accreditation at this time.

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Final 1,000



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Vork Orders : 430928 Lab Batch #: 874502	, Sample: 430928-001 / SMP	Batc	Project II h: ¹ Matrix	D: 2006-142 :Water		
Units: mg/L	Date Analyzed: 11/10/11 15:53	SU	RROGATE RI	ECOVERY	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1.4-Difluorobenzene	· · · · · · · · · · · · · · · · · · ·	0.0275	· 0.0300	. 92	80-120	
4-Bromofluorobenzene		0.0299	0.0300	100	80-120	
Lab Batch #: 874502	Sample: 430928-002 / SMP	Bate	h: 1 Matrix	Water		
Units: mg/L	Date Analyzed: 11/10/11 16:16	SU	RROGATE RI	ECOVERY	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0256	0.0300	85	80-120	
4-Bromofluorobenzene		0.0277	0.0300	92	80-120	•
Lab Batch #: 874502	Sample: 430928-003 / SMP	MP Batch: ¹ Matrix: Water				
Units: mg/L	Date Analyzed: 11/10/11 16:39	SURROGATE RECOVERY STUDY				
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0266	0.0300	89	80-120	
4-Bromofluorobenzene		0.0262	0.0300	87	80-120	
Lab Batch #: 874502	Sample: 430928-004 / SMP	Batc	h: ¹ Matrix:	Water	L	
Units: mg/L	Date Analyzed: 11/10/11 17:02	SURROGATE RECOVERY STUDY				
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0246	0.0300	82	80-120	
4-Bromofluorobenzene		0.0276	0.0300	92	80-120	
Lab Batch #: 874502	Sample: 430928-005 / SMP	Batc	h: 1 Matrix:	Water		
Units: mg/L	Date Analyzed: 11/10/11 17:25	SU	RROGATE RI	ECOVERY S	STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0256	0.0300	85	80-120	L
4-Bromofluorobenzene		0.0277	0.0300	92	80-120	•

* Surrogate outside of Laboratory QC limits

** 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.


Project Name: Lovington Gathering WTI

Vork Orders : 430928 Lab Batch #: 874502	}, Sample: 430928-006 / SMP	Batcl	Project II h: 1 Matrix): 2006-142 : Water		
Units: mg/L	Date Analyzed: 11/10/11 17:48	SU	RROGATE RF	ECOVERY S	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1.4-Difluorobenzene	Anaryus	0.0270	0.0300	90	80-120	
4-Bromofluorobenzene		0.0279	0.0300	93	80-120	<u> </u>
Lab Batch #: 874502	Sample: 613959-1-BLK / B	LK Batcl	h: 1 Matrix	·Water	<u></u>	<u>. </u>
Units: mg/L	Date Analyzed: 11/10/11 15:08	SU	RROGATE RI	ECOVERY !	STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1.4-Difluorobenzene	/ Mary 03	0.0276	0.0300	92	80-120	ł
4-Bromofluorobenzene	· · ·	0.0283	0.0300	94	80-120	
Lah Batch #: 874502	Sample: 613959-1-BKS / B	KS Batcl	h l Matrix	•Water	<u></u> t	<u></u>
Units: mg/L	Date Analyzed: 11/10/11 13:36	SUI	RROGATE RF	ECOVERY S	STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0285	0.0300	95	80-120	
4-Bromofluorobenzene		0.0295	0.0300	98	80-120	[[
Lab Batch #: 874502	Sample: 613959-1-BSD / B	SD Batcl	n: 1 Matrix:	:Water	b	
Units: mg/L	Date Analyzed: 11/10/11 13:59	SUI	RROGATE RF	COVERY S	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount B}	Recovery %R	Control Limits %R	Flags
	Analytes					
4-Bromofluorobenzene		0.0286	0.0300	95	80-120	
		0.0300		100	80-120	<u></u>
Lab Batch #: 0/4302	Sample: 430/34-001 57 MIS	Baten	I: I Matrix:		TINV	
Units: mg/L	Date Analyzed: 11/10/11 19:18		KUGALE NE		, 100 i	
BTE	X by EPA 8021 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		0.0313	0.0300	104	80-120	i <u> </u>
	· · · · · · · · · · · · · · · · · · ·	t			4	

* Surrogate outside of Laboratory QC limits

** 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.



Project Name: Lovington Gathering WTI

Work Orders : 430928 Lab Batch #: 874502	, Sample: 430734-001 SD / N	1SD Bate	Project II ch: 1 Matrix	D: 2006-142 :Water		
Units: mg/L	Date Analyzed: 11/10/11 19:42	SU	RROGATE R	ECOVERY	STUDY	
BTE	X by EPA 8021 `Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0288	0.0300	96	80-120	
4-Bromofluorobenzene	,	0.0316	0.0300	105	80-120	

Surrogate outside of Laboratory QC limits
 ** Surrogates outside limits; data and surrogates confirmed by reanalysis
 *** Poor recoveries due to dilution
 Surrogate Recovery [D] = 100 * A / B

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



BS / BSD Recoveries



Project Name: Lovington Gathering WTI

1

Work Order #: 430928 Analyst: ASA Lab Batch ID: 874502 Units: mg/L

Date Prepared: 11/10/2011

Batch #: 1

Sample: 613959-1-BKS

Project ID: 2006-142 Date Analyzed: 11/10/2011 Matrix: Water

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BTEX by EPA 8021 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Btank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0945	95	0.100	0.0962	96	2	70-125	25	
Toluene	<0.00200	0.100	0.0993	66	0.100	0.101	101	2	70-125	25	
Ethylbenzene	<0.00100	0.100	0.107	107	0.100	0.110	110	3	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.218	109	0.200	0.223	112	2	70-131	25	
o-Xylene	<0.00100	0.100	0.107	107	0.100	0.110	110	3	71-133	25	

Relative Percent Difference RPD = 200*(C-F)/(C+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

Page 10 of 13

Form 3 - MS / MSD Recoveries

Project Name: Lovington Gathering WTI

Project ID: 2006-142

QC- Sample ID: 430734-001 S Date Prepared: 11/10/2011

Date Analyzed: 11/10/2011

Work Order #: 430928 Lab Batch ID: 874502

Matrix: Water .

Batch #:	1	Matrix: Wa
Analyst:	ASA	

Reporting Units: mg/L		M	ATRIX SPIKI	TAM / 3	RIX SPII	KE DUPLICA'	FE REC	VERY S	TUDY		
BTEX by EPA 8021 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	0.0662	0.100	0.146	80	0.100	0.153	87	s	70-125	25	
Toluene	0.0690	0.100	0.152	83	0.100	0.159	8	s	· 70-125	25	
Ethylbenzene	0.00873	0,100	0.101	92	0.100	0.106	-26	: 5	71-129 -	25	
m_p-Xylenes	0.0105	0.200	0.196	93	0.200	0.205	67	4	20-131	25	
o-Xylene	0.00503	0.100	0.0982	93	0.100	0.102	67	4	71-133	25	

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

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

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

Page 1.1 of 13

Xenco Laboratorie	es						126(Ode	Ň	CH Set 1-2	AIN 0 Ea	st OF	USU:	A Y ac	ECC	RD	AND	AN A	L YS	IS RI 432	563- 563-	EST 1800				
Project Manager. Ben J. Argu	jujo												Ā	oject	Nam	اتر	ving	i u	Sathe	ring	Ē			1	I
Company Name Basin Envli	ironmental Sei	vice Tec	chnolo	gies, LLC										Pro	ject	% #	06-1	2							ł
Company Address: P.O.Box 3	301					·	1					1		Proje	ct Lo	اد	a Co	nty. N	≥			·		.	1
City/State/Zip: Lovington,	, NM 88260						ĺ		ļ		[1			PO	2	<u>۲</u>	feng						l	i
Telephone No: (575)396-23	378				Fax No:	[5]	5) 39	5-142				1	Repo	t For	nat:	\mathbf{X}	Star	lard			КР			DES	
Sampler Signature: D4/C 04	An hat	ÿ			e-mail:	eja	rguijo	B a	sinen	v.con	_		1	L				Analy	ze Fo				Γ	ſ	
(lab use only) (lab use only)																٢۴	CLP	\mathbb{H}		A		┝		23 Jrs	
ORDER #: 19UT AU							Ē	eserva	tion 8-#	er Co	ntainer	5	Matrix	89		-	1	- AC	:	09				'8 1	ſ
(vino seu dsi) # 8AJ m n COD		dinning Depth	ding Depth	bəlqms2 əls()	belqms2 emiT	Field Filtered	ice		^t Os²н	HOPN	None	Other (Specify) DW=Drinking Water SL=Sludge	GW = Groundwater S=Soil/Solid	108 M2108 1.814 H91	8001 XT 2001 XT :H9T	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Volatiles. As Ag as Co Ci Fo Fig.	selitelovimeS	RCI	.м.я.о.и			PS (Pre-Schedule) 24	TAU + TAT DISONSIC
O / Goff Dairy - Ctr. Pivot	t Well			10/31/2011	0060	3	×	×					GW							×					×
ටළ Goff Dairy - Ctr. Pivot	t Beg.			10/31/2011	0905	3	×	×					ş					_	_	\mathbf{x}		-			~
O3 Goff Dairy - Ctr. Pivot	t End			10/31/2011	0910	m	×	Ť				\dashv	ß		-	{		-+		\mathbf{x}	-	-+	\rightarrow		×
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Goff Dairy Well				10/31/2011	1105	<u>_</u>	×	Å		-+			QV		-+	-+				\mathbf{x}		-+	_		×
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Page 12 of 13



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XENCO Laboratories

Atlanta, Boca Raton, Corpus Christi, Dallas Houston, Miami, Odessa, Philadelphia Document Title: Sample Receipt Checklist Document No.: SYS-SRC Revision/Date: No. 01, 5/27/2010 Effective Date: 6/1/2010 Page 1 of 1

Phoenix, San Antonio, Tampa

Prelogin / Nonconformance Report - Sample Log-In

Client: PG	uns	1
Date/Time: ///	4/11 8 40	
Lab ID # : .	430928	<u>ې</u>
Initials: + H		

Sample Receipt Checklist

1 Samples on ice?	Blue	(Water)	No	
2 Skipping container in good condition?	Vac	No	None	
2. Snipping container in good condition?	Tes		None	
3. Custody seals intact on shipping container (cooler) and bottles?	Yes	No	NVA	
4. Chain of Custody present?	(Yes)	No		
5. Sample instructions complete on chain of custody?	Yes	No		
6. Any missing / extra samples?	Yes	(No)		
7. Chain of custody signed when relinquished / received?	Yes	No		
8. Chain of custody agrees with sample label(s)?	Yes)	No		
9. Container labels legible and intact?	Yes	No		
10. Sample matrix / properties agree with chain of custody?	Yes	No ·		
11. Samples in proper container / bottle?	Yes	No		
12. Samples property preserved?	Yes	No	N/A	
13. Sample container intact?	Yes	No		
14. Sufficient sample amount for indicated test(s)?	Yes	No		
15. All samples received within sufficient hold time?	Yes	No		
16. Subcontract of sample(s)?	Yes	No	(N/A)	
17. VOC sample have zero head space?	(Yes)	No	N/A	
18. Cooler 1 No. Cooler 2 No. Cooler 3 No.	Cooler 4 N	0.	Cooler 5 No.	
Ibs 0.5 °C Ibs °C ibs °C	ibs	°C	lbs	°C

Nonconformance Documentation

Contact:_____Contacted by:_____Date/Time:______ Regarding: ______Corrective Action Taken: _______Corrective Action Taken: ________Corrective Action Taken: ________Corrective Action Taken: _________Corrective Action Taken: _________Corrective Action Taken: ____________

Dinitial and Backup Temperature confirm out of temperature conditions

Client understands and would like to proceed with analysis

Analytical Report 431401

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

23-NOV-11

Collected By: Client



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Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002) Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054) New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610) Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046): Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85) Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tucson (EPA Lab code: AZ000989): Arizona (AZ0758)



23-NOV-11

Project Manager: Jason Henry PLAINS ALL AMERICAN EH&S 1301 S. COUNTY ROAD 1150 Midland, TX 79706

Reference: XENCO Report No: 431401 Lovington Gathering WTI Project Address: Lea County, NM

Jason Henry:

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 431401. 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. 431401 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 431401



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-1	W	11-09-11 11:45		431401-001
MW-3	· W	11-09-11 12:50		431401-002
MW-4	W	11-09-11 11:25		431401-003
MW-5	W	11-09-11 12:35		431401-004
MW-6	W	11-09-11 12:55		431401-005
MW-7	W	11-09-11 15:05		431401-006
MW-8	W	11-09-11 13:20		431401-007
MW-9	W	11-09-11 16:25		431401-008
MW-10	• W	11-09-11 13:35		431401-009
Goff Dairy-Ctr. Pivot Well	W	11-09-11 14:00		431401-010
Goff Dairy-Ctr. Pivot Beg.	W	11-09-11 14:20		431401-011
Goff Dairy-Ctr. Pivot End	W	11-09-11 14:40		431401-012
Goff Dairy Well	W	11-09-11 13:45		431401-013
JW Well	W	11-09-11 13:50		431401-014



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S Project Name: Lovington Gathering WTI



 Project ID:
 2006-142

 Work Order Number:
 431401

Report Date: 23-NOV-11 Date Received: 11/11/2011

Sample receipt non conformances and comments: None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-875271 BTEX by EPA 8021 SW8021BM

Batch 875271, Benzene recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate.

Samples affected are: 431401-011, -012, -013, -007, -010, -014, -001, -002, -003, -004, -008, - 009.

The Laboratory Control Sample for Benzene is within laboratory Control Limits



Certificate of Analysis Summary 431401 PLAINS ALL AMERICAN EH&S, Midland, TX Project Name: Lovington Gathering WTI



Date Received in Lab: Fri Nov-11-11 01:15 pm Report Date: 23-NOV-11

Project Location: Lea County, NM					Keport Date: 2	3-NUV-11	
					Project Manager: H	Srent Barron II	
	Lab Id:	431401-001	431401-002	431401-003	431401-004	431401-005	431401-006
Auchinic Democrad	Field Id:	I-WM	MW-3	MW-4	MW-5	MW-6	MW-7
naisanhay sissinuv	Depth:	=					
	Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
	Sampled:	Nov-09-11 11:45	Nov-09-11 12:50	Nov-09-11 11:25	Nov-09-11 12:35	Nov-09-11 12:55	Nov-09-11 15:05
BTEX by EPA 8021	Extracted:	Nov-18-11 15:00	Nov-18-11 15:00	Nov-18-11 15:00	Nov-18-11 15:00	Nov-22-11 11:00	Nov-22-11 11:00
	Analyzed:	Nov-20-11 23:52	Nov-21-11 00:15	Nov-21-11 00:38	Nov-21-11 01:01	Nov-22-11 14:22	Nov-22-11 14:45
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Benzene		ND 0.00100	0.00211 0.00100	ND 0.00100	ND 0.00100	0.00356 0.00100	ND 0.00100
Toluene	(ND 0.00200	ND 0.00200	ND 0.00200	ND 0.00200	ND 0.00200	ND 0.00200
Ethylbenzene		ND 0.00100	ND 0.00100	ND 0.00100	00100 ⁻⁰ 00100	ND 0.00100	ND 0.00100
m_p-Xylenes		ND 0.00200	0.00231 0.00200	ND 0.00200	ND 0.00200	0.0388 0.00200	ND 0.00200
o-Xylene		ND 0.00100	0.00114 0.00100	ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100
Xylenes, Total		ND 0.00100	0.00345 0.00100	ND 0.00100	ND 0.00100	0.0388 0.00100	ND 0.00100
Total BTEX		ND 0.00100	0.00556 0.00100	ND 0.00100	ND 0.00100	0.0424 0.00100	ND 0.00100

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

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Brent Barron II Odessa Laboratory Manager

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Certificate of Analysis Summary 431401 PLAINS ALL AMERICAN EH&S, Midland, TX Project Name: Lovington Gathering WTI



Date Received in Lab: Fri Nov-11-11 01:15 pm Report Date: 23-NOV-11

Project Location: Lea County, NM					Report Date:	23-NOV-11	
					Project Manager:]	Brent Barron II	
	Lab Id:	431401-007	431401-008	431401-009	431401-010	431401-011	431401-012
Anolysis Dornacted	Field Id:	MW-8	6-MW	MW-10	Goff Dairy-Ctr. Pivot Well	Goff Dairy-Ctr. Pivot Beg.	Goff Dairy-Ctr. Pivot End
noiconhour ciclimit	Depth:						
	Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
	Sampled:	Nov-09-11 13:20	Nov-09-11 16:25	Nov-09-11 13:35	Nov-09-11 14:00	Nov-09-11 14:20	Nov-09-11 14:40
BTEX by EPA 8021	Extracted:	Nov-18-11 15:00	Nov-18-11 15:00	Nov-18-11 15:00	Nov-18-11 15:00	Nov-18-11 15:00	Nov-18-11 15:00
	Analyzed:	Nov-21-11 03:40	Nov-21-11 04:03	Nov-21-11 04:26	Nov-21-11 04:49	Nov-21-11 05:11	Nov-21-11 05:34
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Benzene		ND 0.00100	0.00179 0.00100	ND 0.00100	00100 ⁻⁰ 01000	ND 0.00100	ND 0.00100
Toluene		*ND 0.00200	ND 0.00200	ND 0.00200	ND 0.00200	ND 0.00200	ND 0.00200
Ethylbenzene		ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100
m p-Xylenes		ND 0.00200	0.00349 0.00200	ND 0.00200	ND 0.00200	ND 0.00200	ND 0.00200
o-Xylene		ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100
Xylenes, Total		00100 ^{.0} UN	0.00349 0.00100	ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100
Total BTEX		ND 0.00100	0.00528 0.00100	ND 0.00100	ND 0.00100	ND 0.00100	00100 ⁻⁰ 0.00100

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Brent Barron II Odessa Laboratory Manager



Certificate of Analysis Summary 431401 PLAINS ALL AMERICAN EH&S, Midland, TX Project Name: Lovington Gathering WTI



Date Received in Lab: Fri Nov-11-11 01:15 pm Report Date: 23-NOV-11

Project Location: Lea County, NM				Report Date: 23-NOV-11	
				Project Manager: Brent Barron II	
	Lab Id:	431401-013	431401-014		
America Docusedad	Field Id:	Goff Dairy Well	JW Well		
naisanhay sistanity	Depth:				
	Matrix:	WATER	WATER		
	Sampled:	Nov-09-11 13:45	Nov-09-11 13:50	 	
BTEX by EPA 8021	Extracted:	Nov-18-11 15:00	Nov-18-11-15:00		
	Analyzed:	Nov-21-11 05:56	Nov-21-11 06:19		
	Units/RL:	· mg/L RL	mg/L RL		
Benzene		ND 0.00100	ND 0.00100		
Toluene		ND 0.00200	ND 0.00200		
Ethylbenzene		ND 0.00100	001000 CIN		
m_p-Xylenes		ND 0.00200	ND 0.00200		
o-Xylene		ND 0.00100	ND 0.00100		
Xylenes, Total		ND 0.00100	ND 0.00100		
Total BTEX		ND 0.00100	ND 0.00100		

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Flagging Criteria

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

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.
- JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit SDL Sample Detection Limit

LOD Limit of Detection

PQL Practical Quantitation Limit MQL Method Quantitation Limit

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

^ NELAC or State program does not offer Accreditation at this time.

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Project Name: Lovington Gathering WTI

Vork Orders: 431401	someter 431401-001 / SMP	Bata	Project IF): 2006-142	·							
Lab balch #: 015211 Units: mg/L	Date Analyzed: 11/20/11 23:52	SU	RROGATE RI	ECOVERY f	STUDY							
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags						
	Analytes		<u> </u>		<u> </u>							
1,4-Difluorobenzene		0.0281	0.0300	94	80-120	·						
4-Bromofluorobenzene	· · · ·	0.0263	0.0300	88	80-120							
Lab Batch #: 875271	Sample: 431401-002 / SMP	Batch	a: 1 Matrix:	Water								
Units: mg/L	Date Analyzed: 11/21/11 00:15	SU)	RROGATE RE	COVERY S	STUDY							
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags						
1,4-Difluorobenzene		0.0269	0.0300	90	80-120	, I						
4-Bromofluorobenzene		0.0264	0.0300	88	80-120							
Lab Batch #: 875271	Sample: 431401-003 / SMP	Batel	h: 1 Matrix:	Water	·							
Units: mg/L	Date Analyzed: 11/21/11 00:38	SU	RROGATE RF	COVERY S	STUDY							
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags						
· .	Analytes		<u> </u>	[D]		L						
1,4-Difluorobenzene		0.0264	0.0300	88	80-120							
4-Bromofluorobenzene		0.0250	0.0300	83	80-120							
Lab Batch #: 875271	Sample: 431401-004 / SMP	Batch: 1 Matrix: Water										
Units: mg/L	Date Analyzed: 11/21/11 01:01	SUI	RROGATE RE	COVERY S	STUDY							
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags						
1,4-Difluorobenzene		0.0278	0.0300	93	80-120	ı						
4-Bromofluorobenzene		0.0268	0.0300	89	80-120	·						
Lab Batch #: 875271	Sample: 431401-007 / SMP	Batch	h: 1 Matrix:	:Water								
Units: mg/L	Date Analyzed: 11/21/11 03:40	SU	RROGATE RF	COVERY S	STUDY							
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags						
1.4-Difluorobenzene		0.0320	0.0300	107	80-120							
4-Bromofluorobenzene		0.0254	0.0300	85	80-120							

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution



Project Name: Lovington Gathering WTI

Vork Orders : 431401 Lab Batch #: 875271	, Sample: 431401-008 / SMP	Batc	Project II h: 1 Matrix	D: 2006-142 : Water		
Units: mg/L	Date Analyzed: 11/21/11 04:03	, SU	RROGATE RI	ECOVERY S	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]	1 1	
1,4-Difluorobenzene		0.0265	0.0300	88	80-120	
4-Bromofluorobenzene		0.0268	0.0300	89	80-120	
Lab Batch #: 875271	Sample: 431401-009 / SMP	Bate	h: 1 Matrix	:Water		
Units: mg/L	Date Analyzed: 11/21/11 04:26	SU	RROGATE RI	ECOVERY	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes		2.02.00			
A.Bromofluorobenzene	· · · · · · · · · · · · · · · · · · ·	0.0276	0.0300	92	80-120	_
4-DIOIIIOHUOIOOCHZCHC		0.0207	0.0300	07	80-120	_
Lab Batch #: 8/52/1	Sample: 431401-010 / SMP	Bate	h: Matrix	Water	TINV	
Units: mg/L	Date Analyzed: 11/21/11 04:49		RRUGAIE N	COVERT A	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			נען		
1,4-Difluorobenzene		0.0276	0.0300	92	80-120	
4-Bromotluorobenzene	<u>_</u>	0.0253	0.0300	84	80-120	
Lab Batch #: 875271	Sample: 431401-011 / SMP	Batc	h: 1 Matrix	:Water		
Units: mg/L	Date Analyzed: 11/21/11 05:11	SU	RROGATE RI	ECOVERY S	STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	,	0.0280	0.0300	93	80-120	
4-Bromofluorobenzene		0.0260	0.0300	87	80-120	
Lab Batch #: 875271	Sample: 431401-012 / SMP	Batc	h: 1 Matrix:	:Water	<u> </u>	
Units: mg/L	Date Analyzed: 11/21/11 05:34	SU	RROGATE RI	ECOVERY S	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
1.4.Difluorobenzene	Analytes	0.0282	0.0300	رما 04	80.120	
4-Bromofluorobenzene		.0.0262	0.0300	9 4 89	80-120	
4-BIOINOTROTOGENZENC	· · · · · · · · · · · · · · · · · · ·	·0.0207	0.0300	07	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution



Project Name: Lovington Gathering WTI

Vork Orders: 431401	,	_	Project II	D: 2006-142				
Lab Batch #: 8/32/1	Sample: 431401-0137 SMP	Batel	h: Matrix	: Water	STUDY			
Units: mg/L BTE	Date Analyzed: 11/21/11 05:56 X by EPA 8021	Amount Found [A]	True Amount IBl	Recovery %R	Control Limits %R	Flags		
	Analytes	()	[2]	[D]				
1,4-Difluorobenzene		0.0282	0.0300	94	80-120			
4-Bromofluorobenzene		0.0264	0.0300	88	80-120			
Lab Batch #: 875271	Sample: 431401-014 / SMP	Batel	h: ¹ Matrix	:Water				
Units: mg/L	Date Analyzed: 11/21/11 06:19	SU	RROGATE RI	ECOVERY	STUDY			
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits ·%R	Flags		
1 4-Difluorobenzene	Analytes	0.0278	0.0200	02	80.120			
4-Bromofluorobenzene	· · · · · · · · · · · · · · · · · · ·	0.0278	0.0300	93	80-120			
		0.0204	0.0300	00	80-120			
Lab Batch #: 8/3438	Sample: 431401-005 / SMP	Batel	h: Matrix	:Water	OTHINK			
Units: mg/L	Date Analyzed: 11/22/11 14:22		KRUGATE RI					
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
1,4-Difluorobenzene		0.0293	0.0300	98	80-120			
4-Bromofluorobenzene	· · · ·	0.0278	0.0300	93	80-120			
Lab Batch #: 875458	Sample: 431401-006 / SMP	Batch: 1 Matrix: Water						
Units: mg/L	Date Analyzed: 11/22/11 14:45	SU	RROGATE RI	ECOVERY	STUDY			
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
1,4-Difluorobenzene		0.0283	0.0300	94	80-120			
4-Bromofluorobenzene		0.0278	0.0300	. 93	80-120			
Lab Batch #: 875271	Sample: 614388-1-BLK / BI	.K Batcl	h: 1 Matrix	:Water				
Units: mg/L	Date Analyzed: 11/20/11 21:13	SU	RROGATE RI	ECOVERY	STUDY			
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
1,4-Difluorobenzene		0.0273	0.0300	91	80-120	· ·		
4-Bromofluorobenzene		0.0256	0.0300	85	80-120	····		

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution



Project Name: Lovington Gathering WTI

ork Orders : 431401 Lab Batch #: 875458	, Sample: 614496-1-BLK / B	LK Batc	Project I h: 1 Matrix	D: 2006-142 : Water							
Units: mg/L	Date Analyzed: 11/22/11 13:36	SU	RROGATE R	ECOVERY	STUDY						
BTE	X by EPA 8021	Amount Found [A]	True Amount . [B]	Recovery %R	Control Limits %R	Flags					
	Analytes			[D]							
1,4-Difluorobenzene		0.0287	0.0300	96	80-120						
4-Bromofluorobenzene	· · ·	0.0282	0.0300	94	80-120						
Lab Batch #: 875271	Sample: 614388-1-BKS / B	KS Bate	h: ¹ Matrix	Water							
Units: mg/L	Date Analyzed: 11/20/11 19:42	SU	RROGATE R	ECOVERY	STUDY						
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags					
1,4-Difluorobenzene	·····	0.0288	0.0300	96	80-120 ·						
4-Bromofluorobenzene	·····	0.0285	0.0300	95	80-120						
Lab Batch #: 875458	Sample: 614496-1-BKS/B	KS Batel	h: 1 Matrix	·Water		1					
Units: mg/L	Date Analyzed: 11/22/11 12:03	SU	RROGATE R	ECOVERY	STUDY						
BTE	X by EPA 8021	Amount Found [A]	True Amount B	Recovery %R	Control Limits %R	Flags					
	Analytes	• •		[D]							
1,4-Difluorobenzene		0.0278	0.0300	93	80-120						
4-Bromofluorobenzene		0.0277	0.0300	92	80-120						
Lab Batch #: 875271	Sample: 614388-1-BSD / B	USD Batch: 1 Matrix: Water									
Units: mg/L	Date Analyzed: 11/20/11 20:05	SU	RROGATE R	ECOVERY	STUDY						
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags					
	Analytes				-						
1,4-Difluorobenzene		0.0293	0.0300	98	80-120						
+-Bromotiuorobenzene		0.0304	0.0300	101	80-120						
Jab Batch #: 875458	Sample: 614496-1-BSD / B	SD Batcl	h: ¹ Matrix	:Water							
Units: mg/L	Date Analyzed: 11/22/11 12:26	SU	RROGATE R	ECOVERY S	STUDY	-					
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags					
	Analyws										
14 Difluorobergono		0.0200	0.0300	01	00.100						

Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis

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*** Poor recoveries due to dilution



Project Name: Lovington Gathering WTI

Vork Orders : 431401 Lab Batch #: 875271 Units: mg/L	, Sample: 431400-001 S / MS Date Analyzed: 11/21/11 01:23	S Bate	Project II h: ¹ Matrix JRROGATE RI	D: 2006-142 Water ECOVERY S	STUDY							
BTE	CX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags						
1,4-Difluorobenzene	· · · ·	0.0292	0.0300	97	80-120							
4-Bromofluorobenzene	-	0.0320	0.0300	107	80-120							
Lab Batch #: 875458	Sample: 431537-004 S / MS	5 Bate	:h: ¹ Matrix	Water								
Units: mg/L	Date Analyzed: 11/22/11 17:48	SU	RROGATE RI	ECOVERY S	STUDY							
BTE	CX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags						
1,4-Difluorobenzene	t teach introduction of the second	0.0286	0.0300	95	80-120							
4-Bromofluorobenzene		0.0284	0.0300	95	80-120							
Lab Batch #: 875271	Sample: 431400-001 SD / N	MSD Batch: 1 Matrix:Water										
Units: mg/L	Date Analyzed: 11/21/11 01:46	SURROGATE RECOVERY STUDY										
BTE	CX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags						
1,4-Difluorobenzene		0.0287	0.0300	96	80-120							
4-Bromofluorobenzene	· · ·	0.0286	0.0300	95	80-120							
Lab Batch #: 875458	Sample: 431537-004 SD / N	ISD Bate	h: 1 Matrix	Water								
Units: mg/L	Date Analyzed: 11/22/11 18:11	SU	RROGATE RI	ECOVERY S	STUDY							
BTE	X by EPA 8021 Analytes	Amount Foùnd [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags						
1,4-Difluorobenzene		0.0294	0.0300	98	80-120							
4-Bromofluorobenzene		0.0296	0.0300	· 99	80-120							

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



BS / BSD Recoveries



Project Name: Lovington Gathering WTI

Work Order #: 431401 Lab Batch ID: 875271 Analyst: ASA

Sample: 614388-1-BKS

Date Prepared: 11/18/2011 Batch #: 1

Project ID: 2006-142 Date Analyzed: 11/20/2011 Matrix: Water **BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY**

Units: mg/L			BLANI	K /BLANK S	PIKE / B	LANK S	PIKE DUPL	JCATE I	LECOVE	RY STUD	Х	
BTEX by EP	A 8021	Blank Sample Result	Spike Added	Blank Spike	Blank Spike	Spike Added	Blank Spike	Blk. Spk Dup.	RPD	Control Limits	Control Limits	Flag
Analytes			[B]	Result [C]	8% [D]	[3]	Duplicate Result [F]	%R [G]	%	%R	%RPD	
Benzene		<0.00100	0.100	0.104	104	0.100	0.111	111	7	70-125	25	
Toluene		<0.00200	0.100	0.103	103	0.100	0.112	112	80	70-125	25	
Ethylbenzene		<0.00100	0.100	0.106	106	0.100	0.115	115	8	71-129	25	
m_p-Xylenes		<0.00200	0.200	0.204	102	0.200	0.222	111	8	70-131	25	
o-Xylene	-	<0.00100	0.100	0.105	105	0.100	0.114	114	8	71-133	25	
Analyst: ASA		Da	te Prepare	ed: 11/22/201	1			Date Ar	alyzed: 1	1/22/2011		
Lab Batch ID: 875458	Sample: 614496-1-B	KS (S)	Batch	1 #: 1					Matrix: V	Vater		

Units: mg/L

BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021	Blank Sample Result	Spike Added	Blank Spike	Blank Spike	Spike Added	Blank Spike	Blk. Spk Dup.	UJY	Control Limits	Control Limits	Flag
Analytes	[Y]	[8]	Result [C]	%R [D]	[3]	Duplicate Result [F]	%R [G]	· %	%R	%RPD	·
Benzene	<0.00100	0.100	0.107	107	0.100	0.107	107	0	70-125	25	
Toluene	<0.00200	0.100	0.109	109	0.100	0.110	110		70-125	25	
Ethylbenzene	<0.00100	0.100	0.114	114	0.100	0.113	113	1	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.229	115	0.200	0.225	113	2	70-131	25	
o-Xylene	<0.00100	0.100	0.113	113	0.100	0.113	113	0	71-133	25	

Relative Percent Difference RPD = 200*(C-F)/(C+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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Form 3 - MS / MSD Recoveries

Project Name: Lovington Gathering WTI



Work Order #: 431401

Date Analyzed: 11/21/2011 Lab Batch ID: 875271 **Reporting Units: mg/L**

Analyst: Batch QC- Sample ID: 431400-001 S Date Prepared: 11/18/2011

Project ID: 2006-142

Water	
Matrix:	
-	ASA
#	st:

Reporting Units: mg/L		N.	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	DVERY S	STUDY		
BTEX by EPA 8021	Parent Sample	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits ·	Control Limits	Flag
Analytes	[A]	Added [B]	<u>5</u>	B]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Benzene	0.0541	0.100	0.190	136	0.100	0.188	134	1	70-125	25	x
Toluene	0.0197	0.100	0.144	124	0.100	0.144	124	0	70-125	25	
Ethylbenzene	0.0110	0.100	0.133	122	0.100	0.136	125 -	2	71-129	25 -	
m_p-Xylenes	0.0128	0.200	0.241	114	0.200	0.250	119	4	70-131	25	
o-Xylene	0.00594	0.100	0.126	120	0.100	0.127	121	ŀ	71-133	25	
Lab Batch ID: 875458 Date Analyzed: 11/22/2011	QC- Sample ID: Date Prepared:	431537 11/22/2	-004 S 011	Ba	tch #: alyst:	l Matris ASA	:: Water				
Renorting Units: mo/l			ATDIV ODII			THE PILE OF	Car au				ſ

Reporting Units: mg/L		M	ATRIX SPIKI	3 / MATI	RIX SPII	KE DUPLICA'	re reco	VERY S	STUDY		
BTEX by EPA 8021	Parent Sample	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flae
Analytes	Result [A]	Added [B]	C	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Benzene	<0.00100	0.100	0.101	101	0.100	0.104	104	3	70-125	25	
Toluene	<0.00200	0.100	0.101	101	0.100	0.104	104	e	70-125	25	
Ethylbenzene	<0.00100	0.100	0.105	105	0.100	0.109	109	4	71-129	25	
m p-Xylenes	<0.00200	0.200	0.209	105	0.200	0.215	.108	, M	70-131	25	
o-Xylene	<0.00100	0.100	0.104	104	0.100	0.108	108	4	71-133	25	

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

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

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

Final 1.000

Page 15 of 18

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Final 1.000



XENCO Laboratories Atlanta, Boca Raton, Corpus Christi, Dallas Houston, Miami, Odessa, Philadelphia Phoenix, San Antonio, Tampa Document Title: Sample Receipt Checklist Document No.: SYS-SRC Revision/Date: No. 01, 5/27/2010 Effective Date: 6/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

client: Bas	sin Env.	/ Plains	
Date/Time:	11.11.11	13:15	
Lab ID #: 43	51401	· · · · · · · · · · · · · · · · · · ·	
Initials:	- An	<u> </u>	

Sample Receipt Checklist

1. Samples on ice?	Blue	Water	No	
2. Shipping container in good condition?		No	None	
3. Custody seals intact on shipping container (cooler) and tootiles	Tes	No	N/A	
4. Chain of Custody present?	Yes	No		
5. Sample instructions complete on chain of custody?	Cres	No		
6. Any missing / extra samples?	Yes	No		
7. Chain of custody signed when relinquished / received?	Tes	No		
8. Chain of custody agrees with sample label(s)?	Yes	No		
9. Container labels legible and intact?	Yes	No		·
10. Sample matrix / properties agree with chain of custody?	Yes	No		
11. Samples in proper container / bottle?	Tes	No		
12. Samples property preserved?	Yes	No	N/A	
13. Sample container intact?	Yes	Ňo		
14. Sufficient sample amount for indicated test(s)?	Yes	No		
15. All samples received within sufficient hold time?	Yes	No		
16. Subcontract of sample(s)?	Yes	No	(N/A)	
17. VOC sample have zero head space?	Yes	No	N/A	
18. Cooler 1 No. Cooler 2 No. Cooler 3 No.	Cooler 4 I	No.	Cooler 5 No.	
ibs 5,5 °c ibs °c ibs	°C Ib	s °C	ibs	°C

Nonconformance Documentation

Contact: _____Contacted by: _____Date/Time: ______

Regarding: ______/
Corrective Action Taken: ______/
Corrective Action Taken: ______/
Check all that apply: □Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.2.1.
□Initial and Backup Temperature confirm out of temperature conditions

Client understands and would like to proceed with analysis

Analytical Report 433392

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

22-DEC-11

Collected By: Client



Celebrating 20 Years of commitment to excellence in Environmental Testing Services



12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002) Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054) New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610) Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046): Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85) Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00989): Arizona (AZ0758)



22-DEC-11

Project Manager: Jason Henry PLAINS ALL AMERICAN EH&S 1301 S. COUNTY ROAD 1150 Midland, TX 79706

Reference: XENCO Report No: 433392 Lovington Gathering WTI Project Address: Lea County, NM

Jason Henry:

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 433392. 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. 433392 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 433392



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-9	W	12-14-11 08:58		433392-001
MW-10	W	12-14-11 09:25		433392-002
Goff Dairy - Ctr. Pivot Well	W	12-14-11 11:20		433392-003
Goff Dairy Well	, W .	12-14-11 12:45		433392-004





Client Name: PLAINS ALL AMERICAN EH&S



Project Name: Lovington Gathering WTI

Project ID: 2006-142 Work Order Number: 433392 Report Date: 22-DEC-11 Date Received: 12/14/2011

Sample receipt non conformances and comments: None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-877549 BTEX by EPA 8021 SW8021BM

Batch 877549, 4-Bromofluorobenzene recovered below QC limits . Matrix interferences is suspected; data not confirmed by re-analysis Samples affected are: 433392-004,433392-003.

私 · / 月 · 相

Certificate of Analysis Summary 433392 PLAINS ALL AMERICAN EH&S, Midland, TX Project Name: Lovington Gathering WTI



Date Received in Lab: Wed Dec-14-11 04:15 pm Report Date: 22-DEC-11

Analysis Requested Lab Id: 433392-001 Analysis Requested Field Id: MW-9 Depth: Depth: WATER Marrix: WATER Sampled: BTEX by EPA 8021 Extracted: Dec-20-11 12:0 Benzene Units/RL: mg/L Toluene ND 00 Ethylbenzene ND 00	433392-001 MW-9 WATER Dec-14-11 08:58 Dec-20-11 12:02 F	433392-002 MW-10 G WATER we-14-11 09:25 bec-20-11 12:02	433392-003 off Dairy - Ctr. Pivot Well WATER Dec-14-11 11:20	Project Manager: Brent Barron II 433392-004 Goff Dairy Well WATER Dec-14-11 12:45
Analysis Requested Lab Id: 433392-001 Analysis Requested Pepth: MW-9 Depth: Marrix: WATER Sampled: Dec-14-11 08:5 BTEX by EPA 8021 Extracted: Dec-20-11 12:0 Benzene Units/RL: mg/L Toluene ND<00 Ethylbenzene ND<00	433392-001 MW-9 MW-9 WATER Dec-14-11 08:58 Dec-20-11 12:02 E	433392-002 MW-10 G WATER wATER ec-14-11 09:25 bec-20-11 12:02	433392-003 off Dairy - Ctr. Pivot Well WATER Dec-14-11 11:20	433392-004 Goff Dairy Well WATER Dec-14-11 12:45
Analysis RequestedField Id:MW-9Analysis RequestedDepth:MW-9Amarix:MATERMATERSampled:Dec-14-11 08:5BTEX by EPA 8021Extracted:Dec-20-11 12:0Analyzed:Dec-20-11 15:4Unic/RL:mg/LBenzeneUnic/RL:mg/LND<00TolueneND00EthylbenzeneND<00EthylbenzeneIIND<00EthylbenzeneIND00	MW-9 WATER Dec-14-11 08:58 E Dec-20-11 12:02 E	MW-10 G WATER ec-14-11 09:25 ec-20-11 12:02	off Dairy - Ctr. Pivot Well WATER Dec-14-11 11:20	Goff Dairy Well WATER Dec-14-11 12:45
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Analyzed: Dec-20-11 15:4 Benzene Units/RL: mg/L Toluene ND 00 Ethylbenzene ND 00	T. 20 11 16.47		Dec-20-11 12:02	Dec-20-11 12:02
Units/RL: mg/L Benzene ND 0.0 Toluene ND 0.0 Ethylbenzene ND 0.0	Dec-20-11 13:40 L	ec-20-11 16:08	Dec-20-11 16:31	Dec-20-11 16:56
Benzene ND 0.0 Toluene ND 0.0 Ethylbenzene ND 0.0	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Tolucane ND 0.0 Ethylbenzene ND 0.0	001000 ON	0.00846 0.00100	ND 0.00100	ND 0.00100
Ethylbenzene ND 0.0	ND 0.00200	0.00226 0.00200	ND 0.00200	⁻ ND 0.00200
	001000 QN	ND 0.00100	ND 0.00100	0.00111 0.00100
m_p-Xylenes ND 0.0	ND 0.00200	0.0261 0.00200	ND 0.00200	ND 0.00200
o-Xylene ND 0.0	00100 ⁻⁰	ND 0.00100	ND 0.00100	ND 0.00100
Xylenes, Total ND 0.0	001000 ON	0.0261 0.00100	ND 0.00100	ND 0.00100
Total BTEX ND 0.0	001000 ON	0.0368 0.00100	ND 0.00100	0.00111 0.00100

This smalytical 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 XENO Laboratories. XENO Laboratorics assumes to responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invicced for this work order utless obterwise agreed to in writing. Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Brent Barron II Odessa Laboratory Manager



Flagging Criteria

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

MQL Method Quantitation Limit

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.
- JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit SDL Sample Detection Limit

LOD Limit of Detection

DL Method Detection Limit

POL Practical Quantitation Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

^ NELAC or State program does not offer Accreditation at this time.

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Project Name: Lovington Gathering WTI

Vork Orders : 433392	", Samula, 433392-001 / SMP	Botal	Project IC): 2006-142 Water		
Lab balch #: 0775-7	Date Analyzed: 12/20/11 15:46	SUI	RROGATE RF	ECOVERY	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R 1D1	Control Limits %R	Flags
	Analytes					I
1,4-Ditiuorobenzene		0.0258	0.0300	80	80-120	·
4-Bromofluorobenzene		0.0241	<u>:</u> 0.0300	80	80-120	<u></u>
Lab Batch #: 877549	Sample: 433392-002 / SMP	Batch	1: 1 Matrix:	Water		
Units: mg/L	Date Analyzed: 12/20/11 16:08	SUP	ROGATE RE	COVERY S	STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1.4-Difluorobenzene		0.0255	0.0300	85	80-120	[
4-Bromofluorobenzene	· · · · · · · · · · · · · · · · · · ·	0.0241	0.0300	80	80-120	ſ
L	 Samula: 433392-003 / SMP	Batel		Water	<u>k</u> t	
Units: mg/L	Date Analyzed: 12/20/11 16:31	SUI	RROGATE RI	ECOVERY	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R ⁻ [D]	Control Limits %R	Flags
1 4-Difluorobenzene		0.0246	0.0300	82	80-120	I
4-Bromofluorobenzene	· · ·	0.0216	0.0300	72	80-120	*
Lah Ratch #: 877549	 Sample: '433392-004 / SMP	Batch	h. 1 Matrix:	Water	L	
Units: mg/L	Date Analyzed: 12/20/11 16:56	SUI	RROGATE RI	ECOVERY !	STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0247	0.0300	82	80-120	
4-Bromofluorobenzene	t	0.0235	0.0300	78	80-120	*
Láb Batch #: 877549	Sample: 615713-1-BLK / BJ	LK Batcl	h: 1 Matrix:	:Water	<u> </u>	****
Units: mg/L	Date Analyzed: 12/20/11 14:45	SUI	RROGATE RF	COVERY S	STUDY	·
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
(4 D: 0	Analytes		0.0200		90.120	
1,4-Difluorobenzene		0.0293	0.0300	98	80-120	h
4-Bromofluorobenzene		0.0247	1 0.0300 j	82	80-120	L

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution



Project Name: Lovington Gathering WTI

Vork Orders : 433392	2, Sample: 615713-1-BKS/F	KS Bate	Project II	D: 2006-142	,	
Units: mg/L	Date Analyzed: 12/20/11 13:13	SU SU	RROGATE R	ECOVERY	STUDY	
BTE	CX by EPA 8021 Analytes	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		0.0283	0.0300	94	80-120	I
Lab Batch #: 877549	Sample: 615713-1-BSD / B	SD Bate	h: ¹ Matrix	Water		
Units: mg/L	Date Analyzed: 12/20/11 13:36	SU'	RROGATE RJ	ECOVERY !	STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0317	0.0300	106	80-120	1
4-Bromofluorobenzene		0.0292	0.0300	97	80-120	i
Lab Batch #: 877549	Sample: 433392-001 S / M ⁴	S Batc'	h: 1 Matrix	Water		
Units: mg/L	Date Analyzed: 12/20/11 19:36	SU'	RROGATE RJ	ECOVERY S	STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0272	0.0300	91	80-120	i
4-Bromofluorobenzene		0.0275	0.0300	92	80-120	
Lab Batch #: 877549	Sample: 433392-001 SD / M	MSD Batc	h: 1 Matrix	:Water	<u> </u>	
Units: mg/L	Date Analyzed: 12/20/11 19:58	SU	RROGATE RI	ECOVERY S	STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0278	0.0300	93	80-120	 I
4-Bromofluorobenzene		0.0275	0.0300	92	80-120	í

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



BS / BSD Recoveries



Project Name: Lovington Gathering WTI

Work Order #: 433392 Analyst: ASA

Lab Batch ID: 877549

Date Prepared: 12/20/2011 Batch #: 1

Sample: 615713-1-BKS

Project ID: 2006-142 Date Analyzed: 12/20/2011 Matrix: Water

BLANK / BLANK SPIKE / BLANK SPIKE DI PLICATE RECOVERY STUDY

Units: mg/L		BLAN	K /BLANK S	PIKE / E	ILANK S	PIKE DUPL	ICATE 1	RECOVE	RY STUD	Y	
BTEX by EPA 8021	Blank Sample Result [A]	Spike Added	Błank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes		[B]		[0]	[E]	Resuft [F]	5				
Benzene	<0.00100	0.100	0.101	101	0.100	0.104	104	'n	70-125	25	
Toluene	<0.00200	0.100	0.103	103	0.100	0.107	107	4	70-125	25	
Ethylbenzene	<0.00100>	0.100	0.110	110	0.100	0.115	115	4	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.228	114	0.200	0.237	- 611	4	70-131	25	
o-Xylene	<0.00100	0.100	0.109	109	0.100	0.112	112	3	71-133	25	

Relative Percent Difference RPD = 200*((C-F)/(C+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

Page 9 of 13

Relinquished by:	Religionished so:	Relinquished by	Special Instructions:						() Goff	ひ ろ Goff Dairy	<i>с</i> с	0	LAB # (lab use only)	ORDER #: 12	(lab use only)	Sampler Signature	Telephone No:	City/State/Zip:	Company Address	Company Name	Project Manager:	Xenco Labor
Date	12.14.11	19/14/10-							Dairy Well	/ - Ctr. Pivot Well	MW-10	MW-9	ELD CODDE	1 7,400		" Mondfur	(575)396-2378	Lovington, NM 88260	: P. O. Box 301	Basin Environmental Servi	Ben J. Arguijo	ratories
Time	16.	Time ノジジン					_					-	Beginning Depth	_		\mathbf{X}				ce Tech		
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XENCO Laboratories

Atlanta, Boca Raton, Corpus Christi, Dallas Houston, Miami, Odessa, Philadelphia

Phoenix, San Antonio, Tampa

Document Title: Sample Receipt Checklist Document No.: SYS-SRC Revision/Date: No. 01, 5/27/2010 Effective Date: 6/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

Client: Ba	sin / Pl	ains
Date/Time:	12.14.11	14:15
Lab ID # :	433	1377
Initials:	A	E

Sample Receipt Checklist

1. Samples on ice?	Blue	< Water	No	
2. Shipping container in good condition?	Tes	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	Yes	No	N/A	
4. Chain of Custody present?	Tes	No		
5. Sample instructions complete on chain of custody?	Yes	No		
6. Any missing / extra samples?	Yes	Nõ		
7. Chain of custody signed when relinquished / received?	Yes	No		
8. Chain of custody agrees with sample label(s)?	Yes	No		
9. Container labels legible and intact?	(res)	No		
10. Sample matrix / properties agree with chain of custody?	(Yes)	No	•	
11. Samples in proper container / bottle?	Yes	No		
12. Samples properly preserved?	Cres	No	N/A	
13. Sample container intact?	Tes	No		
14. Sufficient sample amount for indicated test(s)?	(Yee	No		
15. All samples received within sufficient hold time?	Tes	No		
16. Subcontract of sample(s)?	Yes	No	(NAS	
17. VOC sample have zero head space?	Tes	No	N/A	
18. Cooler 1 No. Cooler 2 No. Cooler 3 No.	Cooler 4 I	10.	Cooler 5 No.	
Ibs 5 0.°C Ibs °C Ibs	°C ib	s °	C Ibs	°C

Nonconformance Documentation

Contact:_____Contacted by:_____Date/Time:_____ Regarding: _____ Corrective Action Taken: _____ Corrective Action Taken: _____ Check all that apply: □Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.

□ Initial and Backup Temperature confirm out of temperature conditions □ Client understands and would like to proceed with analysis


Analytical Report 433651

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

27-DEC-11

Collected By: Client



Celebrating 20 Years of commitment to excellence in Environmental Testing Services



12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122): Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002) Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054) New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610) Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046): Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AAL11), West Virginia (362), Kentucky (85) Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco Tucson (EPA Lab code: AZ000989): Arizona (AZ0758)





27-DEC-11

Project Manager: Jason Henry PLAINS ALL AMERICAN EH&S 1301 S. COUNTY ROAD 1150 Midland, TX 79706

Reference: XENCO Report No: 433651 Lovington Gathering WTI Project Address: Lea County, NM

Jason Henry:

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 433651. 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. 433651 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 433651



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	. •	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-10		W	12-15-11 14:45		433651-001
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CASE NARRATIVE



Client Name: PLAINS ALL AMERICAN EH&S



Project Name: Lovington Gathering WTI

 Project ID:
 2006-142

 Work Order Number:
 433651

Report Date: 27-DEC-11 Date Received: 12/19/2011

Sample receipt non conformances and comments: None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-877812 SVOA PAHs List by SW-846 8270C SW8270C

Batch 877812, Nitrobenzene-d5 recovered above QC limits Data confirmed by re-analysis. Samples affected are: 615639-1-BKS.

Terphenyl-D14 recovered above QC limits Data confirmed by re-analysis. Samples affected are: 615639-1-BLK,433651-001.

SW8270C

Batch 877812, Acenaphthylene recovered above QC limits in the laboratory control sample. Samples affected are: 433651-001.

Surrogates recovered high, however all analytes were non-detect. Compounds in QC recovered high, however all samples were non-detect. Samples reported as is

MH

Project Id: 2006-142 Contact: Jason Henry

Certificate of Analysis Summary 433651 PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI



 Date Received in Lab:
 Mon Dec-19-11
 10:50 am

 Report Date:
 27-DEC-11

Project Location: Lea County, NM				Report Date:	27-DEC-11	
				Project Manager:	Brent Barron II	
	Lab Id:	433651-001				
Analyseis Roomostod	Field Id:	MW-10				
noison hour eichinnis	Depth:					
	Matrix:	WATER		-	-	
	Sampled:	Dec-15-11 14:45				
SVOA PAHs List	Extracted:	Dec-20-11 15:24				
SUB: TX104704215	Analyzed:	Dec-23-11 13:05	_			
	Units/RL:	mg/L RL				
Acenaphthene		ND 0.0102				•
Acenaphthylene		ND 0.0102				
Anthracene		ND 0.0102				
Benzo(a)anthracene		ND 0.0102				
Benzo(a)pyrene		ND 0.0102				
Benzo(b)fluoranthene		ND 0.0102				
Benzo(k)fluoranthene		ND 0.0102				
Benzo(g,h,i)perylene		ND 0.0102				
Chrysene		ND 0.0102				
Dibenz(a,h)anthracene		ND 0.0102				
Fluoranthene		ND 0.0102				
Fluorene		. ND 0.0102		, ,		
Indeno(1,2,3-c,d)Pyrene		ND 0.0102				
1-Methylnaphthalene		ND 0.00510				
2-Methylnaphthalene		ND 0.0102				
Naphthalene		ND 0.0102				
Phenanthrene		ND 0.0102			-	
Pyrene		ND 0.0102				

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This smalytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and reavise expressed throughout this analytical report represent the basi judgment of XENOD Laboratories. XENOD Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is littined to the anomin movie of this work order unless observise agreed to in writing.

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Brent Barron II Odessa Laboratory Manager

Page 5 of 11



Flagging Criteria

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

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.
- JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit

PQL Practical Quantitation Limit MQL Method Quantitation Limit LOD Limit of Detection

LOQ Limit of Quantitation

Pho

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

^ NELAC or State program does not offer Accreditation at this time.

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(305) 823-8500	(305) 823-8555
(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Vork Orders : 433651 Lab Batch #: 877812	, Sample: 433651-001 / SMP	Batch	Project l : 1 Matri	D: 2006-142 x: Water	STUDY	
	OA PAHs List Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl		0.0520	0.0510	102	44-117	
2-Fluorophenol		0.0230	0.0510	45	30-100	
Nitrobenzene-d5		0.0527 ′	0.0510	103	46-111	
Phenol-d6		0.0126	.0.0510	25	15-94	
Terphenyl-D14		0.0653	0.0510	128	46-126	**
2,4,6-Tribromophenol		0.0535	0.0510	105	48-117	
Lab Batch #: 877812	Sample: 615639-1-BLK / BL	K Batch	: 1 Matri	x :Water		
Units: mg/L	Date Analyzed: 12/23/11 08:25	SUF	RROGATE R	ECOVERY	STUDY	

Units: mg/L Date Analyzed:	12/23/11 08:25	SURROGAL	E RECOVERY	SIUDY	
SVOA PAHs List Analytes	Ama Fou [A	unt True Ind Amoun [B]	t Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.05	38 0.0500	108	44-117	
2-Fluorophenol	0.04	60 0.0500	92	30-100	
Nitrobenzene-d5	0.05	39 0.0500	108	46-111	
Phenol-d6	0.04	24 0.0500	85	15-94	
Terphenyl-D14	. 0.06	54 0.0500	131	46-126	**
2,4,6-Tribromophenol	. 0.04	45 0.0500	89 .	48-117	·

Lab Batch #: 877812 Sample: 615639-1-BKS / BKS Matrix: Water Batch: 1

Units: mg/L Date Analyze	d: 12/23/11 08:48	SI	RROGATE RE	COVERY	STUDY	
SVOA PAHs List	A	mount Found [A]	True Amount [B]	Recovery %R ID1	Control Limits %R	Flags
Analytes				1-1		
2-Fluorobiphenyl	C	.0572	0.0500	114	44-117	
2-Fluorophenol	0	.0476	0.0500	95	30-100	
Nitrobenzene-d5	C	.0558	0.0500	112	46-111	**
Phenol-d6	C	.0472	0.0500	94	15-94	
Terphenyl-D14	C	.0580	0.0500	116	46-126	
2,4,6-Tribromophenol	C	.0518	0.0500	104	48-117	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

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



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Vork Orders: 433651	,		Project I	D: 2006-142			
Lab Batch #: 877812	Sample: 615639-1-BSD / B	SD Batc	h: ¹ Matrix	:Water			
Units: mg/L	Date Analyzed: 12/23/11 09:12	SU	RROGATE R	ECOVERY	STUDY		
SV	OA PAHs List	Amount Found [A]	True Amount B]	Recovery %R	Control Limits %R	Flags	
	Analytes			[D]			
2-Fluorobiphenyl		0.0540	0.0500	108	44-117		
2-Fluorophenol		0.0451	0.0500	90	30-100		
Nitrobenzene-d5		0.0530	0.0500	106	46-111		
Phenol-d6	· · ·	0.0450	0.0500	90	15-94		
Terphenyl-D14		0.0557	0.0500	HI	46-126		
2,4,6-Tribromophenol		0.0495	0.0500	99	48-117		

* Surrogate outside of Laboratory QC limits

** 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



Project Name: Lovington Gathering WTI

Work Order #: 433651 Lab Batch ID: 877812 Analyst: MCH

Date Prepared: 12/20/2011 Batch #: 1

Sample: 615639-1-BKS

Project ID: 2006-142 Date Analyzed: 12/23/2011 Matrix: Water

Units: mg/L		BLAN	K/BLANK S	PIKE / E	STANK S	PIKE DUPL	ICATE 1	RECOVE	RY STUD	Y	
SVOA PAHs List Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Bik. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Acenaphthene	<0.0100	0.0500	0.0548	110	0.0500	0.0537	107	2	27-132	31	
Acenaphthylene	<0.0100	0.0200	0.0549	110	0.0500	0.0533	107	3	46-108	25	H
Anthracene	<0.0100	0.0500	0.0504	101	0.0500	0.0494	66	2	47-145	25	
Benzo(a)anthracene	<0.0100	0.0500	0.0515	103	0.0500	0.0506	101	2	33-143	25	
Benzo(a)pyrene	<0.0100	0.0500	0.0510	102	0.0500	0.0510	102	0	65-135	25	
Benzo(b)fluoranthene	<0.0100	0.0500	0.0506	101	0.0500	0.0479	96	5	24-159	25	
Benzo(k)fluoranthene	<0.0100	0.0500	0.0478	96	0.0500	0.0494	66	3	-25-125	25	
Benzo(g,h,i)perylene	<0.0100	0.0500	0.0472	94	0.0500	0.0464	93	2	65-135	25	
Chrysene	<0.0100	0.0500	0.0542	108	0.0500	0.0530	106	2	65-135	25	
Dibenz(a,h)anthracene	. <0.0100	0.0500	0.0538	108	0.0500	0.0533	107	-	50-125	25	
Fluoranthene	<0.0100	0.0500	0.0523	105	0.0500	0.0513	103	2	47-125	25	•
Fluorene	<0.0100	0.0500	0.0540	108	0.0500	0.0525	105	3	48-139	25	
Indeno(1,2,3-c,d)Pyrene	<0.0100	0.0500	0.0541	108	0.0500	0.0535	107	1	27-160	25	
Naphthalene	<0.0100	0.0500	0.0504	101	0.0500	0.0490	86	3	26-175	25	
Phenanthrene .	<0.0100	0.0500	0.0476	95	0.0500	0.0464	93	3	65-135	25	
Pyrene	<0.0100	0.0500	0.0524	105	0.0500	0.0513	103	2	23-152	-31	

Relative Percent Difference RPD = 200*((C-F)/(C+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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Page 9 of 11

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Document Title: Sample Receipt Checklist Document No.: SYS-SRC Revision/Date: No. 01, 5/27/2010 Effective Date: 6/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

Client: B	sin	Plains
Date/Time:	121911	10.50
Lab ID # :	433	051
Initials:	-Ar	<u></u>

Sample Receipt Checklist

1. Samples on ice?	Blue	Water	No	
2. Shipping container in good condition?	(Yes)	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	(Yes)	No	WATE	
4. Chain of Custody present?	Yes	No		`
5. Sample instructions complete on chain of custody?	Yes	No		
6. Any missing / extra samples?	Yes	No		
7. Chain of custody signed when relinquished / received?	YES >	No		
8. Chain of custody agrees with sample label(s)?	Yes	No		
9. Container labels legible and intact?	Yes	No		
10. Sample matrix / properties agree with chain of custody?	Yes	No -		
11. Samples in proper container / bottle?	Yes	No		
12. Samples properly preserved?	(Yes)	No	N/A	
13. Sample container intact?	Yes	No		·
14. Sufficient sample amount for indicated test(s)?	Yes	No		
15. All samples received within sufficient hold time?	Yes'	No		
16. Subcontract of sample(s)?	Yes	No	N/A	
17. VOC sample have zero head space?	Yes	No	(N/A)	
18. Cooler 1 No. Cooler 2 No. Cooler 3 No.	Cooler 4 No).	Cooler 5 No.	
	lbs	°C	ibs	°C

Nonconformance Documentation

Contact:	Contacted by:	Date/Time:
Regarding:	· · · · · · · · · · · · · · · · · · ·	,,,,,,
Corrective Action Tal	xen:	
· · · · · · · · · · · · · · · · · · ·		
Check all that apply:	Cooling process has begun shorti condition acceptable by NEL Initial and Backup Temperature co Client understands and would like	y after sampling event and out of temperature AC 5.5.8.3.1.a.1. nfirm out of temperature conditions to proceed with analysis

с.у^г.

Appendix B Release Notification & Corrective Action (Form C-141)

District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 State of New Mexico Energy Minerals and Natural Resources

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

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

			Rele	ase Notific	atior	n and Co	orrective A	ction				· · · · ·
			•			OPERA	TOR		x Initi	al Report		Final Report
Name of Co	mpany Pl	ains Pipeline				Contact Can	nille Reynolds					,
Address 311	2 W. US	Hwy 82, Lov	vington, 1	NM 88260		Telephone N	10. 202-441-090	<u>))</u>				······
Facility Nat	ne Loving	ton Gatherin	g W11	~		raciiity Typ	e o' Steel Pipeli	ne				
Surface Ow	ner Rober	t Rice		Mineral O	wner	· · · · · · · · · · · · · · · · · · ·			Lease N	NO.		
· ·				LOCA	TIO	N OF REJ	LEASE					
Unit Letter H	Section 6	Township 17S	Range 37E	Feet from the	North	South Line	Feet from the	East/V	Vest Line	County Lea		
· ·		Latitud	e <u>32°51</u>	1' 56.0"		_ Longitude	<u>103° 17' 07.2</u>	»				
				NAT	URE	OF REL	EASE				•	
Type of Rele	ase Crude	Oil				Volume of	Release 12 barre	ls	Volume	Recovered	8 barrel	S
Source of Re	lease 6" St	eel Pipeime				4-21-2006	a 13:00	ж	Date and 4-21-200	Hour of D 6 @ 13:15	iscovery	
Was Immedi	ate Notice	Given?				If YES, To	Whom?				102	24.25
		X	Yes L		equired	Pat Capert	on				22	
By Whom? (Camille Rey	/nolds				Date and H	lour 4-21-2006	a) 15:35		- (Q)		
was a water	course Rea		Yes 🛛	No		11 IE3, V	nume impacting	ine wan	ercourse.	18/	P. H.	
If a Watercon	irse was In	pacted, Descr	ibe Fully.	*						10	6.	No.
										12	E.	Los - Alonda
		•		•						121	>.	
Describe Cau	ise of Prob	em and Reme	dial Actio	n Taken Internal	corrosio	n while purgi	ng the line resulte	ed in rele	ease of swe	et crude of	I. The	ine has been
purged. The	line is an i	dle 6-inch stee	l gatherin	g line. The pressu	ire on th	ne line was ap	proximately 50 p	si and th	e gravity o	of the sweet	crude o	il was 34.
The sweet ci		ri ₂ S content o	r < ro ppin	i. The fine was ap	proxim	atery 1.5 feet	ogs at the release	point.				
			•							.`		
Describe Are	a Affected	and Cleanup	Action Tal	ken.* The impacte	ed soil v	vas excavated	and stockpiled or	n plastic	. Aerial ex	dent of sur	face im	act was
approximatel	y 1,500 ft².						-	•			•	
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		· ·		· ·								
I hereby certi	fy that the	information gi	iven above	e is true and comp	lete to t	the best of my	knowledge and i	Indersta	nd that our	sugnt to M	40CD	nulae and
regulations a	l operators	are required t	o report a	nd/or file certain r	elease r	notifications a	nd perform correct	ctive act	ions for re	leases which	h may e	ndanger
should their (or the envi operations l	ronment. The	acceptant adcouately	ce of a C-141 repo v investigate and r	ort by th remediat	te Ontaminati	arked as "Final R	leport" d	loes not rel	lieve the op	erator o	f liability
or the environ	ment. In	addition, NMC	OCD accep	ptance of a C-141	report o	loes not reliev	e the operator of	respons	ibility for a	ompliance	with an	iman nealth
lederal, state,	or local la	ws and/or regi	lations.									
	No oc	N. N. A.	Kc.	and de			<u>UIL CON</u>	SERV	ATION	DIVISI	<u>ON</u>	
Signature	WYI	fille 1	724	prolos								
Printed Name	: Camille I	Reynolds	/ 0	/ 		Approved by	District Supervis	ior:				
Title: Remed	iation Cool	rdinator		<u></u>		Approval Da	te:		Expiration	Date:		,
E-mail Addre	ess: cjreyno	olds@paalp.co	m			Conditions o	f Approval:					··
Date: 4/26/20)06			Phone:505-441	-	·	· · ·			Attache	d 🗌	
					•					1		

Basin Environmental Service Technologies, LLC

3100 Plains Highway
P. O. Box 301
Lovington, New Mexico 88260
bjarguijo@basinenv.com
Office: (575) 396-2378
Fax: (575) 396-1429



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QUARTERLY MONITORING REPORT July - September 2011

LOVINGTON GATHERING WTI Unit Letter "H" (SE/NE), Section 6, Township 17 South, Range 37 East Latitude 32° 51' 56.0" North, Longitude 103° 17' 07.2" West Lea County, New Mexico Plains SRS Number: 2006-0142 NMOCD Reference Number: 1RP-838

Prepared for:



Plains Marketing, LP 333 Clay Street, Suite 1600 Houston, Texas 77002

Prepared By:

Basin Environmental Service Technologies, LLC P. O. Box 301 Lovington, New Mexico 88260

October 2011

Ben J. Arguijo Project Manager



October 31, 2011

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

RE:

Plains Pipeline, L.P. Lovington Gathering WTI NMOCD Reference # 1R-838 / AP-96 Unit Letter H of Section 6, Township 17 South, Range 37 East Lea County, New Mexico 2011 NOV -2

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Dear Mr. Hansen:

Plains Pipeline, L.P. is pleased to submit the attached *Quarterly Monitoring Report*, dated October 2011, for the Lovington Gathering WTI release site located in Section 6 of Township 17 South, and Range 37 East of Lea County, New Mexico. This document summarizes the status of recent activities performed during the third quarter of 2011.

Should you have any questions or comments, please contact me at (575) 441-1099.

Sincerely,

ason perrur

Jason Henry Remediation Coordinator Plains Pipeline, L.P.

CC: Geoffrey R. Leking, NMOCD, Hobbs Office

Enclosure

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Figure 2 – Inferred Groundwater Gradient Map – 3Q2011

Figure 3 – Groundwater Concentration Map – 3Q2011

Figure 4 – Groundwater Concentration Map – July 2011

Figure 5 -Groundwater Concentration Map - October 2011

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APPENDICES

Appendix A – Laboratory Analytical Reports

Appendix B - Release Notification and Corrective Action (Form C-141)

1.0 INTRODUCTION

Basin Environmental Service Technologies, LLC (Basin), on behalf of Plains Pipeline, LP (Plains), is pleased to submit this *Quarterly Monitoring Report* in compliance with the New Mexico Oil Conservation Division (NMOCD) request of April 5, 2011, requiring submittal of a Quarterly Monitoring Report within thirty (30) days of the end of each calendar quarter. This report is intended to be viewed as a complete document with text, figures, tables, and appendices. This report presents the results of the quarterly groundwater monitoring event conducted in the third quarter (July - September) of 2011 only.

2.0 SITE DESCRIPTION & BACKGROUND INFORMATION

The legal description of the site is Unit Letter "H" (SE/NE), Section 6, Township 17 South, Range 37 East. The geographic coordinates of the release site are 32° 51' 56.0" North latitude and 103° 17' 07.2" West longitude. A "Site Location Map" is provided as Figure 1.

On April 21, 2006, Basin responded to a pipeline release on behalf of Plains to repair the pipeline and excavate the impacted soil. The Lovington Gathering WTI Pipeline was repaired utilizing a pipeline clamp, and the visually stained soil was excavated and placed on plastic sheeting to mitigate any further hydrocarbon impact to the underlying soil. Approximately twelve (12) barrels of crude oil was released from the pipeline, and eight (8) barrels were recovered, resulting in a net loss of four (4) barrels of crude oil. The excavated area was fenced in and is characterized by a Plains pipeline right-of-way adjacent to an idled Plains pump station. The release occurred in a pasture containing various oil and gas production facilities. The release resulted in a visibly stained surface area covering approximately thirty (30) feet in length by twenty (27) feet in width. Excavation activities conducted during the initial response and subsequent remediation of the site covered an area approximately thirty (30) feet in length by twenty-seven (27) feet in width, and ranged from approximately five (5) to six (6) feet in depth. Excavated soil was placed on a six (6)-mil ploy-liner for future remedial action. Utilizing olfactory, visual, and photo-ionization detector (PID) technology, it was determined that Volatile Organic Compounds (VOC's) remained in the sidewalls and floor of the excavation.

In July 2006, a soil investigation was conducted to further delineate the horizontal and vertical extent of the on-site hydrocarbon impact. Eleven (11) soil borings were advanced to a depth of thirty (30) to seventy-five (75) feet below ground surface (bgs). Based on the laboratory results of the soil samples collected during advancement of the soil borings, three (3) groundwater monitor wells (MW-1, MW-2, and MW-3) were installed to evaluate the status of the groundwater.

Based on the laboratory results from the initial groundwater sampling event (October 5, 2006), four (4) additional monitor wells were installed in November 2006. During the installation of the groundwater monitor wells (MW-1 through MW-7), there was no visual evidence of PSH in any of the collected soil samples. Laboratory analytical results of the selected soil samples did not indicate benzene, toluene, ethylbenzene, and total xylenes (BTEX) or total petroleum hydrocarbon (TPH) concentrations above the appropriate laboratory method detection limit (MDL), with the exception of soil samples collected from monitor well MW-3, which exhibited a

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TPH concentration of 2,080 mg/Kg and 121 mg/Kg, at fifty-five (55) and seventy-five (75) feet bgs, respectively.

Laboratory analytical results of groundwater sampling at monitor well MW-7 indicated additional monitor wells were required to fully delineate the down-gradient boundary of the dissolved-phase plume. On February 7, 2007, monitor well MW-8 was installed down-gradient of monitor well MW-7. Laboratory analytical results of soil samples collected during the installation of monitor well MW-8 indicated benzene and BTEX concentrations were less than the appropriate laboratory MDL and the NMOCD regulatory standard of 10 mg/Kg and 50 mg/Kg for benzene and BTEX, respectively. Laboratory analytical results indicate TPH concentrations were less than the laboratory MDL and twenty-five (25) feet bgs. Soil samples collected at fifty (50) and seventy-five (75) feet bgs exhibited a TPH concentration of 14 mg/Kg (below NMOCD standards) and 101 mg/Kg, respectively.

On August 13, 2007, monitor well MW-9 was installed to further delineate the down-gradient boundary of the dissolved-phase plume. Laboratory analytical results of the soil samples collected during the installation of monitor well MW-9 indicated benzene, BTEX, and TPH concentrations were less than the appropriate laboratory MDL and NMOCD regulatory standard in the five (5) laboratory submitted soil samples.

On October 28, 2009, monitor well MW-10 was installed to further delineate the down-gradient boundary of the dissolved-phase plume. Laboratory analytical results of soil samples collected during the installation of monitor well MW-10 indicated benzene, BTEX, and TPH concentrations were less than NMOCD regulatory standards in the seven (7) laboratory submitted soil samples.

Currently, there are ten (10) groundwater monitoring wells on-site: MW-1 which is up-gradient of the release site; MW-4 and MW-5, which are cross-gradient; and MW-2, MW-3, and MW-6 through MW-9, which are down-gradient of the release site.

3.0 FIELD ACTIVITIES

3.1 Groundwater Recovery Efforts

Basin began manual, bi-weekly recovery of hydrocarbon-impacted groundwater from monitor well MW-9 in November 2009 to control the down-gradient migration of the dissolved-phase plume. Bi-weekly recovery from monitor well MW-10 commenced in April 2011 at the behest of the NMOCD. All recovered fluids are disposed of at an NMOCD- approved disposal facility near Monument, New Mexico.

3.2 Groundwater Monitoring

A quarterly groundwater monitoring event was conducted on August 24, 2011 (3Q2011), to assess the levels and extent of dissolved-phase constituents and phase-separated hydrocarbons (PSH). The groundwater monitoring event consisted of measuring static water levels in the ten

(10) on-site monitor wells, checking for the presence of PSH, and purging and sampling of each well exhibiting sufficient recharge. Monitor wells were purged using a PVC bailer of a minimum of three (3) well volumes of water, or until the wells were dry. Groundwater was allowed to recharge, and samples were obtained using disposable Teflon bailers. Water samples were stored in clean, glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a trailer-mounted polystyrene tank and disposed of at an NMOCD-approved disposal facility near the site.

Diminished well volume and recharge in monitor well MW-2 attributable to the use of a largecapacity irrigation well (Goff Dairy Well) on property adjacent to the release site precluded sample collection from the monitor well during the quarterly monitoring event. Monitor well MW-2 was sampled during a subsequent site visit on September 30, 2011.

Per NMOCD request, monthly monitoring events were conducted at MW-10 and five locations (Goff Dairy Well, Goff Dairy - Ctr. Pivot Well, Goff Dairy - Ctr. Pivot Beginning, Goff Dairy - Ctr. Pivot End, and JW Well) on property adjacent to the release site (Goff Dairy #9 Pivot) on July 7, July 11, July 14, and August 24, 2011. Crop harvesting and a consequent reduction in water usage on the property precluded sample collection during the month of September. Arrangements were made with the landowner to conduct a sampling event as soon as possible following the close of the quarter. The third monthly sampling event occurred on October 10, 2011.

Locations of the groundwater monitoring wells and the inferred groundwater gradient, which was constructed from groundwater elevation measurements collected during the 3Q2011 sampling event, are depicted in Figure 2, "Inferred Groundwater Gradient Map – 3Q2011". The groundwater gradient map indicates a general gradient of approximately 0.011 feet/foot to the southeast, as measured between monitor wells MW-1 and MW-10. The corrected groundwater elevation ranged between 3,711.88 and 3,719.76 feet above mean sea level in monitor wells MW-10 and MW-2, respectively. Groundwater elevation data is provided as Table 1, "Groundwater Elevation Data - 3Q2011".

No PSH was detected in any of the on-site monitor wells during the 3Q2011 reporting period.

4.0 LABORATORY RESULTS

Groundwater samples collected from the on-site monitor wells, the Goff Dairy irrigation wells, and the Goff Dairy Center Pivot during the monthly and quarterly sampling events were delivered to Xenco Laboratories in Odessa, Texas, for determination of BTEX constituent concentrations by EPA Method SW846-8021b. Laboratory analytical results were compared to NMOCD regulatory limits based on the New Mexico groundwater standards found in Section 20.6.2.3103 of the New Mexico Administrative Code (NMAC). Table 2 summarizes the "Concentrations of BTEX, Fluoride & Chromium in Groundwater".

4.1 Quarterly Monitoring Data

Data collected during the 3Q2011 groundwater monitoring event is summarized below. Groundwater contaminant concentrations are depicted in Figure 3, "Groundwater Concentration Map - 3Q2011".

- Benzene concentrations ranged from less than the laboratory MDL in the groundwater samples collected from monitor wells MW-1, MW-5, MW-8 and MW-9 to 0.179 mg/L in the groundwater sample collected from monitor well MW-2. Benzene concentrations exceeded the New Mexico Water Quality Control Commission (NMWQCC) regulatory standard of 0.010 mg/L in groundwater samples collected from monitor wells MW-2, MW-3, and MW-6.
- Toluene concentrations were less than the laboratory MDL in all submitted groundwater samples, with the exception of the groundwater sample from MW-3, which exhibited a toluene concentration of 0.00333 mg/L. Toluene concentrations were less than the NMWQCC regulatory standard of 0.750 mg/L in all submitted groundwater samples.
- Ethylbenzene concentrations were less than the laboratory MDL in all submitted groundwater samples, with the exception of the groundwater sample from MW-2, which exhibited an ethylbenzene concentration of 0.00275 mg/L. Ethylbenzene concentrations were less than the NMWQCC regulatory standard of 0.750 mg/L in all submitted groundwater samples.
- Total xylene concentrations ranged from less than the laboratory MDL in the groundwater samples collected from monitor wells MW-1, MW-4, MW-5, MW-7 and MW-8 to 0.0628 mg/L in the groundwater sample collected from monitor well MW-6. Total xylene concentrations were less than the NMWQCC regulatory standard of 0.620 mg/L in all submitted groundwater samples.

4.2 Monthly Monitoring Data

Data collected during the July 2011, August 2011, and October 2011 monthly monitoring events is summarized below. Groundwater contaminant concentrations for the July and October monitoring events are depicted in Figures 4 and 5, "Groundwater Concentration Map - July 2011" and "Groundwater Concentration Map - October 2011", respectively. Groundwater contaminant concentrations for the August sampling event are included in Figure 3, "Groundwater Concentration Map - 3Q2011".

- Monitor Well MW-10:
 - Benzene concentrations ranged from 0.183 mg/L in October 2011 to 3.00 mg/L in July 2011. Toluene concentrations ranged from less than the laboratory MDL in August 2011 and October 2011 to 0.00265 mg/L in July 2011. Ethylbenzene concentrations ranged from less than the laboratory MDL in October 2011 to 0.00365 mg/L in July 2011. Total xylene concentrations ranged from 0.0203

mg/L in August 2011 to 0.0271 mg/L in July 2011. Benzene concentrations exceeded NMWQCC regulatory standards in all submitted groundwater samples. Toluene, ethylbenzene, and total xylene concentrations were less than NMWQCC regulatory standards in all submitted groundwater samples.

• Goff Dairy Well:

- Benzene concentrations ranged from less than the laboratory MDL in August 2011 and October 2011 to 0.00262 mg/L in July 2011. Toluene, ethylbenzene, and total xylene concentrations were less than the appropriate laboratory MDL in all submitted groundwater samples. Benzene, toluene, ethylbenzene, and total xylene concentrations were less than NMWQCC regulatory standards in all submitted groundwater samples.
- Goff Dairy Ctr. Pivot Well:
 - Benzene, toluene, ethylbenzene, and total xylene concentrations were both less than the appropriate laboratory MDL and less than NMWQCC regulatory standards in all submitted groundwater samples.
- Goff Dairy Ctr. Pivot Beginning:
 - Benzene, toluene, ethylbenzene, and total xylene concentrations were both less than the appropriate laboratory MDL and less than NMWQCC regulatory standards in all submitted groundwater samples.
- Goff Dairy Ctr. Pivot End:
 - Benzene, toluene, ethylbenzene, and total xylene concentrations were both less than the appropriate laboratory MDL and less than NMWQCC regulatory standards in all submitted groundwater samples.

• JW Well:

• Benzene, toluene, ethylbenzene, and total xylene concentrations were both less than the appropriate laboratory MDL and less than NMWQCC regulatory standards in all submitted groundwater samples.

ANTICIPATED ACTIONS

Quarterly monitoring and groundwater sampling of monitor wells MW-1 through MW-9 will continue throughout the 2011 calendar year. Monthly monitoring of MW-10 and five (5) representative locations on the Goff Dairy property adjacent to the site (Goff Dairy Well, Goff Dairy Center Pivot Well, Center Pivot Beginning, Center Pivot End, and JW Well) will continue throughout the 2011 calendar year.

Pursuant to the July - September 2011 Quarterly Monitoring Report, dated July 2011, and correspondence from an NMOCD representative, dated August 1, 2011, bi-weekly recovery of hydrocarbon-impacted groundwater from monitor wells MW-9 and MW-10 to control the down-gradient migration of the dissolved-phase plume will continue throughout the 2011 calendar year.

Quarterly monitoring reports will be submitted within thirty (30) days of the end of each calendar quarter, unless or until directed otherwise by the NMOCD. A cumulative *Annual Monitoring Report* for the 2011 reporting period will be submitted to the NMOCD by April 1, 2012.

LIMITATIONS

Basin Environmental Service Technologies, LLC, has prepared this *Quarterly Monitoring Report* to the best of its ability. No other warranty, expressed or implied, is made or intended. Basin has examined and relied upon documents referenced in the report and on oral statements made by certain individuals. Basin has not conducted an independent examination of the facts contained in referenced materials and statements. Basin has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Basin has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin notes that the facts and conditions referenced in this report may change over time, and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Plains Marketing, LP. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of Basin Environmental Service Technologies, LLC, and/or Plains Marketing, LP.

DISTRIBUTION

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Figures













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Tables

PLAINS MARKETING, LP LOVINGTON GATHERING WTI LEACOUNTY, NEW MEXICO PLAINS SRS NO: 2006-142 NMOCD REF NO: 1RP-838

				MFTH	ODS: EPA SV	V 846-8021h			300.1	SW846-6010C
SAMPLE LOCATION	SAMPLE DATE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL- BENZENE (mq/L)	M,P- XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENES (mg/L)	TOTAL BTEX (mg/L)	FLUORIDE (mg/L)	CHROMIUM (mg/L)
MW-1	10/05/06	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	•	•
	12/28/06	<0.0010	<0.0010	<0.0010	0.002	<0.0010	0.002	0.002	•	•
	03/16/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	•	•
	05/31/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	•
	09/25/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
	11/30/07	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	
	03/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	•
	06/14/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	1
	09/11/08	0.020	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.020	•	•
	12/02/08	0.035	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.035	-	•
	03/03/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	•
	06/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	•
	09/01/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	•
-	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
	03/04/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	•
	02/22/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
	08/30/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	•
	11/11/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	•
	03/22/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	
	5/27/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	
	8/24/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
MW-2	10/05/06	0.010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.010	-	•
	12/28/06	0.161	<0.0010	<0.0010	0.024	<0.0010	0.024	0.185	-	•
	03/16/07	0.154	<0.0010	<0.0010	0.015	<0.0010	0.015	0.169	•	•
	05/31/07	0.005	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.005	•	•
	09/25/07	0.050	<0.0010	<0.0010	0.003	<0.0010	0.003	0.053	•	-
	11/30/07	0.928	<0.0010	<0.005	0.036	<0.005	0.036	0.964		•
	03/11/08	0.095	<0.0020	<0.0010	0.0032	<0.0010	0.0032	0.098	-	
	06/14/08	0.003	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.003	-	
	09/11/08	0.159	<0.0020	<0.0010	0.004	<0.0010	0.004	0.163	•	

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PLAINS MARKETING, LP LOVINGTON GATHERING WTI LEA COUNTY, NEW MEXICO PLAINS SRS NO: 2006-142 NMOCD REF NO: 1RP-838

· ·				METHO	DDS: EPA SV	<u> </u>			300.1	SW846-6010C
SAMPLE LOCATION	SAMPLE	BENZENE	TOLUENE	ЕТНҮС-	M,P-	O-XYLENES	TOTAL	TOTAL	FLUORIDE	CHROMIUM
	UAIE	(mg/L)	(mg/L)	BENZENE (mg/L)	XYLENES (mg/L)	(mg/L)	(mg/L)	BTEX (mg/L)	(mg/L)	(mg/L)
MW-2	12/02/08	0.050	0.002	<0.0010	0.007	0.001	0.008	0.060	•	B
	03/03/09	0.036	<0.0020	<0.0010	0.0026	<0.0010	0.0026	0.038		
	06/18/09	0.0097	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.010	•	-
	00/01/00	0.084	<0.0020	<0.0010	0.0083	<0.0010	0.0083	0.093	•	
	12/18/09	0.0129	<0.0020	<0.0010	0.0095	<0.0010	0.0095	0.022	3	
	03/04/10	0.0026	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0026	ές. Β	
	05/25/10	0.0023	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0023	•	•
	08/30/10	0.0406	<0.0020	<0.0010	0.0132	<0.0010	0.0132	0.0538	•	•
	11/11/10	0.0087	<0.0020	<0.0010	0.091	<0.0010	0.091	7660.0	•	
	03/22/11	0.0361	<0.0020	<0.0010	0.0605	0.0011	0.0616	0.0977	•	
	5/27/2011	0.00222	<0.0020	<0.0010	0.00297	<0.0010	0.00297	0.00519	•	•
	9/30/2011	0.179	<0.0020	0.00275	0.00345	0.00212	0.00557	0.187	•	
MW-3	10/05/06	6.60	<0.0010	<0.0010	0.072	<0.0010	0.072	6.67	•	
	12/28/06	1.02	<0.0010	0.005	0.028	<0.0010	0.028	1.05	•	
	03/16/07	1.48	<0.0010	0.013	0.034	<0.0010	0.034	1.53	•	
	05/31/07	1.66	0.010	0.034	0.029	0.012	0.041	1.75	•	•
	09/25/07	0.494	0.023	0.020	0.014	0.007	0.021	0.56	•	
	11/30/07	5.93	0.027	0.273	0.141	0.074	0.215	6.45	•	
	03/11/08	1.159	0.107	0.177	0.066	0.139	0.205	1.65	•	•
	06/14/08	0.214	0.002	0.007	0.012	0.005	0.017	0.24	r	
	09/17/08	0.026	<0.0020	<0.0010	0.002	<0.0010	0.002	0.03	•	•
	12/02/08	0.024	<0.0020	<0.0010	0.004	0.001	0.005	0.03	•	
	03/03/09	1.367	0.0305	0.0251	0.0173	0.0158	0.0331	1.46	ł	
	06/18/09	0.0031	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
	09/01/09	0.0073	0.0033	<0.0010	0.0028	0.0015	0.0043	0.01		
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	•
	03/04/10	0.0011	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0011	•	-
	05/25/10	0.0109	0.0033	<0.0010	0.0048	0.0027	0.0075	0.0217	•	•
	08/30/10	0.0092	0.0036	<0.0010	0.006	0.0033	0.0093	0.0221	•	•
	11/11/10	0.0033	<0.0020	<0.0010	0.0023	0.0013	0.0036	0.0069	•	
	03/22/11	0.00904	0.00283	<0.0010	0.00815	0.00375	0.0119	0.0238	•	ŧ

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PLAINS MARKETING, LP LOVINGTON GATHERING WTI LEA COUNTY, NEW MEXICO PLAINS SRS NO: 2006-142 NMOCD REF NO: 1RP-838

				METH	DDS: EPA SI	V 846-8021b			300.1	SW846-6010C
SAMPLE LOCATION	SAMPLE	BENZENE	TOLUENE	ETHYL-	M,P-	O-XYLENES	TOTAL	TOTAL	FLUORIDE	CHROMIUM
	UAIE	(mg/L)	(mg/L)	BENZENE (mg/L)	XYLENES (mg/L)	(mg/L)	XYLENES (mg/L)	BTEX (mg/L)	(mg/L)	(mg/L)
MW-3	5/27/2011	0.0205	<0.0020	<0.0010	0.00308	0.00116	0.00424	0.0247	9	E
	8/24/2011	0.0262	0.00333	<0.0010	0.00827	0.00312	0.0114	0.0409	•	•
MW-4	12/28/06	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	•	
	03/16/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		
	05/30/07	<0.0010	0.001	<0.0010	<0.0010	<0.0010	<0.0010	0.001	•	•
	09/25/07	<0.0010	0.001	<0.0010	<0.0020	<0.0010	<0.0020	0.001		•
	11/30/07	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
	03/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
	06/14/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
	09/17/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
	12/02/08	<0.0010	0.006	<0.0010	<0.0020	<0.0010	<0.0020	0.006	•	•
	03/03/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
	06/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
	09/01/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/04/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	
	05/25/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	
	08/30/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	
	11/11/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	•
	03/22/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
	5/27/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	4.76	<0.0050
	8/24/2011	0.00119	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.00119	•	•
MW-5	12/28/06	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		•
	03/16/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	•	•
	05/30/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	•	
	09/25/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
	11/30/07	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
	03/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	
	06/14/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
	06/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	

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PLAINS MARKETING, LP LOVINGTON GATHERING WTI LEA COUNTY, NEW MEXICO PLAINS SRS NO: 2006-142 NMOCD REF NO: 1RP-838

				METHO	DDS: EPA SI	V 846-8021b			300.1	SW846-6010C
SAMPLE LOCATION	SAMPLE	BENZENE	TOLUENE	ЕТНУL-	M,P-	O-XYLENES		TOTAL	FLUORIDE	CHROMIUM
	DAIE	(mg/L)	(mg/L)	BENZENE (mg/L)	XYLENES (mg/L)	(mg/L)	XYLENES (mg/L)	BIEX (mg/L)	(mg/L)	(mg/L)
MW-5	12/02/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
	03/03/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
	06/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
	09/01/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	9	
	03/04/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
	05/25/10	0.0014	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0014	•	
	08/30/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
	11/11/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
-	03/22/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
	5/27/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
	8/24/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
					전 가입을 가입는다.				-	
MW-6	12/28/06	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	•	-
	03/16/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	•	
	05/30/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	1	
	09/25/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
	11/30/07	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
	03/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
	06/14/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
	00/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
	12/02/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	1	•
	03/03/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
	06/18/09	0.0044	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0044		•
•	09/01/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
	12/18/09	0.013	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0130	•	•
	03/04/10	0.0063	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0063	•	
	05/25/10	0.0059	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0059	•	•
	08/30/10	0.0053	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0053		•
	11/11/10	0.0082	<0.0020	<0.0010	0.0035	<0.0010	0.0035	0.0117	•	
	03/22/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		

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PLAINS MARKETING, LP LOVINGTON GATHERING WTI LEA COUNTY, NEW MEXICO PLAINS SRS NO: 2006-142 NMOCD REF NO: 1RP-838

-				METH	DDS: EPA SI	N 846-8021b			300.1	SW846-6010C
SAMPLE LOCATION	SAMPLE DATE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL- BENZENE (mg/L)	M,P- XYLENES (mg/L)	(mg/L) O-XYLENES	TOTAL XYLENES (mg/L)	TOTAL BTEX (mg/L)	FLUORIDE (mg/L)	CHROMIUM (mg/L)
MW-6	5/27/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
	8/24/2011	0.105	<0.0020	<0.0010	0.0597	0.00309	0.0628	0.168	•	
					a state of the sta					
7-WM	12/28/06	0.047	<0.0010	<0.0010	0.001	<0.0010	0.001	0.0480	•	•
	03/16/07	0.047	<0.0010	<0.0010	0.015	<0.0010	0.015	0.0620		•
	05/31/07	0.039	<0.0010	<0.0010	0.005	<0.0010	0.005	0.0440		•
	09/25/07	0.037	<0.0010	<0.0010	0.030	<0.0010	0.03	0.0670	•	
	11/30/07	0.026	<0.0020	<0.0010	0.022	<0.0010	0.022	0.0480		•
	03/11/08	0.095	<0.0020	<0.0010	0.0032	<0.0010	0.0032	0.0982	•	•
	06/14/08	0.138	<0.0020	<0.0010	0.016	<0.0010	0.016	0.1540	•	•
	09/17/08	0.353	<0.0020	<0.0010	0.003	<0.0010	0.003	0.3560	•	•
	12/02/08	0.036	<0.0020	<0.0010	0.003	0.002	0.005	0.0410	•	•
	03/03/09	0.0775	<0.0020	<0.0010	0.0327	<0.0010	0.0327	0.1102		•
	06/18/09	0.057	<0.0020	<0.0010	0.0329	<0.0010	0.0329	0.0899		•
	09/01/09	0.012	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0120	-	•
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
	03/04/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
	05/25/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	
	08/30/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	U	•
	11/11/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
	03/22/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
	5/27/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
	8/24/2011	0.00192	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.00192	-	•
MW-8	03/16/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	•	•
	05/31/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	•
	09/25/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	•
	11/30/07	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	•
	03/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
	06/14/08	0.008	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.008	1	•
	09/11/08	0.568	<0.0100	<0.005	<0.0100	<0.005	<0.0100	0.568	-	•
	12/02/08	0.234	0.046	0.008	0.041	0.013	0.054	0.342	•	•

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PLAINS MARKETING, LP LOVINGTON GATHERING WTI LEA COUNTY, NEW MEXICO PLAINS SRS NO: 2006-142 NMOCD REF NO: 1RP-838

				METH	ODS: EPA SI	V 846-8021b			300.1	SW846-6010C
SAMPLE LOCATION	SAMPLE	BENZENE	TOLUENE	ЕТНҮС-	М,Р-	O-XYLENES	TOTAL	TOTAL	FLUORIDE	CHROMIUM
	DATE	(mg/L)	(mg/L)	BENZENE (mg/L)	XYLENES (mg/L)	(mg/L)	XYLENES (mg/L)	BTEX (mg/L)	(mg/L)	(mg/L)
MW-8	60/03/06	0.0284	<0.0020	<0.0010	0.0068	<0.0010	0.0068	0.0352	•	•
	06/18/09	0.0045	<0.0020	0.0016	0.0032	<0.0010	0.0032	0.0093	•	•
	09/01/09	0.0013	<0.0020	0.0011	0.0141	<0.0010	0.0141	0.0165	•	
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	•
-	03/04/10	<0.0010	<0.0020	0.0011	<0.0020	<0.0010	<0.0020	0.0011	-	
	05/25/10	0.0012	<0.0020	0.001	<0.0020	<0.0010	<0.0020	0.0022	•	•
	08/30/10	<0.0010	<0.0020	0.0014	<0.0020	<0.0010	<0.0020	0.0014	•	•
	11/11/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
	03/22/11	<0.0010	<0.0020	<0.0010	<0.0020	0.00154	0.00154	0.00154	-	×
	5/27/2011	<0.0010	<0.0020	<0.0010	<0.0020	0.00260	0.00260	0.00260	•	
	8/24/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
物語であるが、 アンド・シート・シート		¢	Battine Battine	ور کار میں اور					A TANK A SUCCESSION OF T	والموركين فتراري والمحالي والمراجع والمراجع
6-MW	09/25/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	
	11/30/07	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
	03/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	
	06/14/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		
	09/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
	12/02/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		
	03/03/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		
	06/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	I	•
	09/01/09	0.9717	0.0641	<0.0100	0.0867	0.0422	0.1289	1.1647		B
	09/10/09	1.838	<0.0200	<0.0100	0.0537	<0.0100	0.0537	1.8917	•	
	10/05/09	0.985	<0.0020	<0.0010	0.0442	<0.0010	0.0442	1.0292	•	
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
	03/04/10	0.0192	<0.0020	<0.0010	0.0027	<0.0010	0.0027	0.0219		
	05/25/10	0.0421	<0.0020	<0.0010	0.0063	<0.0010	0.0063	0.0484	1	
	08/30/10	0.1259	<0.0020	<0.0010	0.0344	<0.0010	0.0344	0.1603	•	
	11/11/10	0.0265	<0.0020	<0.0010	0.0097	<0.0010	0.0097	0.0362	•	•
	03/22/11	0.00335	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.00335		•
	5/27/2011	0.00406	<0.0020	<0.0010	0.00326	<0.0010	0.00326	0.00732	-	•
	8/24/2011	<0.0010	<0.0020	<0.0010	0.00237	<0.0010	0.00237	0.00237	•	
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TABLE 2 CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

PLAINS MARKETING, LP LOVINGTON GATHERING WTI LEA COUNTY, NEW MEXICO PLAINS SRS NO: 2006-142 NMOCD REF NO: 1RP-838

				MFTH(ODS FPAS	N 846-8021b			300.1	SW846-6010C
	SAMPLE			ETHYL-	M,P-		TOTAL	TOTAL		
SAMPLE LUCATION	DATE	BENZENE (mg/L)	(mg/L)	BENZENE (mg/L)	XYLENES (mg/L)	U-XTLENES (mg/L)	XYLENES (mg/L)	BTEX (mg/L)	rruukiue (mg/L)	(mg/L)
MW-10	11/02/09	<0.005	<0.005	<0.005	<0.010	<0.005	<0.010	<0.010	•	
	03/04/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		
	05/25/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	•
	08/30/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	•
	11/11/10	0.0350	<0.0020	<0.0010	0.0035	<0.0010	0.0035	0.0385	•	
	03/22/11	0.0568	<0.0020	<0.0010	0.00333	<0.0010	0.00333	0.0601	•	•
	5/27/2011	1.52	<0.0020	0.00107	0.0113	<0.0010	0.0113	1.53	-	
	7/11/2011	3.00	0.00265	0.00365	0.0248	0.00232	0.0271	3.03	-	•
	8/24/2011	0.654	<0.0020	0.00158	0.0177	0.00262	0.0203	0.676		•
	10/10/2011	0.183	<0.0020	<0.0010	0.121	<0.0010	0.121	0.304		
Goff Dairy Well	5/27/2011	0.00125	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.00123	•	•
	7/11/2011	0.00262	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.00262	•	•
	8/24/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
	10/10/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
Goff Dairy - Ctr. Pivot Well	7/7/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
	8/24/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
	10/10/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	•
		367 24 14 14 14								Martin Starting
Goff Dairy - Ctr. Pivot Beg.	7/7/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
	8/24/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
	10/10/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	
		유가는 김 유장님이								
Goff Dairy - Ctr. Pivot End	7/7/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	
	8/24/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	8	•
	10/10/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	
		A State of the sta							たいでは、ほうう	ないいたいである

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TABLE 2 CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

PLAINS MARKETING, LP LOVINGTON GATHERING WTI LEACOUNTY, NEW MEXICO PLAINS SRS NO: 2006-142 NMOCD REF NO: 1RP-838

				METHO	DDS: EPA SV	V 846-8021b			300.1	SW846-6010C
SAMPLE LOCATION	SAMPLE	BENZENE	TOLUENE	ETHYL-	M,P- VVI FNFS	O-XYLENES	TOTAL		FLUORIDE	CHROMIUM
		(mg/L)	(mg/L)	(mg/L)	ATLENES (mg/L)	(mg/L)	(mg/L)	mg/L)	(mg/L)	(mg/L)
JW Well	7/14/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		
*	8/24/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		•
	10/10/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	•	•
							وْ مَنْ مَنْ الْمَالْ			
NMOCD CRITERI	IA	0.01	0.75	0.75		TOTAL XYL	ENES 0.62		1.6	0.05

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Analytical Report 422513

for PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry Lovington Gathering WTI

2006-142

15-JUL-11

Collected By: Client



Celebrating 20 Years of commitment to excellence in Environmental Testing Services



12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002) Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054) New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610) Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046): Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85) Louisiana (04176), USDA (P330-07-00105)

> Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330) Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900) Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX) Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX) Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370) Xenco-Boca Raton (EPA Lab Code: FL01273): Florida(E86240),South Carolina(96031001), Louisiana(04154), Georgia(917) North Carolina(444), Texas(T104704468-TX), Illinois(002295), Florida(E86349)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757) Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757) Xenco Tucson (EPA Lab code: AZ000989): Arizona (AZ0758)



15-JUL-11

Project Manager: Jason Henry PLAINS ALL AMERICAN EH&S 1301 S. COUNTY ROAD 1150 Midland, TX 79706

Reference: XENCO Report No: 422513 Lovington Gathering WTI Project Address: Lea County, NM

Jason Henry:

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 422513. 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. 422513 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 422513



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Goff Dairy- Ctr. Pivot End	W	Jul-07-11 14:00		422513-001
Goff Dairy- Ctr. Pivot Beg.	W	Jul-07-11 14:15		422513-002
Goff Dairy- Ctr. Pivot Well	W	Jul-07-11 14:20		422513-003

Final 1.000

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CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S Project Name: Lovington Gathering WTI

J



Project ID: 2006-142 Work Order Number: 422513 Report Date: 15-JUL-11 Date Received: 07/08/2011

Sample receipt non conformances and comments: None

Sample receipt non conformances and comments per sample:

None

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	μ	AINS ALL A	MERICA	N EH&	5, Midlan	d, 1 X			
Project Id: 2006-142		Project Nar	ne: Loving	ton Gathe	ering WTI				
Contact: Jason Henry						Date	: Received in Lab:	Fri Jul-08-11 04:05 pm	
Project Location: Lea County, NM							Report Date:	15-JUL-11	
							Project Manager:	Brent Barron, II	
	Lab Id:	422513-001	4225	13-002	422513-0	03		-	
Analysis Downstad	Field Id:	Goff Dairy- Ctr. Pivot	End Goff Dairy-	Ctr. Pivot Beg.	Goff Dairy- Ctr. I	Pivot Well			
naicanhau ciclimity	Depth:								
	Matrix:	WATER	MA	VTER	WATEI	~			
•	Sampled:	Jul-07-11 14:00	Jul-07-	11 14:15	Jul-07-11 1	4:20		•	
BTEX by EPA 8021	Extracted:	Jul-14-11 17:30	Jul-12-	11 14:00	Jul-12-11	4:00			
	Analyzed:	Jul-15-11 08:58	Jul-13-	11 05:34	· Jul-13-110	11:5:11	•		
	Units/RL:	mg/L H	tL mg/L	RL	mg/L	RL	•		
Benzene		ND 0.0	N 010	ID 0.0010	ON .	0.0010			
Toluene		ND 0.0	020 N	ID 0.0020	QN	0.0020			
Ethylbenzene		ND 0.0	010 N	D 0:0010	QN	0.0010			
m_p-Xylenes		ND 0.0	020 N	ID 0.0020	QN	0.0020			

Certificate of Analysis Summary 42251

0.0010

ND

0.0010 0.0010 0.0010

0.0010

a a a

Xylenes, Total

o-Xylene

Total BTEX

0.0010 0.0010

0.0010 0.0010

Q Q

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 its analytical report represent the best juggment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Final 1.000

Page 5 of 14

Odessa Laboratory Manager Brefit Barron, II



Flagging Criteria

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

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.
- JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit SDL Sample Detection Lim

LOD Limit of Detection

PQL Practical Quantitation Limit MQL Method Quantitation Limit

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

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Project Name: Lovington Gathering WTI

ork Orders : 422513	·		Project I	D: 2006-142		
Lab Batch #: 863907	Sample: 607896-1-BKS / E	KS Bate	ch: Matrix	Water	CTUDY	
Units: mg/L	Date Analyzed: 07/13/11 03:17	SL	RROGATE R	ECOVERY	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes		•	[D]		1
1,4-Difluorobenzene	·	0.0304	0.0300	101	80-120	
4-Bromofluorobenzene	· · · · · · · · · · · · · · · · · · ·	0.0318	0.0300	106	80-120	
Lab Batch #: 863907	Sample: 607896-1-BSD / E	SD Bate	ch: 1 Matrix	:Water		
Units: mg/L	Date Analyzed: 07/13/11 03:40	SU	RROGATE R	ECOVERY	STUDY	
BTE	X by EPA 8021	Amount Found [A]	. True Amount [B]	Recovery %R	Control Limits %R	Flags
14-Difluorobenzene	Analytes	0.0205	0.0300	1-1		
4-Bromofluorobenzene		0.0303	0.0300	102	80-120	
		0.0505	0.0300		00-120	
Lab Batch #: 803907	Sample: 607896-1-BLK / E	SLK Bate	h: Matrix	Water	OTUDN	
Units: mg/L	Date Analyzed: 07/13/11 04:48	SU	RROGATE R	ECOVERY		
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	· · · · · · · · · · · · · · · · · · ·	0.0261	0.0300	87	80-120	
4-Bromofluorobenzene	······	0.0264	0.0300	88	80-120	
Lah Batch #: 863907	Sample: 422513-003 / SMF) Bate	h l Matrix	Water		
Units: mg/L	Date Analyzed: 07/13/11 05:11	SU	RROGATE R	ECOVERY	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
14 Diffuenchangene	Analytes	0.0201	0.02.00	121	00.120	
4-Bromofluorobenzene	· · · · · · · · · · · · · · · · · · ·	0.0294	0.0300	98	80-120	
		0.0270	0.0300	92	80-120	
Lab Batch #: 803907	Sample: 422513-0027 SMF	' Batc	h: Matrix	Water	CTUDY	
Units: mg/L	Date Analyzed: 07/13/11 05:34	50	KRUGATE R	ECOVERY		
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
I,4-Difluorobenzene	• .	· 0.0289	0.0300	96	80-120	
4-Bromofluorobenzene	······································	0.0287	0.0300	96	80-120	

* Surrogate outside of Laboratory QC limits

** 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.



Project Name: Lovington Gathering WTI

Vork Orders : 422513	s, Sample: 422513-003 S / MS	S Bate	Project II	D: 2006-142 Water		
Units: mg/L	Date Analyzed: 07/13/11 08:57	SU	RROGATE RI	ECOVERY	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes					
1,4-Difluorobenzene		0.0308	0.0300	103	80-120	
4-Biomonuorobenzene		0.0293	0.0300	98	80-120	i <u> </u>
Lab Batch #: 863907	Sample: 422513-003 SD / N	ASD Bate	h: Matrix:	Water	OTLINY	
Units: mg/L	Date Analyzed: 07/13/11 09:19		RROGATE RI	LCOVERY		
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0308	0.0300	103	80-120	<u> </u>
4-Bromofluorobenzene	= =	0.0304	0.0300	101	80-120	
Lab Batch #: 863963	Sample: 607965-1-BKS / B	KS Bate	h: Matrix:	Water		
Units: mg/L	Date Analyzed: 07/15/11 06:43	SU	RROGATE RI	ECOVERY	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
j .	Analytes		ļ	[D]	ļ	
1,4-Difluorobenzene		0.0307	0.0300	102	80-120	
4-Bromofluorobenzene		0.0314	0.0300	105	80-120	
Lab Batch #: 863963	Sample: 607965-1-BSD / B	SD Batc	h: 1 Matrix:	Water		
Units: mg/L	Date Analyzed: 07/15/11 07:06	· SU	RROGATE RI	ECOVERY	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R D	Control Limits %R	Flags
1.4-Difluorobenzene		0.0205	0.0300	102	80.120	
4-Bromofluorobenzene		0.0303	0.0300	102	80-120	
			h l Motrin	Watar		
Lap Balen #: 005905	Date A polyzod: 07/15/11 09:14	SI SI	RROGATE RI	ECOVERY	STUDY	
BTE	EX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	•	0.0279	0.0300	93	80-120	
4-Bromofluorobenzene		0.0279	0.0300	93	80-120	

* Surrogate outside of Laboratory QC limits

** 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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Project Name: Lovington Gathering WTI

Vork Orders : 422513, Lab Batch #: 863963	Sample: 422513-001 / SMP	Bate	Project II ch: ¹ Matrix	D: 2006-142 :Water	• •	
Units: mg/L	Date Analyzed: 07/15/11 08:58	SL	RROGATE R	ECOVERY	STUDY	. ,
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0277	0.0300	92	80-120	
4-Bromofluorobenzene		0.0282	0.0300	94	80-120	
Lab Batch #: 863963	Sample: 422758-001 S / MS	S Bato	ch: ¹ Matrix	:Water		
Units: mg/L	Date Analyzed: 07/15/11 10:06	SU	IRROGATE R	ECOVERY	STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0301	0.0300	100	80-120	-
4-Bromofluorobenzene		0.0310	0.0300	103	80-120	

* Surrogate outside of Laboratory QC limits
 ** Surrogates outside limits; data and surrogates confirmed by reanalysis
 *** Poor recoveries due to dilution
 Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

BS / BSD Recoveries



Project Name: Lovington Gathering WTI

Work Order #: 422513 Analyst: ASA Lab Batch ID: 862007

Date Prepared: 07/12/2011

Project ID: 2006-142 Date Analyzed: 07/13/2011 Matrix: Water

Lab Batch ID: 863907 Sample: 607896-1-	BKS	Batch	ı#: 1		·			Matrix: V	Vater		
Units: mg/L		BLANI	K /BLANK S	PIKE / E	S XNA S	PIKE DUPL	ICATE	RECOVE	RY STUD	Y	
BTEX by EPA 8021	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	BIK. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes		[B]		[a]	[E]	Result [F]	[C]				
Benzene	<0.00100	0.100	0.111	111	0.100	0.108	801	3	70-125	25	
Toluene	<0.00200	0.100	0.102	102	0.100	0.0992	66	3	70-125	25	
Ethylbenzene	<0.00100	0.100	0.109	109	0.100	0.107	107	2	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.212	. 106	0.200	0.207	104	2	70-131	25	
o-Xylene	<0.00100	0.100	0.106	106	0.100	0.103	103	3	71-133	25	
Analyst: BRB	Da	te Prepar	ed: 07/14/201	1			Date A	nalyzed: 0	7/15/2011		
Lab Batch ID: 863963 Sample: 607965-1-	BKS	Batch	1 #: 1					Matrix: V	Vater		
Units: mg/L		BLAN	K /BLANK S	PIKE / H	ILANK S	PIKE DUPL	ICATE	RECOVE	RY STUD	Y	
BTEX by EPA 8021	Blank Sample Result	Spike Added	Blank Spike	Blank Spike	Spike Added	Blank Svike	Blk. Spk Dup.	RPD	Control Limits	Control Limits	Flag

BTEX by EPA 8021	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes		[B]	[C]	[D]	· [E]	Result [F]	[G]				
Benzene	00100.0>	0.100	0.107	107	0.100	0.106	901	1	70-125	25	
Toluene	<0.00200	001.0	0.102	102	0.100	1660.0	66	3	70-125	25	
Ethylbenzene	<0.00100	0.100	0.109	, 109	0.100	0.107	107	2	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.212	106	0.200	0.209	105	1	70-131	25	
o-Xylene	<0.00100	0.100	0.105	105	0.100	0.104	104	1	71-133	25	

Relative Percent Difference RPD = 200*((C-F)/(C+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 Final 1 000

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Form 3 - MS Recoveries



Project Name: Lovington Gathering WTI

Work Order #: 422513

Lab Batch #: 863963 Date Analyzed: 07/15/2011

OC Same ID 422758 001 9

Date Prepared: 07/14/2011

Project ID: 2006-142 Analyst: BRB

QC- Sample ID: 422758-001 S Batch #: 1 Matrix: Water Reporting Units: mg/L MATRIX / MATRIX SPIKE RECOVERY STUDY Parent BTEX by EPA 8021B Spiked Sample Control Sample Spike Result %R Limits Flag Result Added %R [C] [D] [A] [B] Analytes Benzene < 0.00100 0.100 0.101 101 70-125 Toluene 70-125 < 0.00200 0.100 0.0926 93 Ethylbenzene < 0.00100 0.100 0.101 101 71-129 m_p-Xylenes < 0.00200 0.200 0.198 99 70-131 o-Xylcne < 0.00100 0.100 0.0982 98 71-133

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

BRL - Below Reporting Limit

XENCO Laboratories

Form 3 - MS / MSD Recoveries

Project Name: Lovington Gathering WTI

 Work Order #:
 422513

 Lab Batch ID:
 863907

 Date Analyzed:
 07/13/2011

Batch #: 1 Matrix: Water

Project ID: 2006-142

QC- Sample ID: 422513-003 S Date Prepared: 07/12/2011

Analyst: ASA

Reporting Units: mg/L		M	ATRIX SPIKI	E / MATI	IIX SPH	KE DUPLICAT	FE RECO	DVERY S	STUDY		
BTEX by EPA 8021	Parent Sample	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
Analytes	Result [A]	Added [B]	[C]	[D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	,
Benzene	<0.00100	0.100	0.107	107	·0.100	0.103	. 103	4	70-125	25	
Toluene	<0.00200	0.100	0.0969	97	0.100	0.0938	94	3	70-125	25	
Ethylbenzene	<0.00100	0.100	0.102	102	0.100	0.0997	100	2.	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.192	96	0.200	0.184	92	4	70-131	25	
o-Xylene	<0.00100	001.0	1660'0	66	0.100	0.0957	96	3	71-133	25	

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

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

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XENCO Laboratories

Atlanta, Boca Raton, Corpus Christi, Dallas Houston, Miami, Odessa, Philadelphia

Document Title: Sample Receipt Checklist Document No.: SYS-SRC Revision/Date: No. 01, 5/27/2010 Effective Date: 6/1/2010 Page 1 of 1

Phoenix, San Antonio, Tampa

Prelogin / Nonconformance Report - Sample Log-In

Client:	Plains	
Date/Time:	7-8-11 4:05	
Lab ID # :	422513	
Initials:	ZM	

Sample Receipt Checklist

1. Samples on ice?	E	Blue	Water	No	
2. Shipping container in good condition?	C	Yes	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?		Yes	No	(N/A)	
4. Chain of Custody present?		Yes	No	<u> </u>	
5. Sample instructions complete on chain of custody?		Yes,	No		
6. Any missing / extra samples?		Yes	No		
7. Chain of custody signed when relinquished / received?	(Yes	No		
8. Chain of custody agrees with sample label(s)?	2	Yes	No		······································
9. Container labels legible and intact?	\leq	Yes	No		
10. Sample matrix / properties agree with chain of custody?		Yes	No		
11. Samples in proper container / bottle?	(Yeş	No		
12. Samples properly preserved?		Yes	No	N/A	
13. Sample container intact?	(Yes	No		
14. Sufficient sample amount for indicated test(s)?		Yes	No		
15. All samples received within sufficient hold time?		Yes	No		
16. Subcontract of sample(s)?		Yes	No/	N/A	
17. VOC sample have zero head space?	C	Tes	No	N/A	
18. Cooler 1 No. Cooler 2 No. Cooler 3 No.	Coc	oler 4 No)	Cooler 5 No.	
Ibs 4.6 °C Ibs °C Ibs	°C	lbs	°C	lbs	°c

Nonconformance Documentation

Contact:	Contacted by:	······	 Date/Time:		
Regarding:					
Corrective Action Taken:			 		
·			 	<u></u>	
	· · · · · · · · · · · · · · · · · · ·		 		

condition acceptable by NELAC 5.5.8.3.1.a.1.

□ Initial and Backup Temperature confirm out of temperature conditions

Client understands and would like to proceed with analysis

Analytical Report 422757

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry Lovington Gathering WTI

2006-142

15-JUL-11

Collected By: Client,



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12600 West I-20 East Odessa, Texas 79765

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Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002) Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054) New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610) Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046): Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85) Louisiana (04176), USDA (P330-07-00105)

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Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757) Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757) Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)





15-JUL-11

Project Manager: Jason Henry PLAINS ALL AMERICAN EH&S 1301 S. COUNTY ROAD 1150 Midland, TX 79706

Reference: XENCO Report No: 422757 Lovington Gathering WTI Project Address: Lea County, NM

Jason Henry:

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 422757. 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. 422757 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 422757



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	· .	Matrix	Date Collected Sample Dept	h Lab Sample Id
Goff Dairy Well		W	Jul-11-11 14:45	422757-001
MW-10		W	Jul-11-11 15:00	422757-002

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Page 3 of 14





Client Name: PLAINS ALL AMERICAN EH&S Project Name: Lovington Gathering WTI



 Project ID:
 2006-142

 Work Order Number:
 422757

Report Date: 15-JUL-11 Date Received: 07/12/2011

Sample receipt non conformances and comments: None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-863907 BTEX by EPA 8021 SW8021BM

Batch 863907, 1,4-Difluorobenzene recovered above QC limits . Matrix interferences is suspected; data confirmed by re-analysis Samples affected are: 422757-002.

(Entropication	PL	AINS ALL A	MERICAN EH&	s, Midland, T	X		
Project 1d: 2006-142		Project Nan	ie: Lovington Gath	ering WTI			
Contact: Jason Henry		ι			Date Received in Lab: Tu	ue Jul-12-11 01:00 pm	
ject Location: Lea County, NM				. *	Report Date: 15 Project Manager: Br	-JUL-11 ent Barron, II	
	Lab Id:	422757-001	422757-002				
Analysis Dogusstad	Field Id:	Goff Dairy Well	01-WW				
naicanhau ciclinut	Depth:						
	Matrix:	WATER	WATER				
	Sampled:	Jul-11-11 14:45	Jul-11-11 15:00				
BTEX by EPA 8021	Extracted:	Jul-12-11 15:20	Jul-12-11 15:20				
	Analyzed:	Jul-13-11 11:11	Jul-13-11 11:34				
	Units/RL:	mg/L R	L mg/L RL				
enzene		0.00262 0.00	010 3.00 D 0.0250				
oluene		ND 0.00	0.00265 0.0020				
thylbenzene		ND 0.00	010 0.00365 0.0010				
1_p-Xylenes		ND 0.00	0.0248 0.0020				
-Xylene		ND 0.0(010 0.00232 0.0010				
(ylenes, Total		ND 0.0(010 0.0271 0.0010				
otal BTEX		0.00262 .0.00	010 3.03 D 0.0010				

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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 juggment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Brefit Barron, II Odessa Laboratory Manager

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Flagging Criteria

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

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.
- JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit SDL Sample Detection Limit

LOD Limit of Detection

LOQ Limit of Quantitation

PQL Practical Quantitation Limit MQL Method Quantitation Limit

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

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Project Name: Lovington Gathering WTI

ork Orders : 422757	', Sampla: 607896-1-BKS / F	3KS Boto	Project II	D: 2006-142						
Units: mg/L	Date Analyzed: 07/13/11 03:17	SU SU	RROGATE R	ECOVERY	STUDY					
BTE	X by EPA 8021	Amount Found [A]	True Amount B]	Recovery %R	Control Limits %R	Flags				
	Analytes			[D]						
I,4-Difluorobenzene		0.0304	0.0300	101-	80-120					
4-Bromofluorobenzene		0.0318	0.0300	106	80-120					
Lab Batch #: 863907	Sample: 607896-1-BSD / P	BSD Bate	h: l Matrix	:Water						
Units: mg/L	Date Analyzed: 07/13/11 03:40	SU	RROGATE RI	ECOVERY	STUDY					
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
1.4-Difluorobenzene		0.0305	0.0300	102	80-120					
4-Bromofluorobenzene		0.0303	0.0300	101	80-120	· · · ·				
Lah Batch #• 863907	Sample: 607896-1-BLK / F		h· Matrix	·Water						
Units: mg/L	Date Analyzed: 07/13/11 04:48	SU	RROGATE RI	ECOVERY	STUDY					
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
1,4-Difluorobenzene		0.0261	0.0300	87	80-120					
4-Bromofluorobenzene		0.0264	0.0300	88	80-120					
Lab Batch #: 863907	Sample: 422513-003 S / M	S Bate	h: 1 Matrix	:Water	<u>ا ا ا ا ا ا</u>					
Units: mg/L	Date Analyzed: 07/13/11 08:57	SURROGATE RECOVERY STUDY								
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
1,4-Difluorobenzene		0.0308	0.0300	103	80-120					
4-Bromofluorobenzene	· · · · · · · · · · · · · · · · · · ·	. 0.0293	0.0300	- 98	80-120					
Lab Batch #: 863907	Sample: 422513-003 SD / 1	MSD Bate	h: ¹ Matrix	:Water						
	•	ISD Batch: I Matrix: Water SURROGATE RECOVERY STUDY								
Units: mg/L	Date Analyzed: 07/13/11 09:19	50								
Units: mg/L BTE	Date Analyzed: 07/13/11 09:19 X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
Units: mg/L BTE	Date Analyzed: 07/13/11 09:19	Amount Found [A]	True Amount [B] 0.0300	Recovery %R [D]	Control Limits %R 80-120	Flags				

* Surrogate outside of Laboratory QC limits

** 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.



Project Name: Lovington Gathering WTI

Work Orders : 422757 Lab Batch #: 863907	, Sample: 422757-001 / SMP	Batc	Project II h: ¹ Matrix:	D: 2006-142 Water		
Units: mg/L	Date Analyzed: 07/13/11 11:11	SU	RROGATE RI	ECOVERY	STUDY	<u> </u>
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1.4-Difluorobenzene		0.0269	0.0300	90	80-120	
4-Bromofluorobenzene		0.0260	0.0300	87	80-120	
Lab Batch #: 863907	Sample: 422757-002 / SMP	Bate	h: ¹ Matrix:	Water	I	I
Units: mg/L	Date Analyzed: 07/13/11 11:34	SU	RROGATE RI	ECOVERY	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1.4-Difluorobenzene	Analytes	0 109	0.0300	363	80-120	**
4-Bromofluorobenzene		0.0354	0.0300	118	80-120	
Lab Batch #: 863963	Sample: 607965-1-BKS / B	KS Bate	i h· Matrix	Water	<u> </u>	
Lab Batch #. 005505	Date Analyzed: 07/15/11 06:43	SU	RROGATE RI	ECOVERY	STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0307	0.0300	102	80-120	
4-Bromofluorobenzene		0.0314	0.0300	105	80-120	
Lab Batch #: 863963	Sample: 607965-1-BSD / B	SD Bate	h: ¹ Matrix:	Water	• • •	
Units: mg/L	Date Analyzed: 07/15/11 07:06	SU	RROGATE RI	ECOVERY	STUDY	<u> </u>
BTE	CX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	· · · · · · · · · · · · · · · · · · ·	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene		0.0312	0.0300	104	80-120	
Lab Batch #: 863963	Sample: 607965-1-BLK / B	LK Bate	h: 1 Matrix	Water		
Units: mg/L	Date Analyzed: 07/15/11 08:14	SU	RROGATE RI	ECOVERY	STUDY	
BTE	CX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0279	0.0300	93	80-120	
4-Bromofluorobenzene		0.0279	0.0300	93	80-120	

* Surrogate outside of Laboratory QC limits

** 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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	Laboratories

Project Name: Lovington Gathering WTI

Nork Orders: 422757,	,		Project I	D: 2006-142		
Lab Batch #: 863963	Sample: 422757-002 / DL	Bate	h: ¹ Matrix	:Water		
Units: mg/L	Date Analyzed: 07/15/11 09:21	SU	RROGATE R	ECOVERY	STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R D	Control Limits %R	Flags
1,4-Difluorobenzene	· · · ·	0.0304	0.0300	101	80-120	
4-Bromofluorobenzene		0.0272	0.0300	91	80-120	-
Lab Batch #: 863963	Sample: 422758-001 S / MS	Batc	h: ¹ Matrix	Water	·	
Units: mg/L	Date Analyzed: 07/15/11 10:06	SU	RROGATE R	ECOVERY	STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	· · · · · · · · · · · · · · · · · · ·	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	······································	0.0310	0.0300	103	80-120	

Surrogate outside of Laboratory QC limits
 ** Surrogates outside limits; data and surrogates confirmed by reanalysis
 *** Poor recoveries due to dilution
 Surrogate Recovery [D] = 100 * A / B
 All results are based on MDL and validated for QC purposes.



BS / BSD Recoveries



Project Name: Lovington Gathering WTI

Work Order #: 422757 Analyst: ASA Lab Batch ID: 863007

Date Prepared: 07/12/2011

Date Analyzed: 07/13/2011 Matrix: Water

Project ID: 2006-142

Lab Batch ID: 863907 Sample: 607896	-1-BKS	Batcl	n#: 1					Matrix: V	Vater		
Units: mg/L		BLAN	K /BLANK S	SPIKE / E	S XNA S	PIKE DUPI	ICATE I	RECOVE	RY STUD	Y	
BTEX by EPA 8021	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes		[B]	[c]	<u>[</u>	[E]	Result [F]	[<u>0</u>]				
Benzene	<0.00100	0.100	0.111	111	0.100	0.108	108	e	70-125	25	
Toluene	<0.00200	0.100	0.102	102	. 0.100	0.0992	66	ю	70-125	25	
Ethylbenzene	<0.00100	0.100	0.109	601	0.100	0.107	107	2	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.212	901	0.200	0.207	104	2	70-131	25	
o-Xylene	<0.00100	0.100	0.106	901	0.100	0.103	103	3	71-133	25	
Analyst: BRB	Ũ	ate Prepar	ed: 07/14/201	1			Date Ar	nalyzed: 0	7/15/2011		
Lab Batch ID: 863963 Sample: 607965	-1-BKS	Batcl	I #: 1					Matrix: V	Vater		
Units: mg/L		BLAN	K /BLANK S	SPIKE / B	S ANK S	PIKE DUPL	ICATE F	RECOVE	RY STUD	Y	
	1		114	-	:	ā					

Control Limits %RPD 25 25 25 25 25 Control Limits %R 70-125 71-129 71-133 70-125 70-131 RPD % --ŝ 2 BIK. Spk Dup. %R [G] 105 106 107 104 66 Blank Spike Duplicate Result [F] 0.106 0.107 0.209 0.104 0.0991 Spike Added 0.100 0.100 0.200 0.100 0.100 Ξ Blank Spike %R [D] 106 105 107 102 109 Blank Spike Result [C] 0.107 0.102 0.109 0.212 0.105 Spike Added 0.100 0.100 0.100 0.200 0.100 <u>B</u> Blank Sample Result <0.00100 <0.00100 <0.00200 <0.00100 <0.00200 4 BTEX by EPA 8021 Analytes Ethylbenzene m_p-Xylenes Benzene o-Xylene Toluene

Flag

Relative Percent Difference RPD = 200*[(C-F)/(C+F)] Blark Spike Recovery [D] = 100*(C)/[B] Blark Spike Duplicate Recovery [G] = 100*(F)/[E] All results are based on MDL and Validated for QC Purposes Final 1.000

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Form 3 - MS Recoveries



Project Name: Lovington Gathering WTI

Work Order #: 422757 Lab Batch #: 863963

Project ID: 2006-142

Date Analyzed: 07/15/2011 D	ate Prepared: 07/14	4/2011	· . A	nalyst: B	RB	
QC- Sample ID: 422758-001 S	Batch #: 1		Ν	Matrix: W	ater	
Reporting Units: mg/L	MATR	RIX / MA	TRIX SPIKE	RECOV	VERY STU	DY
BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result (C)	%R [D]	Control Limits %R	Flag
Benzene	<0.00100	0.100	0.101	101	70-125	
Toluene	<0.00200	0.100	0.0926	93	70-125	
Ethylbenzene	<0.00100	0.100	0.101	101	71-129	
m_p-Xylenes	<0.00200	0.200	0.198	99	70-131	
o-Xylene	<0.00100	0.100	0.0982	98	71-133	

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

RL - Below Reporting Limit

Form 3 - MS / MSD Recoveries



Work Order #: 422757

Date Analyzed: 07/13/2011 Lab Batch ID: 863907

Reporting Units: mg/L

Project Name: Lovington Gathering WTI

Project ID: 2006-142

Matrix: Water -Batch #:

QC-Sample ID: 422513-003 S

Date Prepared: 07/12/2011

ASA Analyst:

Reporting Units: mg/L		M	ATRIX SPIKI	E / MATI	AIX SPIF	(E DUPLICA)	FE RECO	VERY S	STUDY		
BTEX by EPA 8021	Parent Sample	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
Analytes	Result [A]	Added [B]		%R [D]	Àdded [E]	Result [F]	[G]	%	%R	%RPD)
Benzene	<0.00100	0.100	0.107	107	0.100	0.103	103	4	70-125	25	
Toluene	<0.00200	0.100	0.0969	97	001.0	0.0938	94	3	70-125	25	
Ethylbenzene	<0.00100	0.100	0.102	102	0.100	0.0997	100	2	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.192	96	0.200	0.184	92	4	70-131	25	
o-Xylene	<0.00100	001.0	1660.0	66	0.100	0.0957	96	3	71-133	25	

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

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

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Final 1.000

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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



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XENCO Laboratories

Atlanta, Boca Raton, Corpus Christi, Dallas Houston, Mlami, Odessa, Philadelphia Phoenix, San Antonio, Tampa

Document Title:	Sample Rece	eipt Checklist
Document No.:	SYS-SRC	
Revision/Date:	No. 01, 5/27/2	010
Effective Date:	6/1/2010	Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

Client:	basin Env. / Plains
Date/Time:	7:12.11 13:00
Lab ID # :	422 757
Initials:	Æ

Sample Receipt Checklist

				· · · · · · · · · · · · · · · · · · ·	
1. Samples on ice?		Blue	Water	No	
2. Shipping container in good condition?		Yes	No	None	
3. Custody seals intact on shipping container (cooler) and bott	es?	(Yes)	No	N/A	
4. Chain of Custody present?		Yes	No		
5. Sample instructions complete on chain of custody?		Yee	No		
6. Any missing / extra samples?		Yes	No		
7. Chain of custody signed when relinquished / received?		Yes	No		
8. Chain of custody agrees with sample label(s)?		Yes	No		
9. Container labels legible and intact?	Yes	No			
10. Sample matrix / properties agree with chain of custody?		Yes	No		
11. Samples in proper container / bottle?		Yes	No		
12. Samples properly preserved?		(Yes)	No	N/A	
13. Sample container intact?		(Yes)	No		
14. Sufficient sample amount for indicated test(s)?		Yes	No		
15. All samples received within sufficient hold time?		(Yes)	No		
16. Subcontract of sample(s)?		Yes	No	(NA)	
17. VOC sample have zero head space?		Yes	No	N/A	
18. Cooler 1 No. Cooler 2 No. Cooler 3 No.		Cooler 4 N	o	Cooler 5 No.	
	°C	lbs	°C	lbs	°C

Nonconformance Documentation

Final 1.000

Analytical Report 423313

for PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry Lovington Gathering WTI 2006-142

18-JUL-11

Collected By: Client



Celebrating 20 Years of commitment to excellence in Environmental Testing Services



12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002) Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054) New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610) Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046): Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AAL11), West Virginia (362), Kentucky (85) Louisiana (04176), USDA (P330-07-00105)

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Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757) Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757) Xenco Tucson (EPA Lab code: AZ000989): Arizona (AZ0758)



18-JUL-11

Project Manager: Jason Henry PLAINS ALL AMERICAN EH&S 1301 S. COUNTY ROAD 1150 Midland, TX 79706

Reference: XENCO Report No: 423313 Lovington Gathering WTI Project Address: Lea County, NM

Jason Henry:

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 423313. 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. 423313 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 423313



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id		Matrix	Date Collected	Sample Depth	Lab Sample Id
JW Well		· W	Jul-14-11 14:20		423313-001
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CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S Project Name: Lovington Gathering WTI



Project ID:2006-142Work Order Number:423313

Report Date: 18-JUL-11 Date Received: 07/15/2011

Sample receipt non conformances and comments: None

Sample receipt non conformances and comments per sample:

None

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Project Id: 2006-142		Project Name:	: Lovington Gath	ering WTI		Namo ^{B.}	
Contact: Jason Henry Designt Location: Lea County NM				Da	ite Received in Lab: Report Date:	Fri Jul-15-11 02:57 p. 18-JUL-11	Ē
					Project Manager:	Brent Barron, II	
	Lab Id:	423313-001					
Analucia Domotod	Field Id:	JW Well					-
naisanhay sistimuy	Depth:						
· ·	Matrix:	WATER				• •	
	Sampled:	Jul-14-11 14:20					
BTEX by EPA 8021	Extracted:	Jul-15-11 17:30					
	Analyzed:	Jul-15-11 20:52					
· ·	Units/RL:	mg/L RL			-,		
Benzene		ND 0.0010					
Toluene		ND 0.0020					
Ethylbenzene		ND 0.0010					
m_p-Xylenes		ND 0:0020			- - - -		
o-Xylene		ND 0:0010				*	
Xylenes, Total		ND 0.0010					
Total BTEX		ND 0.0010					
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This analytical report, and the entire data package it represents, has been r	made for your exclusive	and confidential use.					
The interpretations and results expressed throughout this analytical report KENCO Laboratories assumes no responsibility and makes no warranty to	1 represent the best judgn to the end use of the data	nent of XENCO Laboratories. hereby presented.				()	
Our liability is limited to the amount invoiced for this work order unless of	otherwise agreed to in wi	Thing.				11. 140	

Final 1.000

Brent Barron, II Odessa Laboratory Manager

Page 5 of 12

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Flagging Criteria

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

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.
- JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit SDL Sample Detection Limit

LOD Limit of Detection

Phone

PQL Practical Quantitation Limit MQL Method Quantitation Limit LOQ Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

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5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
2505 North 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
12600 West I-20 East, Odessa, TX 79765	(432) 563-1800	(432) 563-1713
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3725 E. Atlanta Ave, Phoenix, AZ 85040	(602) 437-0330	

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Project Name: Lovington Gathering WTI

Vork Orders: 423313	β , Sompley 608031-1-BKS/E	KS Potal	Project II): 2006-142 •Water		
Units: mg/L	Date Analyzed: 07/15/11 18:59	SU SU	RROGATE RI	ECOVERY S	STUDY	
BTE	X by EPA 8021 Analytes	A'mount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0314	0.0300	105	80-120	
4-Bromofluorobenzene		0.0295	0.0300	98	80-120	
Lab Batch #: 864101	Sample: 608031-1-BSD / B	SD Batch	h: 1 Matrix:	Water		
Units: mg/L	Date Analyzed: 07/15/11 19:22	SU	RROGATE RF	COVERY S	STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R D]	Control Limits %R	Flags
I,4-Difluorobenzene		0.0283	0.0300	94	80-120	
4-Bromofluorobenzene	· · · · · · · · · · · · · · · · · · ·	0.0280	0.0300	93	80-120	
Lah Batch #: 864101	Sample: 608031-1-BLK / P	LI SLK Batel	h· 1 Matrix:	•Water	l I	
Units: mg/L	Date Analyzed: 07/15/11 20:29	SU	RROGATE RE	ECOVERY S	STUDY	<u></u>
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0288	0.0300	96	80-120	
4-Bromofluorobenzene		0.0256	0.0300	85	80-120	
Lab Batch #: 864101	Sample: 423313-001 / SMP	Batch	h: Matrix:	Water		
Units: mg/L	Date Analyzed: 07/15/11 20:52	SURROGATE RECOVERY STUDY				
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount B]	Recovery %R [D]	Control Limits %R	Flags
I,4-Difluorobenzene		0.0300	0.0300	100	80-120	
4-Bromofluorobenzene	· · · · · · · · · · · · · · · · · · ·	0.0269	0.0300	90	80-120	
Lab Batch #: 864101	Sample: 423313-001 S / MS	S Batch	n: 1 Matrix:	Water		
Units: mg/L	Date Analyzed: 07/15/11 23:30	SU	RROGATE RE	COVERY S	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
1.4 Diffuorohenzana		0.02.03	0.0200	101	<u>80 120</u>	
4-Bromofluorohenzene		0.0303	0.0300	101	80-120	
4-Dromonuorobenzene		+0.0.0	0.0500	101	00-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B



Project Name: Lovington Gathering WTI

ork Orders : 423313 Lab Batch #: 864101 Units: mg/L	, Sample: 423313-001 SD / M Date Analyzed: 07/15/11 23:52	ISD Bate SU	Project l h: 1 Matri: RROGATE R	D: 2006-142 x: Water ECOVERY	STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0316	0.0300	. 105	80-120	
4-Bromofluorobenzene		0.0307	0.0300	102	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

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

BS / BSD Recoveries

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Project Name: Lovington Gathering WTI

Work Order #: 423313 Analyst: ASA

Lab Batch ID: 864101

Date Prepared: 07/15/2011 Batch #: 1

Sample: 608031-1-BKS

Project ID: 2006-142 **Date Analyzed:** 07/15/2011 Matrix: Water

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Units: mg/L		BLANK	K /BLANK S	PIKE / B	LANK S	PIKE DUPL	ICATE I	RECOVE	RY STUD	Y	
BTEX by EPA 8021	Blank Sample Result	Spike Added	Blank Spike	Blank Spike	Spike Added	Blank Spike	Bik. Spk Dup.	RPD	Control Limits	Control Limits	Flag
Analytes	[A]	[B]	Result [C]	%R {D]	[E]	Duplicate Result [F]	%R [G]	%	%R	%RPD	
Benzene	<0.00100>	0.100	0.102	102	0.100	101.0	101	- I	70-125	25	
Toluene	<0.00200	0.100	0.0933	93	0.100	0.0932	93	0	70-125	25	
· Ethylbenzene	<0.00100.0>	0.100	0.103	103	0.100	0.101	101	2	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.201	101	0.200	0.195	86	3	70-131	25	
o-Xylene	<0.00100	0.100	0.100	100	0.100	0.0942	94	6	71-133	25	

Relative Percent Difference RPD = 200*[(C-F)/(C+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

Page 9 of 12

Form 3 - MS / MSD Recoveries



Work Order #: 423313 Lab Batch ID: 864101 Date Analyzed: 07/15/2011 Reporting Units: mg/L

Project ID: 2006-142

QC- Sample ID: 423313-001 S Date Prepared: 07/15/2011

Matrix: Water ASA Batch #: Analyst:

-

Reporting Units: mg/L		W	ATRIX SPIKI	E / MATI	IIX SPIE	KE DUPLICAT	FE RECO	VERY S	TUDY		
BTEX by EPA 8021	Parent Sample	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
Analytes	Result [A]	Added [B]		%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Benzene	<0.00100	0.100	0.103	103	0.100	0.110	110	7	70-125	25	
Toluene	<0.00200	0.100	0.0953	95	0.100	0.100	100	5	70-125	25	
Ethylbenzene	<00100.0>	0.100	0.102	102	0.100	0.107	107	5	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.192	96	0.200	0.204	102	6	70-131	25	
o-Xylene	<0.00100	0.100	0.0946	95	0.100	0.104	104	9	71-133	25	

.

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

ND = Not Detected, J = Present Below Reporting Limit, <math>B = Present in Blank, NR = Not Requested, l = Interference, NA = Not ApplicableN = Sec Narrative, EQL = Estimated Quantitation Limit

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

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XENCO Laboratories

Atlanta, Boca Raton, Corpus Christi, Dallas Houston, Miami, Odessa, Philadelphia

Phoenix, San Antonio, Tampa

Document Title: Sample Receipt Checklist Document No.: SYS-SRC Revision/Date: No. 01, 5/27/2010 Effective Date: 6/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

Client:	Plains	
Date/Time:	7-1511 14:57	
Lab ID # :	423313	
Initials:	,LM	

Sample Receipt Checklist

	······			··
1. Samples on ice?	Blue	Water	No	
2. Shipping container in good condition?	(Yes)	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	Yes	No	N/A`	
4. Chain of Custody present?	Yes	No		
5. Sample instructions complete on chain of custody?	Yes	No		
6. Any missing / extra samples?	Yes	No		
7. Chain of custody signed when relinquished / received?	Yes	No		
8. Chain of custody agrees with sample label(s)?	Yes	No		•
9. Container labels legible and intact?	Yes	No		
10. Sample matrix / properties agree with chain of custody?	Yes	No ·		
11. Samples in proper container / bottle?	(Yes)	No		
12. Samples properly preserved?	Yes	No	N/A	
13. Sample container intact?	Tes	No		
14. Sufficient sample amount for indicated test(s)?	Yes	No		
15. All samples received within sufficient hold time?	(Yes)	No		
16. Subcontract of sample(s)?	Yes	NO	N/A	
17. VOC sample have zero head space?	Yes	No	N/A	
18. Cooler 1 No. Cooler 2 No. Cooler 3 No.	Cooler 4 No		Cooler 5 No.	
ibs 14.6 °C ibs °C ibs °C	C Ibs	°c	lbs	°C
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Nonconformance Documentation

Contact:	Contacted by:	Date/Time:
Regarding:		
,		
Corrective Action Tak	en:	
······		
Check all that apply:	Cooling process has begun shortly after sam condition acceptable by NELAC 5.5.8.3.	pling event and out of temperature 1.a.1. f temperature conditions

Client understands and would like to proceed with analysis

Analytical Report 426487

for PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry Lovington Gathering WTI

2006-142

01-SEP-11

Collected By: Client



Celebrating 20 Years of commitment to excellence in Environmental Testing Services



12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002) Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054) New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610) Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046): Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AAL11), West Virginia (362), Kentucky (85) Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00989): Arizona (AZ0758)



01-SEP-11

Project Manager: Jason Henry PLAINS ALL AMERICAN EH&S 1301 S. COUNTY ROAD 1150 Midland, TX 79706

Reference: XENCO Report No: 426487 Lovington Gathering WTI Project Address: Lea County, NM

Jason Henry:

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 426487. 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. 426487 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron II Odessa Laboratory Manager

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







Sample Cross Reference 426487



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-1	W	08-24-11 09:20		426487-001
MW-3	W	08-24-11 12:40		426487-002
MW-4	W	08-24-11 10:00		426487-003
MW-5	W	08-24-11 10:30		426487-004
MW-6	. W	08-24-11 13:20	•	426487-005
MW-7	W	08-24-11 17:30		426487-006
MW-8	W	08-24-11 17:40		426487-007
MW-9	W	08-24-11 15:00		426487-008
MW-10	W	08-24-11 14:30		426487-009
Goff Dairy Well	W	08-24-11 16:30		426487-010
Goff Dairy - Ctr. Pivot Well	W	08-24-11 16:45		426487-011
Goff Dairy - Ctr. Pivot Beg.	W	08-24-11 17:00		426487-012
Goff Dairy - Ctr. Pivot End	W	08-24-11 17:25	* <i>a</i>	426487-013
JW Well	W	08-24-11 17:15		426487-014

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CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S Project Name: Lovington Gathering WTI



Project ID:2006-142Work Order Number:426487

Report Date: 01-SEP-11 Date Received: 08/25/2011

Sample receipt non conformances and comments: None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-868690 BTEX by EPA 8021 SW8021BM

Batch 868690, 4-Bromofluorobenzene recovered below QC limits . Matrix interferences is suspected; data confirmed by re-analysis Samples affected are: 426487-009.

Project Id: 2006-142

Contact: Jason Henry

Certificate of Analysis Summary 426487 PLAINS ALL AMERICAN EH&S, Midland, TX Project Name: Lovington Gathering WTI



Date Received in Lab: Thu Aug-25-11 11:10 am Report Date: 01-SEP-11

Project Location: Lea County, NM					Keport Date:	11-326-11	
					Project Manager: H	Srent Barron II	
	Lab Id:	426487-001	426487-002	426487-003	426487-004	426487-005	426487-006
Andhicis Donucedad	Field Id:	I-WM	MW-3	MW-4	MW-5	9-MM	MW-7
vinuty of the sector	Depth:						
	Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
-	Sampled:	Aug-24-11 09:20	Aug-24-11 12:40	Aug-24-11 10:00	Aug-24-11 10:30	Aug-24-11 13:20	Aug-24-11 17:30
BTEX by EPA 8021	Extracted:	Aug-26-11 16:00	Aug-26-11 16:00	Aug-26-11 16:00	Aug-26-11 16:00	Aug-26-11 16:00	Aug-26-11 16:00
	Analyzed:	Aug-27-11 21:13	Aug-27-11 21:35	Aug-27-11 21:58	Aug-28-11 03:16	Aug-27-11 23:52	Aug-28-11 00:14
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Benzene		ND 0.00100	0.0262 0.00100	0.00119 0.00100	ND 0.00100	0.105 0.00100	0.00192 0.00100
Toluene		ND 0.00200	0.00333 0.00200	ND 0.00200	ND 0.00200	ND 0.00200	ND 0.00200
Ethylbenzene		ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100
m_p-Xylenes		ND 0.00200	0.00827 0.00200	ND 0.00200	ND 0.00200	0.0597 0.00200	ND 0.00200
o-Xylene		ND 0.00100	0.00312 0.00100	ND 0.00100	ND 0.00100	0.00309 0.00100	ND 0.00100
Xylenes, Total		ND 0.00100	0.0114 0.00100	ND 0.00100	ND 0.00100	0.0628 0.00100	ND 0.00100
Total BTEX		ND 0.00100	0.0409 0.00100	0.00119 0.00100	ND 0.00100	0.168 0.00100	0.00192 0.00100

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and result expressed throughout this analytical report represent the best judgment of XENO Laboratories. XENO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoced for this work order unless otherwise agreed to in writing. Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Odessa Laboratory Manager Brefit Barron II

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Project Id: 2006-142 Contact: Jason Henry

Certificate of Analysis Summary 426487 PLAINS ALL AMERICAN EH&S, Midland, TX Project Name: Lovington Gathering WTI



 Date Received in Lab:
 Thu Aug-25-11 11:10 am

 Report Date:
 01-SEP-11

Draigat I agatian. I as County NM					керогт иаце:	UI-SEF-11	
					Project Manager:	Brent Barron II	
	Lab Id:	426487-007	426487-008	426487-009	426487-010	426487-011	426487-012
Australia Damardad	Field Id:	8-WM	6-MW	MW-10	Goff Dairy Well	Goff Dairy - Ctr. Pivot Well	Goff Dairy - Ctr. Pivot Bcg.
naisanhay sistimut	Depth:						
	Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
	Sampled:	Aug-24-11 17:40	Aug-24-11 15:00	Aug-24-11 14:30	Aug-24-11 16:30	Aug-24-11 16:45	Aug-24-11 17:00
BTEX by EPA 8021	Extracted:	Aug-26-11 16:00	Aug-26-11 16:00	Aug-26-11 16:00	Aug-30-11 15:49	Aug-30-11 15:49	Aug-26-11 16:00
	Analyzed:	Aug-28-11 00:37	Aug-28-11 01:00	Aug-28-11 01:23	Aug-31-11 06:35	Aug-31-11 06:58	Aug-28-11 02:30
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Benzene		ND 0.00100	ND 0.00100	0.654 D 0.0100	0.00138 0.00100	ND 0.00100	ND 0.00100
Toluene		ND 0.00200	ND 0.00200	ND 0.00200	ND 0.00200	ND 0.00200	ND 0.00200
Ethylbenzene		ND 0.00100	ND 0.00100	0.00158 0.00100	ND 0.00100	ND 0.00100	ND 0.00100
m_p-Xylenes		ND 0.00200	0.00237 0.00200	0.0177 0.00200	ND 0.00200	ND 0.00200	ND 0.00200
o-Xylene		ND 0.00100	ND 0.00100	0.00262 0.00100	ND 0.00100	ND 0.00100	ND 0.00100
Xylenes, Total		ND 0.00100	0.00237 0.00100	0.0203 0.00100	ND 0.00100	ND 0.00100	ND 0.00100
Total BTEX		ND 0.00100	0.00237 0.00100	0.676 D 0.00100	0.00138 0.00100	ND 0.00100	ND 0.00100

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

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Odessa Laboratory Manager Brefit Barron II

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Project (bit : 2006)-142 Project (bit : 2006)-142 Connect: Jason Hamy Date Review In Lah: Tur Aug 25-11 [1:10 am Tuper Location: La County, Mit Date Review In Lah: Tur Aug 25-11 [1:10 am Tuper Location: La County, Mit Date Review In Lah: Tur Aug 25-11 [1:10 am Tuper Location: La County, Mit Date Review In Lah: Tur Aug Analysis Requested Field Lah Date Review In Lah Aug 26-11 [2:13 Analysis Requested Aug 26-11 [2:13 Date Review In Lah Aug 26-11 [2:13 <tr< th=""><th>Laboratories</th><th></th><th>tificate of Al AINS ALL AM</th><th>nalysis Summ ERICAN EH&S,</th><th>ary 426487 Midland, TX</th><th></th><th>, . •</th></tr<>	Laboratories		tificate of Al AINS ALL AM	nalysis Summ ERICAN EH&S,	ary 426487 Midland, TX		, . •	
Date Received in Lais This Mag-25-11 11:10 and Received in Lais Date Received in Lais Received in Lais Date Received in Lais Received in Lais <th co<="" th=""><th>Project Id: 2006-142</th><th></th><th>Project Name:</th><th>Lovington Gatheri</th><th>ng WTI</th><th></th><th></th></th>	<th>Project Id: 2006-142</th> <th></th> <th>Project Name:</th> <th>Lovington Gatheri</th> <th>ng WTI</th> <th></th> <th></th>	Project Id: 2006-142		Project Name:	Lovington Gatheri	ng WTI		
Toper Lucitor: Lea County, NA Toper Lucitor: Lea County, NA Analysis Requested Lak Ma Cabination Project Manager: Bent Barron I Analysis Requested Pair Ma 20487-013 426487-013 426487-014 Project Manager: Bent Barron I Analysis Requested Pair Ma Analysis Requested Variation Variation 426487-014 426487-014 Project Manager: Bent Barron I Analysis Requested Pair Ma Variation Variation Variation 426487-014 Project Manager: Bent Barron I Analysis Requested Pair Ma Analysis Requested Analysis Manager: Analysis Manager: Project Manager: Bent Man	Contact: Jason Henry				Date Received in	Lab: Thu Aug-25-11 11:10 am		
Analysis Requested Lab th 426487-014 Park th 426487-014 Park th 426487-014 Park th Park	oject Location: Lea County, NM				Report Project Man	Date: 01-SEP-11 ager: Brent Barron II		
Audysis Requested Fed to Depris Well Jw Well Depris Depris WATER WATER Mag Depris Mag 24-11 17:12 Mag 24-11 17:12 Mag 24-11 17:12 Mag 24-11 17:12 BTEX by EPA 8021 Extraords Mag 24-11 17:12 Mag 24-11 17:12 Mag 24-11 17:12 BTEX by EPA 8021 Extraords Mag 24-11 17:12 Mag 24-11 17:12 Mag 24-11 17:12 Analyset Aug 24-11 17:12 Mag 24-11 16:20 Mag 24-11 16:20 Mag 24-11 16:20 Analyset Mag 24-11 16:20 Mag 24-11 16:20 Mag 24-11 16:20 Mag 24-11 16:20 Analyset Mag 24-11 16:20 Mag 24-11 16:20 Mag 24-11 16:20 Mag 24-11 16:20 Analyset Mag 24-11 16:20 Mag 24-11 16:20 Mag 24-11 16:20 Mag 24-11 16:20 Analyset Mag 24-11 16:20 Mag 24-11 16:20 Mag 24-11 16:20 Mag 24-11 16:20 Analyset Mag 24-11 16:20 Mag 24-11 16:20 Mag 24-11 16:20 Mag 24-11 16:20 Analyset Mag 24-11 16:20 Mag 24-11 16:20 Mag 24-11 16:20 Mag 24-11 16:20 <t< td=""><td></td><td>Lab Id:</td><td>426487-013</td><td>426487-014</td><td></td><td></td><td></td></t<>		Lab Id:	426487-013	426487-014				
Deptile Interces Deptile Interces Matrices Matrices Natifies Natif		Field Id:	Goff Dairy - Ctr. Pivot End	JW Well				
Matrix WATER WATER Samples Samples WATER WATER BTEX by E7 801 Samples Aug-341117:15 Aug-341117:15 BTEX by E7 801 Samples Aug-341117:16 Aug-341117:16 BTEX by E7 801 Aug-34110:0 Aug-341117:16 Aug-34110 BTEX by E7 801 Aug-34110:0 Aug-34110:0 Aug-34110 Buter Aug-3410 Aug-34110:0 Aug-34110 Deter Aug-3410 Aug-3410 Aug-3410 Deter Aug-3410 Aug-3410 Aug-3410 Deter Aug-3110 BL Aug-3410 Deter ND<0000	Analysis Kequested	Depth:		-			-	
		Matrix:	WATER	WATER				
BTEX by EPA 8021 Extracted Aug.36-11 16:00 Aug.36-11 16:02 Aug.37-11 16:02		Sampled:	Aug-24-11 17:25	Aug-24-11 17:15				
Ambyadr Aug-31-11 08:53 Aug-31-11 08:53 Aug-31-11 08:53 Buzene Distrover, mg/L RL mg/L RL Distrover, mg/L RL mg/L RL mg/L Toluene ND 0.0000 ND 0.0010 Ethylbrezene ND 0.0010 ND 0.0010 Ethylbrezene ND 0.0010 ND 0.0010 Verse, road ND 0.0010 ND 0.0010 Verse, road ND 0.0010 ND 0.0010 Verse, road ND 0.0010 ND 0.0010 Xytenes, road ND 0.0010 ND 0.0010 Xytenes, road ND 0.0010 ND 0.0010	BTEX by EPA 8021	Extracted:	Aug-26-11 16:00	Aug-30-11 15:49				
Henzene UnterAtt: mg/L RL mg/L RL mg/L RL Benzene ND 0.000 ND ND 0.000 ND ND 0.000 ND		Analyzed:	Aug-28-11 02:53	Aug-31-11 08:52				
Benzene ND 0.0010 ND 0.0010 ND 0.0010 ND 0.0020 ND 0.0010 ND ND 0.0010 <t< td=""><td></td><td>Units/RL:</td><td>mg/L RL</td><td>mg/L RL</td><td>•</td><td></td><td></td></t<>		Units/RL:	mg/L RL	mg/L RL	•			
Induction ND 0.0000 ND	Benzene		ND 0.00100	ND 0.00100				
Ethylhenzene ND 0.00100 ND 0.0010 ND ND 0.0010 ND ND 0.0010 ND ND 0.0010 ND ND </td <td>Toluene</td> <td></td> <td>ND 0.00200</td> <td>ND 0.00200</td> <td></td> <td></td> <td></td>	Toluene		ND 0.00200	ND 0.00200				
m_p-Xytenes ND 0.00200 ND 0.00200 0-Xytene ND 0.00100 ND 0.00100 0-Xytenes ND 0.00100 ND 0.00100 Total BTEX ND 0.00100 ND 0.00100	Ethylbenzene		ND 0.00100	ND 0.00100				
o-Xylene ND 0000 ND 0000 ND 0000 Xylenes, Taal ND 0000 ND 0000 ND 0000 Total BTEX ND 0000 ND 0000 ND 0000	m_p-Xylenes		ND 0.00200	ND 0.00200				
Xytemes: Total ND 000100 ND 000100 ND 000100 Total BTEX ND 000100 ND 000100 ND 000100	o-Xylene		ND 0.00100	ND 0.00100				
Total BTEX ND 0.00100 ND 0.00100	Xylenes; Total		ND 0:00100	ND 0.00100				
	Total BTEX		ND 0.00100	ND 0.00100				
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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 itability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Brent Barron II Odessa Laboratory Manager



Flagging Criteria

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

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.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit SDL Sample Detection Limit

LOD Limit of Detection

PQL Practical Quantitation Limit MQL Method Quantitation Limit

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

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

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(210) 509-3334	(210) 509-3335
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(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	

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Project Name: Lovington Gathering WTI

Vork Orders : 426487 Lab Batch #: 868690	', Sample: 426487-001 / SMP	Batch	Project II n: 1 Matrix	D: 2006-142 : Water		•
Units: mg/L	Date Analyzed: 08/27/11 21:13	SUI	RROGATE RE	ECOVERY S	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes		I'	נטן		
1,4-Difluorobenzene		0.0291	0.0300	97	80-120	
4-Bromofluorobenzene		0.0272	0.0300	. 91	80-120	
Lab Batch #: 868690	Sample: 426487-002 / SMP	Batch	n: 1 Matrix:	Water		
Units: mg/L	Date Analyzed: 08/27/11 21:35	SUI	RROGATE RI	ECOVERY ?	STUDY	•
BTE	X by EPA 8021	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		0.0255	0.0300	89	80-120	
T at Batak #1 868690	 Samala, 426487-003 / SMP	I	1 Motriy	Water		<u> </u>
Lad Balon #: 000070	Sample: 1200-10001		PROCATE RI	FCOVERY	STUDY	
Units: mg/L	Date Analyzea: 08/2//11/21:38			T	1	r
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0286	0.0300	95	80-120	
4-Bromofluorobenzene		0.0276	0.0300	92	80-120	
Lab Batch #: 868690	Sample: 426487-005 / SMP	Batch	n: 1 Matrix	:Water	·	
Units: mg/L	Date Analyzed: 08/27/11 23:52	SUI	RROGATE RE	ECOVERY f	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	· Flags
	Analytes		I	[D]		
1,4-Difluorobenzene		0.0310	0.0300	103	80-120	
4-Bromofluorobenzene		0.0258	0.0300	86	80-120	<u> </u>
Lab Batch #: 868690	Sample: 426487-006 / SMP	Batch	1: 1 Matrix:	:Water		
Units: mg/L	Date Analyzed: 08/28/11 00:14	SUF	RROGATE RF	ECOVERY S	STUDY	
ВТЕ	X by EPA 8021	Amount	True Amount	Recovery	Control Limits	Flags
	Analytes	[A]	[B]	%R [D]	%R	1
1,4-Difluorobenzene	Analytes	[A]	[B]	%R [D] . 89	%R 80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B



Project Name: Lovington Gathering WTI

Vork Orders : 426487 Lab Batch #: 868690	, Sample: 426487-007 / SMP	Batc	Project II h: ¹ Matrix:	D: 2006-142 Water		
Units: mg/L	Date Analyzed: 08/28/11 00:37	SU	RROGATE RI	ECOVERY	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
1,4-Difluorobenzene		0.0278	0.0300	93	80-120	
4-Bromofluorobenzene		0.0259	0.0300	86	80-120	
Lab Batch #: 868690	Sample: 426487-008 / SMP	Batc	h: ¹ Matrix:	Water		
Units: mg/L	Date Analyzed: 08/28/11 01:00	SU	RROGATE RI	ECOVERY	STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0279	0.0300	93	80-120	
4-Bromofluorobenzene		0.0268	0.0300	89	80-120	
Lab Batch #: 868690	Sample: 426487-009 / SMP	Batc	h: ¹ Matrix:	Water	·	
Units: mg/L	Date Analyzed: 08/28/11 01:23	SU	RROGATE RI	COVERY	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
1,4-Difluorobenzene		0.0332	0.0300	111	80-120	
4-Bromofluorobenzene_		0.0220	0.0300	73	80-120	**
Lab Batch #: 868690	Sample: 426487-012 / SMP	Bate	h: 1 Matrix:	Water		
Units: mg/L	Date Analyzed: 08/28/11 02:30	SU	RROGATE RI	ECOVERY	STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1.4-Difluorobenzene		0.0283	0.0300	94	80-120	
4-Bromofluorobenzene		0.0272	0.0300	91	80-120	
Lab Batch #• 868690	 Sample: 426487-013 / SMP	Bate	h• Matrix:	Water	!	
Units: mg/L	Date Analyzed: 08/28/11 02:53	SU	RROGATE RI	ECOVERY	STUDY	
BTE	X by EPA 8021 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	· · · · · · · · · · · · · · · · · · ·	0.0266	0.0300	89	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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Project Name: Lovington Gathering WTI

Vork Orders : 426487	, Sample: 426487-004 / SMP	Poto	Project II	D: 2006-142		
Units: mg/L	Date Analyzed: 08/28/11 03:16	SU	RROGATE R	ECOVERY	STUDY	
ВТЕ	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes					
1,4-Difluorobenzene		0.0276	0.0300	92	80-120	
4-Bromofluorobenzene		0.0266	0.0300	89	80-120	
Lab Batch #: 868958	Sample: 426487-010 / SMP	Batc	h: ¹ Matrix	Water		
Units: mg/L	Date Analyzed: 08/31/11 06:35	SU	RROGATE R	ECOVERY	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0280	0.0300	<u> </u>	80-120	
4-Bromofluorobenzene		0.0281	0.0300	94	80-120	
Lah Batch #: 868958	Sample: 426487-011 / SMP	Bate	h: 1 Matrix	:Water	1	
Units: mg/L	Date Analyzed: 08/31/11 06:58	SU	RROGATE R	ECOVERY	STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0287	0.0300	• 96	80-120	
4-Bromofluorobenzene		0.0275	0.0300	92	80-120	
Lab Batch #: 868958	Sample: 426487-014 / SMP	Batc	h: 1 Matrix	:Water	· ·	
Units: mg/L	Date Analyzed: 08/31/11 08:52	SU	RROGATE R	ECOVERY	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1 4-Difluorobenzene		0.0290	0.0200	02	80.120	
4-Bromofluorobenzene		0.0280	0.0300	93	80-120	
	0 + 426487.000 / DI	0.0201		Watar	00 120	
Lab Batch #: 808938	Sample: 426487-0097 DL Date Analyzed: 08/31/11 09:37	Batc SU	RROGATE R	ECOVERY	STUDY	=
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	· · · · · · · · · · · · · · · · · · ·	0.0298	0.0300	99	80-120	L
4-Bromofluorobenzene		0.0289	0.0300	96	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B



Project Name: Lovington Gathering WTI

Vork Orders : 426487	7,		Project II	D: 2006-142		
Lab Batch #: 868690	Sample: 610634-1-BLK / B	SLK Bate	RROGATE RI	ECOVERY	STUDY	
BTE	CX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
· · · · · · · · · · · · · · · · · · ·	Analytes			[D]		
1,4-Difluorobenzene		0.0285	0.0300	95	80-120	
4-Bromofluorobenzene	· · · · · · · · · · · · · · · · · · ·	0.0272	0.0300	91	80-120	
Lab Batch #: 868958	Sample: 610803-1-BLK / E	BLK Bate	h: l Matrix:	Water		
Units: mg/L	Date Analyzed: 08/31/11 03:10	SU	RROGATE RI	ECOVERY	STUDY	
BTE	EX by EPA 8021 Analytes	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	· · · · · · · · · · · · · · · · · · ·	0.0272	0.0300	91	80-120	
Lah Batch #• 868690	Sample: 610654-1-BKS / F	KS Bate	h• Matrix	Water	I	
Unite mg/L	Date Analyzed: 08/27/11 16:39	SU SU	RROGATE RI	ECOVERY	STUDY	
BTE	EX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1 4-Difluorobenzene	Analytes	0.0293	0.0300	08	80-120	
4-Bromofluorobenzene		0.0255	0.0300	89	80-120	
Lah Datah #. 969059	Sec. 610802 1 BKS / B	PKS Date	h. I. Motning	Watan		L
Lap batch #: 000930	Sample: 010805-1-BKS7 E	SI SI	RROCATE RI	FCOVERV	STUDY	
BTE	EX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1.4-Difluorobenzene		0.0297	0.0300	99	80-120	
4-Bromofluorobenzene	·	0.0280	0.0300	93	80-120	
Lah Batch #• 868690	Sample: 610654-1-BSD / F	SD Bate	h· Matrix	• Water		
Units: mg/L	Date Analyzed: 08/27/11 17:02	SU Batt	RROGATE RI	ECOVERY	STUDY	
BTE	EX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	<u> </u>	0.0322	0.0300	107	80-120	
4-Bromofluorobenzene		0.0292	0.0300	97	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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Project Name: Lovington Gathering WTI

Vork Orders : 426487 Lab Batch #: 868958	, Sample: 610803-1-BSD / B	SD Batc	Project II h: 1 Matrix	D: 2006-142 ;Water		
Units: mg/L	Date Analyzed: 08/31/11 02:02	SU	RROGATE R	ECOVERY	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			נטן		
1,4-Difluorobenzene		0.0289	0.0300	96	80-120	
4-Bromofluorobenzene	·	0.0268	0.0300	89	80-120	
Lab Batch #: 868690	Sample: 426335-001 S / MS	S Batc	h: ¹ Matrix	Water		
Units: mg/L	Date Analyzed: 08/27/11 22:20	SU	RROGATE R	ECOVERY	STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount B}	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0309	0.0300	103	80-120	
4-Bromofluorobenzene		0.0305	0.0300	102	80-120	
Lab Batch #• 868958	Sample: 426488-001 S / MS	S Bata	l	·Water	.1	L
Units: mg/L	Date Analyzed: 08/31/11 07:20	SU SU	RROGATE R	ECOVERY	STUDY	· · · · ·
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R D]	Control Limits .%R	Flags
1,4-Difluorobenzene		0.0298	0.0300	99	80-120	
4-Bromofluorobenzene	······	0.0283	0.0300	94	80-120	
Lab Batch #: 868690	Sample: 426335-001 SD / N	ASD Batc	h: 1 Matrix	:Water	1	I
Units: mg/L	Date Analyzed: 08/27/11 22:43	SU	RROGATE R	ECOVERY	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			וטן		
1,4-Difluorobenzene	······	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene		0.0277	0.0300	92	80-120	
Lab Batch #: 868958	Sample: 426488-001 SD / N	ASD Bate	h: 1 Matrix	:Water		
Units: mg/L	Date Analyzed: 08/31/11 07:43	SU	RROGATE R	ECOVERY	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	,	0.0306	0.0300	102.	80-120	
4-Bromofluorobenzene		0.0284	0.0300	05	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

XENCO Laboratorics

BS / BSD Recoveries



Project Name: Lovington Gathering WTI

Work Order #: 426487 Analyst: ASA

Lab Batch ID: 868690

Date Prepared: 08/26/2011 Batch #: 1

Sample: 610654-1-BKS

Project ID: 2006-142 Date Analyzed: 08/27/2011 Matrix: Water

Units: mg/L			BLANH	K /BLANK S	PIKE / B	LANK S	PIKE DUPL	ICATE I	RECOVE	RY STUD	۲	
BTEX by EPA Analytes	8021	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	BIk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene		<0.00100	0.100	0.107	107	0.100	0.116	116	8	70-125	25	
Toluene		<0.00200	0.100	0.0952	95	0.100	0.101	101	6	70-125	25	
Ethylbenzene		<0.00100	0.100	0.102	102	0.100	0.110	110	8	71-129	25	
m_p-Xylenes		<0.00200	0.200	0.201	101	0.200	0.217	109	8	70-131	25	
o-Xylene		<0.00100	0.100	0.0956	96	0.100	0.103	103	7	71-133	25	
Analyst: ASA Lab Batch ID: 868958	Sample: 610803-1-BK	Da	te Prepare Batch	d: 08/30/201 #: 1	-			Date A1	alyzed: 0 Matrix: V	8/31/2011 Vater		

Units: mg/L		BLAN	K /BLANK S	PIKE / B	LANK S	PIKE DUPL	ICATE I	RECOVE	RY STUD	Y	
BTEX by EPA 8021	Blank Sample Result IAI	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes		[B]	[c]	[D]	[3]	Result [F]	[6]				
Benzene	<0.00100	0.100	0.117	11	001.0	0.115	511	2	70-125	25	
Toluene	<0.00200	0.100	0.104	104	001.0	0.102	201	2	70-125	25	
Ethylbenzene	<0.00100	0.100	0.112	112	001.0	0.110	011	2	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.226	113	0.200	0.222	111	2	70-131	25	
o-Xylene	<0.00100	0.100	0.104	104	0.100	0.104	104	0	71-133	25	

Relative Percent Difference RPD = 200*((C-F)/(C+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 Final 1.000

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Project Name: Lovington Gathering WTI

Form 3 - MS / MSD Recoveries

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Project ID: 2006-142

QC- Sample ID: 426335-001 S Date Prepared: 08/26/2011

Date Analyzed: 08/27/2011 Lab Batch ID: 868690 Work Order #: 426487

Matrix: Water -Batch #:

ASA Analyst:

Reporting Units: mg/L		M	ATRIX SPIKI	Z/MAT	RIX SPII	KE DUPLICA	FE REC	VERY S	STUDY		
BTEX by EPA 8021	Parent Sample	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD .	Control Limits	Control Limits	Flag
Analytes	[A]	Added [B]		1 <u>0</u>	Added [E]	Kesuit [F]	1 <u>6</u>]	%		%KPD	
Benzene	<0.00100	0.100	0.115	115	0.100	0.108	108	6	70-125	25	Γ
Toluene	<0.00200	0.100	0.100	100	0.100	0.0948	95	5	70-125	25	
Ethylbenzene	<0.00100	0.100	0.106	106	0.100	0.101	101	s	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.184	92	0.200	0.175	88	s	70-131	25	
o-Xylene	<0.00100	0.100	0.0979	98	0.100	0.0931	93	5	71-133	·25	
Lab Batch ID: 868958 Date Analyzed: 08/31/2011	QC- Sample ID: Date Prepared:	426488- 08/30/2(001 S 111	Bai Ani	ch #: ilyst: /	l Matrix ASA	: Water				

Reporting Units: mg/L		M	ATRIX SPIKI	C/MATI	RIX SPI	KE DUPLICA	TE RECC	VERY S	STUDY		
BTEX by EPA 8021	Parent Sample	Spike	Spiked Sample Result	Spiked Sample	Spike	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]	%	%К	%RPD	0
Benzene	<0.00100	0.100	0.110	110	0.100	0.117	117	6	70-125	25	
Toluene	. <0.00200	0.100	0.0964	96	0.100	0.102	102	9	70-125	25	
Ethylbenzene	<0.00100	0.100	0.105	105	0.100	0.111	Ξ	9	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.211	106	0.200	0.223	112	9	70-131	25	
o-Xylene	<0.00100	0.100	8660'0	100	0.100	0.104	104	4	71-133	25	

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

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

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

Final 1.000

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											0.	roject	Name	Lov	ngton	Gath	ering V	F		
ame Basin Environmental S	ervice Tec	Bolond	jies, LLC									24	oject #	200	-142					
ddress: P. 0. Box 301												Proje	ct Loc	: Lea	ounty	WN				
p: Lovington, NM 88260							- [ļ			#Od	PAA	J. Hen	≥				
to: <u>(575)396-2378</u>		ľ		Fax No:	(21	5) 396	-1429				Repo	nt For	mat:	Ň	tandarc		🗍 тккр		ця П	DES
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FIELD CODE	Beginning Depth	Ending Depth	Dale Sampled	bəlqms2 əmiT	Field Filtered Total #. of Containers	0NH 80]	HCI	HOBN VOS ² H	N ³ S ³ O ³	Other (Specify)	96bul2=.2 %sw.goninin,0=W0 bilo2vijo2=2 %swbnuov3 = W0	108 WS108 1817 Hat	TPH: TX 1005 TX 1006 Cations (Ca. Mq. Na, K)	(ylinils Alk alinity)	S BH dL I D D BB Cd Ct Pb Hg.	səlilasov səliləsi səlil səlil səlil sə	A O B M RCI BTEX 80518/5030 of BTEX 826			RUSH TAT (Pre-Schedule) 24, VAO N TAT by Pre-Schedule)
MW-1			8/24/2011	0660	3	×	×				GΨ						×		-	$\hat{}$
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MW-3			8/24/2011	1 2 HO 100	3	×	X				GW						×			Î
MW-4			8/24/2011	0001	3	×	×				δ					-	×			
MW-5			8/24/2011	1030	3	×	×				GW					4	×		_	
MW-6			8/24/2011	1320	3	×	×				Š						×		_	
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MW-8			8/24/2011	1740	3	×	×				§		\neg			-	×		-	
6-MW			8/24/2011	1500	3	×	X	_			ß		-			_	×		\neg	Ê
MW-10			8/24/2011	1430	3	X	X				GW				ŀ		×			
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いたのが非常な問題になるためです。これは国家特徴的な教育などの思想をなってい

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ny Name	asin Environmental Se	rvice 1	echn	ologies, LLC										۲.	oject	# 2	06-1	4						
ny Address: P	. O. Box 301			,			-							Proje	ect Lo	i. Ee	a Cot	nty, l	ş					
ate/Zip:	ovington, NM 88260	ļ													6	₩	- - -	Henr	>					
one No:	575)396-2378				Fax No:	ت	575) :	<u> 96-14</u>	53				Repo	nt Fo	mat:	×	Stan	dard		TR TR	RP		NPDE	S
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HELD	CODE	dîqəD prinnigə8	Ending Depth	Date Sampled	bəlqms2 əmiT	Field Filtered		¢ONH	H ³ 20'	HOEN	None S2S2D3	Other (Specify)	9W=Drinking Water SL=Sludge VG=Scoundwater S=Soil/Solid	Here and the source a	9001 XT 2001 XT H9T	Calions (Ca, Mg, Na, N) Anions (Cl, SO4, Alkalinity)	SARVESPICEC	Metals: As Ag Ba Cd Cr Pb Hg : Volatiles	səlitslovimə2	RCI B TEX 8021B/5030 o BTEX 82	.М.Я.О.К.М.		λ5 (elubedoc-schedule) 24.	YAG & TAT bisbrist
Goff Da	iry Well			8/24/2011	1630		3 X		×				GW							×				×
Goff Dalry - C	tr. Pivot Well			8/24/2011	1645		3 X		×				ß							×				×
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Contraction (



XENCO Laboratories Atlanta, Boca Raton, Corpus Christi, Dallas Houston, Miami, Odessa, Philadelphia Phoenix, San Antonio, Tampa Document Title: Sample Receipt Checklist. Document No.: SYS-SRC Revision/Date: No. 01, 5/27/2010 Effective Date: 6/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

Client P	lains	
Date/Time:	8/25/11 11:10	
Lab ID # :	426487	
Initials: 7	{ <i>H</i>	

Sample Receipt Checklist

1. Samples on ice?	Blue (Water	No	
2. Shipping container in good condition?	Yes	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	Yes	No	N/A	
4. Chain of Custody present?	Yes	No		
5. Sample instructions complete on chain of custody?	Yes	No		
6. Any missing / extra samples?	Yes	No		
7. Chain of custody signed when relinquished / received?	(Yes)	No		·
8. Chain of custody agrees with sample label(s)?	(Yes)	No		
9. Container labels legible and intact?	Yes	No		
10. Sample matrix / properties agree with chain of custody?	(Yes)	No ·		
11. Samples in proper container / bottle?	Yes	No		
12. Samples property preserved?	Yes	No	N/A	
13. Sample container intact?	Yes	No		
14. Sufficient sample amount for indicated test(s)?	Yes	No		
15. All samples received within sufficient hold time?	(Yes)	No		
16. Subcontract of sample(s)?	Yes	No	(NA)	
17. VOC sample have zero head space?	Yes	No	N/A	
18. Cooler 1 No. Cooler 2 No. Cooler 3 No.	Cooler 4 No.		Cooler 5 No.	
ibs 56 °C ibs °C ibs	C Ibs	°c	lbs	°C

Nonconformance Documentation

_____Contacted by:_____ Contact: Date/Time: Regarding: Corrective Action Taken: ς. Check all that apply: Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1. Initial and Backup Temperature confirm out of temperature conditions Client understands and would like to proceed with analysis

Analytical Report 428994

for PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry Lovington Gathering WTI

2006-142

12-OCT-11

Collected By: Client



Celebrating 20 Years of commitment to excellence in Environmental Testing Services



12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122): Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002) Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054) New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610) Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046): Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AAL11), West Virginia (362), Kentucky (85) Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tucson (EPA Lab code: AZ000989): Arizona (AZ0758)



12-OCT-11

Project Manager: Jason Henry PLAINS ALL AMERICAN EH&S 1301 S. COUNTY ROAD 1150 Midland, TX 79706

Reference: XENCO Report No: **428994** Lovington Gathering WTI Project Address: Lea County, NM

Jason Henry:

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 428994. 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. 428994 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 428994

PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id MW-2	Matrix W	Date Collected 09-30-11 09:00	Sample Depth	Lab Sample Id 428994-001
				· · ·
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CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S Project Name: Lovington Gathering WTI



 Project ID:
 2006-142

 Work Order Number:
 428994

Report Date: 12-OCT-11 Date Received: 10/05/2011

Sample receipt non conformances and comments: None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-872166 BTEX by EPA 8021 SW8021BM

Batch 872166, 4-Bromofluorobenzene recovered below QC limits . Matrix interferences is suspected; data not confirmed by re-analysis Samples affected are: 428994-001.

	● Cer	tificate of Al AlNS ALL AMI	■ ● ● ● ● • 1 1alysis Summ ERICAN EH&S,	● ● ● ● ● ● ● ● ● ● ● ● ● ■ ary 428994 ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●		•
Project Id: 2006-142		Project Name:	Lovington Gatheri	ing WTI		
Contact: Jason Henry			<i>.</i> .	Date Received in Renort 1	Lab: Wed Oct-05-11 11:18 am	×
Project Location: Lea County, NM				Project Man	ager: Brent Barron II	
	Lab Id:	428994-001			· · ·	
Andhisis Poguostad	Field Id:	MW-2				
naicanhay ciclimuv	Depth:					
•	Matrix:	WATER				
	Sampled:	Sep-30-11 09:00				
BTEX by EPA 8021	Extracted:	Oct-10-11 15:45		-		
	Analyzed:	Oct-11-11 05:36				
	Units/RL:	mg/L RL				
Benzene		0.179 0.00100			•	
Toluene		ND 0.00200				
Ethylbenzene		0.00275 0.00100				
m_p-Xylenes		0.00345 0.00200				
o-Xylene		0.00212 0.00100				
Xylenes, Total		0.00557 0.00100				
Total BTEX		0.187 0.00100				
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		×	• •			
This analytical report, and the entire data package it represents, has been ma	ade for your exclusive	and confidential use.		• •		
The interpretations and results expressed throughout this analytical report re- XENCO Laboratories assumes no responsibility and makes no warrary to it Orr liability is limited to the amount involved for this work order unless other modes of the second s	cpresent the best judg the end use of the data herwise agreed to in w	ment of XENCO Laboratories. a hereby presented. riting.	L		Cher Dil	
Houston - Dallas - San Antonio - Atlanta - Tampa - Boc:	ca Raton - Latin	America - Odessa - Corpu	s Christi		Dennt Domon II	
					Brent Barron II Odessa I aboratory Manager	
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Flagging Criteria

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

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.
- JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit SDL Sample Detection Limit

LOD Limit of Detection

PQL Practical Quantitation Limit MQL Method Quantitation Limit

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

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Project Name: Lovington Gathering WTI

Work Orders : 428994, Lab Batch #: 872166	Sample: 428994-001 / SMP	Bate	Project II	D: 2006-142 • Water			
Units: mg/L	SURROGATE RECOVERY STUDY						
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1,4-Difluorobenzene		0.0275	0.0300	92	80-120		
4-Bromofluorobenzene		0.0232	0.0300	77	80-120	*	
Lab Batch #: 872166	Sample: 612517-1-BLK / BI	LK Batcl	h: 1 Matrix	Water			
Units: mg/L	Date Analyzed: 10/10/11 21:14	SURROGATE RECOVERY STUDY					
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount B]	Recovery %R [D]	Control Limits %R	Flags	
1,4-Difluorobenzene		0.0278	0.0300	93	80-120		
4-Bromofluorobenzene		0.0284	0.0300	95	. 80-120		
Lab Batch #: 872166	Sample: 612517-1-BKS / BI	KS Batc	h: 1 Matrix	Water	.	<u> </u>	
Units: mg/L	Date Analyzed: 10/10/11 19:43	SURROGATE RECOVERY STUDY					
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R {D]	Control Limits %R	Flags	
1,4-Difluorobenzene		0.0258	. 0.0300	86	80-120		
4-Bromofluorobenzene		0.0251	0.0300	84	80-120		
Lab Batch #: 872166	Sample: 612517-1-BSD / BS	D Batcl	h: ¹ Matrix:	Water			
Units: mg/L	SURROGATE RECOVERY STUDY						
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount jBj	Recovery %R [D]	Control Limits %R	Flags	
I,4-Difluorobenzene		0.0289	0.0300	96	80-120		
4-Bromofluorobenzene	······································	0.0293	0.0300	98	80-120		
Lab Batch #: 872166	Sample: 428960-001 D / MI) Batc	h: 1 Matrix	Water	.		
Units: mg/L	Date Analyzed: 10/11/11 01:25	SU	RROGATE RI	ECOVERY	STUDY		
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
I,4-Difluorobenzene		0.0274	0.0300	91	80-120		
4-Bromofluorobenzene		0.0286	0.0300	95	80-120		

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B



BS / BSD Recoveries



Project Name: Lovington Gathering WTI

Work Order #: 428994 Analyst: ASA

Lab Batch ID: 872166

Date Prepared: 10/10/2011

Batch #: 1

Sample: 612517-1-BKS

Project ID: 2006-142 Date Analyzed: 10/10/2011 Matrix: Water

Units: mg/L		BLANH	K /BLANK S	PIKE / B	LANK S	PIKE DUPL	ICATE I	RECOVE	RY STUD	×	
BTEX by EPA 8021	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes	1	[B]	[c]	[0]	<u>[</u>]	Result [F]	[6]				
Benzene	<0.00100	0.100	0.0908	16	0.100	0.104	104	14	70-125	25	
Toluene	<0.00200	0.100	0.0931	93	0.100	0.106	106	13	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0977	86	0.100	0.111	111	13	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.195	86	0.200	0.222	111	13	70-131	25	
o-Xylene	<0.00100	0.100	0.0980	98	0.100	0.112	112	13	71-133	25	

Relative Percent Difference RPD = 200*((C-F)/(C+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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Sample Duplicate Recovery



Project Name: Lovington Gathering WTI

Work Order #: 428994

Lab Batch #: 872166 Date Analyzed: 10/11/2011 01:25 QC- Sample ID: 428960-001 D Reporting Units: mg/L	Date Prepared: 10/10/2011 Batch #: 1 SAMPLE /	Project ID: 2006-142 red: 10/10/2011 Analyst: ASA h #: 1 Matrix: Water SAMPLE / SAMPLE DUPLICATE RECOVE					
BTEX by EPA 8021 Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag		
Benzene	<0.00100	<0.00100	0	25	Ū		
Toluene	<0.00200	<0.00200	0	25	U		
Ethylbenzene	<0.00100	< 0.00100	0	25	U		
m_p-Xylenes	<0.00200	<0.00200	0	25	U		
o-Xylene	<0.00100	<0.00100	0	25	υ·		

Spike Relative Difference RPD 200 * | (B-A)/(B+A) | All Results are based on MDL and validated for QC purposes. BRL - Below Reporting Limit
Xen	ico Labora	atories						1260 Ode	0 We ssa, 1	CH/ St I-2 Fexas	4/N (0 Eas 7976	St D D	USTO	DYR	ECOF	D AI	A D A	Pho Pho	rSIS ne: 4 :: 4	REQ 32-56 32-56	JEST 3-1800 3-1713				
	Project Manager:	Ben J. Arguijo											I	å	oject N	ame:	۲ آ	ngto	n Gai	therir	Ы	_			١
	Company Name	Basin Environmental Se	rvice Te	chnolo	gies, LLC				[1		1		Proj	sct #:	2006	-142	Ì						ł
	Company Address:	P. O. Box 301											1	-	roject	Loc:	Lea (ount	WN '				ļ		I
	City/State/Zip:	Lovington, NM 88260		ļ									1			;# Oc	PAA.	J. He	Σ						1
	Telephone No:	(575)396-2378				Fax No:	(57	5) 39(-142					Repor	Form	at:	N N	tandaı	ą		TRRP		ž □	PES	
	Sampler Signature:	DyKothN WAND				e-mail:	bjá	rguijo	@pa	sinen	V.COM			I	L				orvie	i. U				F	
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ORDER	# 438 ^c	hbb						ď	eserva	tion 8 #	of Cor	Itainers	-	latrix	89		101	əs ن		× 09				21 ,84 ,	Γ
(yino seu dsi) # 8/			dtqsQ gninnigs	ntqəQ pribr	bəlqme2 əls(bəlqms2 əmi	eld Fillered Mal #. of Containers		ICI	'OS ⁷ 1	HOB1	lone	Dther (Specify) W=Drinking Water SL=Studge	bitoStio2=S refewbruorD = W P=Nor-Potable Specify Ofher	108 M8108 1.814 H9	ations (Ca, Mg, Na, K)	nions (Cl, SO4, Alkalinity)	PER SEC COLOR PD HQ	səlifelo	1EX 80518\2030 0181EX 85	1.0.8.M. I.O.B.M.		<u></u>	≥S (eluberisS-erg) TAT HSUS	YAO & TAT bisbrist
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Relinquish Dfl /c. v.+	ed by: -n h wal d	Date 10/5/11	1 L	3 ()	Received by:	ry Na	4					(8)	Date 05/1	6	Time 730	<u>55ē</u>	stody stody	n cont seals seals	on co	s) ntaine oler(s)	(s).		- PA	zzz	
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XENCO Laboratories

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Phoenix, San Antonio, Tampa

Document Title: Sample Recei	pt Checklist
Document No.: SYS-SRC	
Revision/Date: No. 01, 5/27/20	010
Effective Date: 6/1/2010	Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

Client: P	asin Env. / Plains
Date/Time:	10 5 11 11 18
Lab ID # :	438994
Initials:	<u>Ne</u>

Sample Receipt Checklist

· · · · · · · · · · · · · · · · · · ·					
1. Samples on ice?		Blue	Water,	No	
2. Shipping container in good condition?		Yes)	No	None	
3. Custody seals intact on shipping container (con	pier) and bottles?	Yes	No	N/A	
4. Chain of Custody present?		Yes	No		
5. Sample instructions complete on chain of custo	ody?	Yes	No		
6. Any missing / extra samples?		Yes	NO		
7. Chain of custody signed when relinquished / re	ceived?	Yes	No		
8. Chain of custody agrees with sample label(s)?		Yes	No		
9. Container labels legible and intact?		Yes	No		
10. Sample matrix / properties agree with chain of	custody?	Yes	No		
11. Samples in proper container / bottle?		(Yes)	No		
12. Samples property preserved?		Yes	No	N/A	
13. Sample container intact?		Yes	No		
14. Sufficient sample amount for indicated test(s)	?	Yes	No		
15. All samples received within sufficient hold tim	e?	Yes	No		
16. Subcontract of sample(s)?		Yes	No	(NA)	
17. VOC sample have zero head space?		(Yes)	No	N/A	
18. Cooler 1 No. Cooler 2 No. (Cooler 3 No.	Cooler 4 N	0.	Cooler 5 No.	
lbs 3, 0 °C lbs °C	lbs °C	lbs	°c	ibs	°C

Nonconformance Documentation

Contact:	Contacted by:	Date/Time:
Regarding:	·	·
Corrective Action Tal	ken:	
Check all that apply:	Cooling process has begun shortly after s condition acceptable by NELAC 5.5.3	ampling event and out of temperature 3.3.1.a.1.

□Initial and Backup Temperature confirm out of temperature conditions □Client understands and would like to proceed with analysis

Analytical Report 429246

for PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry Lovington Gathering WTI

2006-142

18-OCT-11

Collected By: Client



Celebrating 20 Years of commitment to excellence in Environmental Testing Services



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Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002) Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054) New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610) Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046): Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AAL11), West Virginia (362), Kentucky (85) Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00989): Arizona (AZ0758)



18-OCT-11

Project Manager: Jason Henry PLAINS ALL AMERICAN EH&S 1301 S. COUNTY ROAD 1150 Midland, TX 79706

Reference: XENCO Report No: **429246** Lovington Gathering WTI Project Address: Lea County, NM

Jason Henry:

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 429246. 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. 429246 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 429246

PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Goff Dairy Well	W	10-10-11 09:15		429246-001
Goff Dairy - Ctr. Pivot Well	W	10-10-11 09:00		429246-002
Goff Dairy - Ctr. Pivot Beg.	W	10-10-11 09:00		429246-003
JW Well	W	10-10-11 08:00		429246-004
MW-10	W	10-10-11 08:00	· .	429246-005



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S





Project ID:2006-142Work Order Number:429246

Report Date: 18-OCT-11 Date Received: 10/10/2011

Sample receipt non conformances and comments: None

Sample receipt non conformances and comments per sample:

None

Project Id: 2006-142 Contact: Jason Henry Project Location: Lea County, NM

Date Received in Lab: Mon Oct-10-11 02:40 pm

Report Date: 18-OCT-11

					Project Manager: E	srent Barron II	
	Lab Id:	429246-001	429246-002	429246-003	429246-004	429246-005	
Analysis Roomostod	Field Id:	Goff Dairy Well	Goff Dairy - Ctr. Pivot Well	Goff Dairy - Ctr. Pivot Beg.	JW Well	MW-10	
naisanhar sistimur	Depth:						
	Matrix:	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	GROUND WATER	
	Sampled:	Oct-10-11 09:15	Oct-10-11 09:00	Oct-10-11 09:00	Oct-10-11 08:00	Oct-10-11 08:00	
BTEX by EPA 8021B	Extracted:	Oct-15-11 09:40	Oct-15-11 09:40	Oct-15-11 09:40	Oct-15-11 09:40	Oct-15-11 09:40	
•	Analyzed:	Oct-18-11 02:21	Oct-18-11 02:44	Oct-18-11 03:07	Oct-18-11 03:29	Oct-18-11 08:39	
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	
Benzene		ND 0.00100	00100 ⁻⁰ ON	ND 0.00100	ND 0.00100	0.183 0.010	
Toluene		ND 0.00200	ND 0.00200	. ND 0.00200	ND 0.00200	ND 0.020	
Ethylbenzene		ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100	ND 0.010	
m_p-Xylenes		ND 0.00200	ND 0.00200	ND 0.00200	ND 0.00200	0.121 0.020	
o-Xylene		ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100	ND 0.010	
Total Xylenes		ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100	0.121 0.010	
Total BTEX		ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100	0.304 0.010	
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This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Odessa Laboratory Manager

Brent Barron II



Flagging Criteria

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

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.
- JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit SDL Sample Detection Limit

LOD Limit of Detection

LOQ Limit of Quantitation

PQL Practical Quantitation Limit MQL Method Quantitation Limit

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

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Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

5, Samalar 420246 001 / SMP	D. 6.1	Project II	D: 2006-142	-	
Date Analyzed: 10/18/11 02:21	SU	RROGATE RI	ECOVERY	STUDY	
X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Anaryus	0.0261	0.0300		80-120	
	0.0274	0.0300	91	80-120	
Sample: 429246-002 / SMP	Batel	h• 1 Matrix	•Ground Wate	r	
Date Analyzed: 10/18/11 02:44	SU	RROGATE RI	ECOVERY	STUDY	
X by EPA 8021B Analytes	Amount Found [A]	True Amount B]	Recovery %R [D]	Control Limits %R	Flags
	0.0287	0.0300	96	80-120	,
	0.0315	0.0300	105	80-120	
Sample: 429246-003 / SMP	Batcl	h: ¹ Matrix	Ground Wate	r	··· ·
Date Analyzed: 10/18/11 03:07	SU	RROGATE RI	ECOVERY	STUDY	
X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
	0.0270	0.0300	90	80-120	
	0.0288	0.0300	96	80-120	
Sample: 429246-004 / SMP	Batcl	h: ¹ Matrix	Ground Wate	<u>г</u>	
Date Analyzed: 10/18/11 03:29	SU	RROGATE RI	ECOVERY	STUDY	
X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
· · · · · · · · · · · · · · · · · · ·	0.0271	0.0300	90	80-120	
	0.0292	0.0300	97	80-120	
Sample: 429246-005 / SMP	Batch	h: 1 Matrix	Ground Wate	<u>г</u>	
Date Analyzed: 10/18/11 08:39	SU	RROGATE RI	ECOVERY S	STUDY	
			I		
X by EPA 8021B	Amount Found A}	True Amount [B]	Recovery %R [D]	Control Limits %R·	Flags
X by EPA 8021B Analytes	Amount Found [A] 0.0260	True Amount [B]	Recovery %R [D] 87	Control Limits %R·	Flags
	5, Sample: 429246-001 / SMP Date Analyzed: 10/18/11 02:21 X by EPA 8021B Analytes Sample: 429246-002 / SMP Date Analyzed: 10/18/11 02:44 X by EPA 8021B Analytes Sample: 429246-003 / SMP Date Analyzed: 10/18/11 03:07 X by EPA 8021B Analytes Sample: 429246-004 / SMP Date Analyzed: 10/18/11 03:29 X by EPA 8021B Analytes Sample: 429246-004 / SMP Date Analyzed: 10/18/11 03:29 X by EPA 8021B Analytes Sample: 429246-005 / SMP Date Analyzed: 10/18/11 08:39	Sample: 429246-001 / SMP Bate Date Analyzed: 10/18/11 02:21 SU X by EPA 8021B Amount Found [A] Amount Found [A] Analytes 0.0261 0.0274 Sample: 429246-002 / SMP Bate Date Analyzed: 10/18/11 02:44 SU X by EPA 8021B Amount Found [A] Amount Found [A] Analytes 0.0287 0.0315 Sample: 429246-003 / SMP Bate Date Analyzed: 10/18/11 03:07 SU X by EPA 8021B Amount Found [A] Amount Found [A] Analytes 0.0270 0.0288 Sample: 429246-004 / SMP Bate Date Analyzed: 10/18/11 03:29 SU X by EPA 8021B Amount Found [A] Found [A] Analytes 0.0270 0.0288 Sample: 429246-004 / SMP Bate Date Analyzed: 10/18/11 03:29 SU X by EPA 8021B Amount Found [A] Analytes 0.02271 0.0271 0.0292<	Simple: 429246-001 / SMP Batch: 1 Matrix Date Analyzed: 10/18/11 02:21 SURROGATE RI X by EPA 8021B Amount Found [A] True Amount [B] Amount [B] Analytes 0.0261 0.0300 0.0274 0.0300 Sample: 429246-002 / SMP Batch: 1 Matrix Date Analyzed: 10/18/11 0.0274 0.0300 Sample: 429246-002 / SMP Batch: 1 Matrix Date Analyzed: 10/18/11 0.0287 0.0300 0.0300 Sample: 429246-003 / SMP Batch: 1 Matrix Date Analyzed: 10/18/11 0.307 SURROGATE RI X by EPA 8021B Amount [A] IB] True Amount [A] IB] Analytes 0.0270 0.0300 0.0288 0.0300 Sample: 429246-004 / SMP Batch: I Matrix Date Analyzed: 10/18/11 03:29 SURROGATE RI X by EPA 8021B Amount [A] True Found [A] True Amount [A] IB]	Simple: 29246-001 / SMP Project ID: 2006-142 Sample: 429246-001 / SMP Batch: 1 Matrix: Ground Wate Date Analyzed: 10/18/11 02:21 SURROGATE Recovery %R X by EPA 8021B Amount True Amount Recovery %R Analytes 0.0261 0.0300 87 0.0274 0.0300 91 Sample: 429246-002 / SMP Batch: 1 Matrix: Ground Wate Date Analyzed: 10/18/11 02:44 SURROGATE Recovery %R X by EPA 8021B Amount True Recovery %R Analytes 0.0287 0.0300 96 0.0315 0.0300 105 Sample: 429246-003 / SMP Batch: 1 Matrix: Ground Wate Date Analyzed: 10/18/11 03:07 SURROGATE RECOVERY 1 %R Malytes 0.0270 0.0300 90 0.0288 0.0300 90 Date Analyzed: 10/18/11 03	Simple: 429246-001 / SMP Bateh: I Matrix: Ground Water Date Analyzed: 10/18/11 02:21 SURROGATE RECOVERY STUDY X by EPA 8021B Amount Found True Amount III Recovery %R Control Limits Analytes 0.0261 0.0300 87 80-120 Sample: 429246-002 / SMP Batch: I Matrix: Ground Water Date Analyzed: 10/18/11 02:44 SURROGATE RECOVERY STUDY X by EPA 8021B Amount Found Amount IAI Recovery IBI Control Limits %R Analytes 0.0287 0.0300 91 80-120 Sample: 429246-003 / SMP Batch: I Matrix: Ground Water Date Analyzed: 10/18/11 03:07 SURROGATE Recovery %R Limits %R Analytes 0.0270 0.0300 96 80-120 Sample: 429246-004 / SMP Batch: 1 Matrix: Ground Water Date Analyzed: 10/18/11 03:07 SURROGATE Recovery %R Control Limits %R Analytes 0.0270 0.0300 90 80-120

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

/ork Orders : 429246	, Sample: 612816-1-BLK / B	LK Bate	Project II h: Matrix:): 2006-142 Water		
Units: mg/L	Date Analyzed: 10/17/11 20:17	SU	RROGATE RI	ECOVERY	STUDY	
BTE	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
1,4-Difluorobenzene	·	0.0270	0.0300	90	80-120	· · · ·
4-Bromofluorobenzene		0.0281	0.0300	94	80-120	
Lab Batch #: 872545	Sample: 612816-1-BKS / B	KS Bate	h: ¹ Matrix:	Water		
Units: mg/L	Date Analyzed: 10/17/11 18:45	SU	RROGATE RI	ECOVERY	STUDY	
BTE	X by EPA 8021B Analytes	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	·····	0.0305	0.0300	102	80-120	
t at Datat 4, 877545	Samala, 612816-1-BSD / B	SD Boto	h. 1 Matrix	Water		
Lad Balch #: 072545	Date Analyzed: 10/17/11 10.08		RROCATE RI	ECOVERY	STUDY	
Units: mg/L	Date Analyzed: 10/17/11 19:08	50				
BTE	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes -			[D]		
1,4-Difluorobenzene	•	0.0267	0.0300	89	80-120	
4-Bromofluorobenzene		0.0299	0.0300	100	80-120	
Lab Batch #: 872545	Sample: 429338-009 S / MS	B Bate	h: ¹ Matrix:	Water		
Units: mg/L	Date Analyzed: 10/18/11 00:27	SU	RROGATE RI	ECOVERY	STUDY	
BTE	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1 4-Difluorobenzene	2 kmary 0.5	0.0293	0.0300	08	80-120	
4-Bromofluorobenzene		0.0255	0.0300	104	80-120	
I.a.h. D.a.h.h. 4. 877545	Samula: 420338 000 SD / N	(SD Bata	h. 1 Matrix	Water		
Lad Batch #: 872343	Dote Applyred: 10/18/11 00:50	ASD Bate	RROGATE RI	ECOVERY	STUDY	· ··-
Units: mg/L	Date Analyzed: 10/18/11 00:30					
BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	,	0.0285	0.0300	95	80-120	
4-Bromofluorobenzene		0.0310	0.0300	103	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BSD Recoveries

Æ

Project Name: Lovington Gathering WTI

Work Order #: 429246 Analyst: ASA

Lab Batch ID: 872545

Date Prepared: 10/15/2011 Batch #:

Sample: 612816-1-BKS

Project ID: 2006-142 Date Analyzed: 10/17/2011 Matrix: Water

DECOVEDV

	BLA	NK /BLANK	SPIKE / E	3LANK S	PIKE DUPL	ICATE	RECOVE	CRY STUD	Y	
BTEX by EPA 8021B Blank Sample Result [A]	Spike sult Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD , %	Control Limits %R	Control Limits %RPD	Flag
Analytes	[B]	[C]	[a]	E	Result [F]	[0]				
Benzene <0.00100	0.100	06800	89	0.100	0.0978	98	6	70-125	25	
Toluene <0.00200	001.0	6060'0	16	0.100	0.0984	98	80	70-125	25	
Ethylbenzene <0.00100	0.100	0.0941	94	0.100	0.102	102	8	71-129	25	
m_p-Xylenes <0.00200	0.200	0.187	94	0.200	0.205	103	6	70-131	25	
o-Xylene <0.00100	0.100	0.0958	96	0.100	0.104	104	8	71-133	25	

Relative Percent Difference RPD = 200*((C-F)/(C+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

Final 1.000

Page 9 of 12



Form 3 - MS / MSD Recoveries



Date Analyzed: 10/18/2011 Work Order #: 429246 Lab Batch ID: 872545

Reporting Units: mg/L

Project ID: 2006-142 Batch #:

> QC- Sample ID: 429338-009 S Date Prepared: 10/15/2011

Matrix: Water -

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY ASA Analyst:

BTEX by EPA 8021B	Parent Sample	Spike	Spiked Sample Result	Spiked Sample	Spike	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	0.00159	0.100	0.113	111	0.100	0.102	100	10	70-125	25	
Toluene	<0.00200	0.100	0.110	110	0.100	0.102	102	8	70-125	25	
Ethylbenzene	<0.00100	0.100	0.114	114	0.100	0.104	104	9	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.223	112	0.200	0.204	102	9	70-131	25	
o-Xylene	<0.00100	0.100	0.115	115	0.100	0.106	106	8	71-133	25	

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*[(C-F)/(C+F)]

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

Final 1.000

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Col Laboratories сили исто Priect Nanager: Enr. J. Arguio Priect Nanager: Enr. J. Arguio Dompany Name Bauin Environmental Service Technologies, LLC Dompany Address: P. O. Bex, 301 Dompany Address: P. Bey Address Dompany Address: P. D. Bey address Dompany Address: P. A. D. Address Dompany Address P. Address Dompany Address
Co Laboratories Poject Manager. <u>Ben J. Anguijo</u> Company Name <u>Basin Environmental Service Technologies, LLC</u> Company Address: <u>P. 0. Bon 301</u> Company Address: <u>P. 1001</u> Company Address: <u>P. 10</u>
Co Laboratories Project Manager: Ben J. Arguijo Company Name Basin Environmental Service Tech Company Address: P. O. Box 301 Company Address: P. Date Time Company Address: P. Date Time
Co Laboratories Ben J. Arguijo Project Manager: Ben J. Arguijo Dompany Name Basin Environmental Ser Dompany Address: P. O. Box 301 Date Goff Dairy - Ctr. Pivot Beg. My Date Jby: Date Jby: Date



XENCO Laboratories

Atlanta, Boca Raton, Corpus Christi, Dallas Houston, Miami, Odessa, Philadelphia

Phoenix, San Antonio, Tampa

ocument Title: Sample Receipt Checklist
ocument No.: SYS-SRC
Revision/Date: No. 01, 5/27/2010
Effective Date: 6/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

Client: Plains	
Date/Time: 10/10/11 14:40	
Lab ID#: 479746	<u> </u>
Initials: AH	
• •	

Sample Receipt Checklist

1. Samples on ice?	Blue	Water	No	
2. Shipping container in good condition?	Yes	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	Yes	No	N/A	
4. Chain of Custody present?	Yes	No		
5. Sample instructions complete on chain of custody?	Yes	No		
6. Any missing / extra samples?	Yes	(No)		
7. Chain of custody signed when relinguished / received?	Yes	No		
8. Chain of custody agrees with sample label(s)?	Yes	No		
9. Container labels legible and intact?	Yes	No		
10. Sample matrix / properties agree with chain of custody?	Yes	No -		
11. Samples in proper container / bottle?	Yes	No		
12. Samples property preserved?	Yes	No	N/A	
13. Sample container intact?	Yes	No		
14. Sufficient sample amount for indicated test(s)?	Yes	No		
15. All samples received within sufficient hold time?	Yes	No		
16. Subcontract of sample(s)?	Yes	No	(NA)	
17. VOC sample have zero head space?	Yes	No	N/A	
18. Cooler 1 No. Cooler 2 No. Cooler 3 No.	Cooler 4 N	lo	Cooler 5 No.	
libs 5.0 °C libs °C libs	°C lb	s °C	lbs	°(

Nonconformance Documentation

_____Contacted by:___ Contact: Date/Time:_ Regarding: _____ **Corrective Action Taken:** • •

Check all that apply: Ocooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1. Initial and Backup Temperature confirm out of temperature conditions

Client understands and would like to proceed with analysis

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Analytical Report 429406

for PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry Lovington Gathering WTI

2006-142

19-OCT-11

Collected By: Client



Celebrating 20 Years of commitment to excellence in Environmental Testing Services



12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002) Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054) New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610) Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046): Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AAL11), West Virginia (362), Kentucky (85) Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00989): Arizona (AZ0758)



19-OCT-11

Project Manager: Jason Henry PLAINS ALL AMERICAN EH&S 1301 S. COUNTY ROAD 1150 Midland, TX 79706

Reference: XENCO Report No: 429406 Lovington Gathering WTI Project Address: Lea County, NM

Jason Henry:

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 429406. 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. 429406 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 429406

PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id	
Goff Dairy - Ctr. Pivot End	W	10-10-11 16:00	·	429406-001	

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CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S



Project Name: Lovington Gathering WTI

Project ID:2006-142Work Order Number:429406

Report Date: 19-OCT-11 Date Received: 10/12/2011

Sample receipt non conformances and comments: None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-872647 BTEX by EPA 8021 SW8021BM

Batch 872647, Ethylbenzene, Toluene, m_p-Xylenes, o-Xylene recovered above QC limits in the laboratory control sample. This is most likely due to analyst error. Samples affected are: 429406-001. The Laboratory Control Sample Duplicate were within QC limits.

Project Id: 2006-142 Project Name: Lowington Gathering WTI Project Id: 2006-142 Project Name: Dowington Gathering WTI Contact: Jason Henry Project Name: Lowington Gathering WTI Project Location: Lea Lue Project Name: Lao Lue Analysis Requested Lab Id: Gat Dairy - Ct. Pivot End Project Ma Analysis Requested Lab Id: Gat Dairy - Ct. Pivot End Project Ma BTEX by EPA 8021 Lab Id: Gat Dairy - Ct. Pivot End Project Ma BTEX by EPA 8021 Exvaced: Oct-10-11 16:00 Project Ma Barzene Oct-10-11 16:00 Manize: Manize: Manize: GROUND WATER Manize: Manize: Manize: Manize: BTEX by EPA 8021 Exvaced: Oct-10-11 16:00 Project Ma Barzene Manize: Manize: Manize: Manize: Manize: Manize: Manize: <th></th> <th>Certi</th> <th>ificate of Analysis Summary</th> <th>429406</th> <th></th> <th></th>		Certi	ificate of Analysis Summary	429406		
Project Id: 2006-142 Project Name: Lovington Gathering WTI Contact: Jason Henry Eason Henry Project Name: Lovington Gathering WTI Project Location: Lea County, NM Report Report Analysis Requested Lab Id: 429406-001 Report Analysis Requested Depth: Cort. Fivet End Project Ma BTEX by EPA 8021 Extracted: Oct-10-11 16:00 Project Ma Britex Dy EPA 8021 Extracted: Oct-10-11 16:00 Britex Dol0100 Dol0100 Dol0100 Collente ND 000100 Marzere ND 000100 Sampled: ND 000100 Marzere ND 000100 Marzere ND 000100 Marzere ND 000100		PLA	AINS ALL AMERICAN EH&S, Midla	nd, TX	Carl Child	
Date Received 1 Contact: Jason Henry Project Location: Lea County, NM Lab Id: 42946-001 Analysis Requested Lab Id: 42946-001 Bepti: Report Report Report BTEX by EPA 8021 Extracted: Oct-10-11 16:00 Benzene ND 0.00100 Toluene ND 0.00100 Cot-14 ND 0.00100 Mark/L N	Project Id: 2006-142		Project Name: Lovington Gathering WT	Ι		
Report Project Location: Lea County, NM Analysis Requested Lab Id: Field Id: Depti: 429406-001 Field Id: Field Id: Goff Dairy - Cr. Pivot End Project Ma Analysis Requested Depti: Cort. Bulty - Cr. Pivot End Pepti: Project Ma Bert Analysis Requested Depti: Cort. Bult Cort. Bult Depti: Project Ma Bert Sup EPA 8021 Extracted: Cot. IB-11 16:00 Matric: Gr. Oct. Bult Depti: Project Ma Benzele Oct. Bult ND 000100 Do Do Do Depti: Benzele ND 000100 DO	Contact: Ison Henry			Date Received in Lab: We	ed Oct-12-11 03:10 pm	
Analysis Requested Lab Id: 429406-001 Freid Id: 6aff Dairy - Cr. Fivot End Analysis Requested Freid Id: Gent Dairy - Cr. Fivot End Pepth: BTEX by EPA 8021 Cot-10-11 16:00 Analysis BTEX by EPA 8021 Extracted: Oct-10-11 16:00 Brizte Oct-10-11 16:00 Analysis Brizte Oct-10-11 16:00 Analysis Brizte ND 00100 Chilene ND 00100 Toluene ND 00100 Cylenes ND 00100 Xylenes ND 00100 Xylenes, Total ND 00100	Deviaet Location: Les County NM			Report Date: 19-	-0CT-11	
Lab Id: Lab Id: 429406-001 Analysis Requested Lab Id: 60f Dairy - Ct. Pivot End Depth: Depth: GROUND WATER Matrix: GROUND WATER BTEX by EPA 8021 Extracted: Oct-10-11 16:00 BTEX by EPA 8021 Extracted: Oct-18-11 11:37 Benzene Oct-18-11 11:37 Analyzed: Chilene NID 0.00100 Dibene NID 0.00100 Dibene NID 0.00100 Matrix: ng/L RL ND 0.00100 Matrix: NID 0.00100				Project Manager: Bro	ent Barron II	
Analysis RequestedField Id: 0Goff Dairy - Cu: Pivot EndPeterdDepth: 0 $Natrix:Sampled:Depth:Sampled:Oct-10-11 16:00PeterdPeterdBTEX by EPA 8021Extracted:Analyzed:Oct-18-11 11:37PeterdPeterdNatrix:BnzeneCot-18-11 11:37PeterdPeterdPeterdNatrix:Depterd:Oct-18-11 11:37PeterdPeterdPeterdNatrix:Depterd:Cot-18-11 11:30PeterdPeterdPeterdNatrix:Depterd:ND<000100$		Lab Id:	429406-001			
Depth: Matrix: Sampled:Depth: GROUND WATERDepth: 	A walveie Dogugetad	Field Id: G	off Dairy - Ctr. Pivot End	•		
	naicanhay ciclimity	Depth:				
		Matrix:	GROUND WATER			
BTEX by EPA 8021 Extracted: Oct-18-11 11:37 Analyzed: Oct-18-11 16:30 Analyzed: Defension Analyzed: Defension Analyzed: Defension Analyzed: Defension Analyzed: Defension Analyzed: Defension Defe		Sampled:	Oct-10-11 16:00			
	BTEX by EPA 8021	Extracted:	Oct-18-11 11:37			
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Benzene ND 0.00100 ND 0.00200 Toluene ND 0.00200 ND 0.00200 Ethylbenzene ND 0.00100 ND 0.00200 m_p-Xylenes ND 0.00200 ND 0.00100 Xylenes, Total ND 0.00100 ND 0.00100		Units/RL:	mg/L RL			
Tolucne ND 0.00200 Ethylbenzene ND 0.00100 m_p-Xylenes ND 0.00100 vXylenes, Total ND 0.00100 Xylenes, Total ND 0.00100	Benzene		ND 0.00100			
Ethylbenzene ND 0.00100 ND 0.00100 m_p-Xylenes ND 0.00200 ND 0.00100 o-Xylenes, Total ND 0.00100 ND 0.00100 Xylenes, Total ND 0.00100 ND 0.00100	Toluene		ND 0.00200	•		
m_p-Xylenes ND 0.00200 ND 0.00100 ND ND </td <td>Ethylbenzene</td> <td></td> <td>ND 0.00100</td> <td></td> <td></td> <td></td>	Ethylbenzene		ND 0.00100			
o-Xylene ND 0.00100 ND 0.00100 Xylenes, Total ND 0.00100 </td <td>m_p-Xylenes</td> <td></td> <td>ND 0.00200</td> <td></td> <td></td> <td></td>	m_p-Xylenes		ND 0.00200			
Xylenes, Total ND 0.00100 · ·	o-Xylene		ND 0.00100		-	
	Xylenes, Total		ND 0.00100			
Total BTEX	Total BTEX		ND 0.00100			

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

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Brent Barron II Odessa Laboratory Manager

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XENCO Laboratorics

Flagging Criteria

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

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.
- JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit	SDL Sample Detection Limit
----------------------------	----------------------------

PQL Practical Quantitation Limit MQL Method Quantitation Limit LOQ Limit of Quantitation

LOD Limit of Detection

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

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Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Vork Orders : 429406 Lab Batch #: 872647	, Sample: 429406-001 / SMP	Batc	Project II	D: 2006-142 Ground Wate	r	
Units: mg/L	Date Analyzed: 10/18/11 16:30	SU	RROGATE RI	ECOVERY S	STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount B]	Recovery %R [D]	Control Limits %R	Flags
I,4-Difluorobenzene		0.0263	0.0300	88	80-120	
4-Bromofluorobenzene		0.0278	0.0300	93	80-120	
Lab Batch #: 872647	Sample: 612871-1-BLK / B	LK Batc	h: Matrix:	Water		
Units: mg/L	Date Analyzed: 10/18/11 13:43	SU	RROGATE RI	ECOVERY S	STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1.4-Difluorobenzene		0.0264	0.0300	88	80-120	
4-Bromofluorobenzene	·	0.0263	0.0300	88	80-120	
Lab Batch #: 872647	Sample: 612871-1-BKS / Bl	KS Batc	h: ¹ Matrix:	Water	·	
Units: mg/L	Date Analyzed: 10/18/11 12:13	SU	RROGATE RE	ECOVERY S	STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0280	0.0300	93	80-120	
4-Bromofluorobenzene		0.0276	0.0300	92	80-120	
Lab Batch #: 872647	Sample: 612871-1-BSD / B	SD Batc	h: ¹ Matrix:	Water	· ·	
Units: mg/L	Date Analyzed: 10/18/11 12:35	SU	RROGATER	ECOVERY S	STUDY	
вте	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
I,4-Difluorobenzene		0.0252	0.0300	. 84	80-120	
4-Bromofluorobenzene		0.0279	0.0300	· 93	80-120 ·	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



BS / BSD Recoveries



Project Name: Lovington Gathering WTI

Work Order #: 429406 Lab Batch ID: 872647 Analyst: ASA

Date Prepared: 10/18/2011 Batch #: 1

Sample: 612871-1-BKS

Project ID: 2006-142 Date Analyzed: 10/18/2011 Matríx: Water

Units: mg/L		BLANI	K /BLANK S	SPIKE / B	LANK S	PIKE DUPL	ICATE I	RECOVE	RY STUD	Y	
BTEX by EPA 8021	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes		[B]	[C]	[0]	[E]	Result [F]	[6]				
Benzene	<0.00100	0.100	0.123	123	0.100	0.0958	96	25	70-125	25	
Toluene	<0.00200	0.100	0.127	127	0.100	0.0995	100	24	70-125	25	Н
Ethylbenzene	<0.00100>	0.100	0.136	136	0.100	0.107	107	24	71-129	25	н
m_p-Xylenes	<0.00200	0.200	0.275	138	0.200	0.218	601	23	70-131	25	H .
o-Xvlene	<0.00100	0100	0134	134	0010	0 108	108	16	71-133	2.5	Н

Relative Percent Difference RPD = 200*(C-F)/(C+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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Page 8 of 10

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XENCO Laboratories Atlanta, Boca Raton, Corpus Christi, Dallas Houston, Miami, Odessa, Philadelphia Phoenix, San Antonio, Tampa

Document Title:	Sample Reco	eipt Checklist
Document No.:	SYS-SRC	
Revision/Date:	No. 01, 5/27/2	2010
Effective Date:	6/1/2010	Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

Client:	aus			
Date/Time:	0/12/11	BIU	· ·	
Lab ID#: 4	29406			
Initials:	41			_
	······			

Sample Receipt Checklist

1. Samples on ice?	Blue	Water	No	
2. Shipping container in good condition?	(Yes)	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?)	Yes	No	N/A	
4. Chain of Custody present?	Yes	No		
5. Sample instructions complete on chain of custody?	(Yes)	No		
6. Any missing / extra samples?	Yes	(No')		
7. Chain of custody signed when relinquished / received?	Yès	No		
8. Chain of custody agrees with sample label(s)?	(Yes)	No		
9. Container labels legible and intact?	Yes	No		
10. Sample matrix / properties agree with chain of custody?	Yes)	No		
11. Samples in proper container / bottle?	Yes	No		
12. Samples property preserved?	Yes	No	N/A	
13. Sample container intact?	Yes	No		
14. Sufficient sample amount for indicated test(s)?	Yes	No		
15. All samples received within sufficient hold time?	Yes	No		
16. Subcontract of sample(s)?	Yes	No	NA	
17. VOC sample have zero head space?	(Yes)	No	N/A	· · · ·
18. Cooler 1 No. Cooler 2 No. Cooler 3 No.	Cooler 4 N	10.	Cooler 5 No.	
lbs (\mathcal{P} °C lbs °C lbs	°C Ib	s °C	lbs	°C

Nonconformance Documentation

Contacted by: Contact:

Regarding:

Corrective Action Taken:

Check all that apply: Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1. □Initial and Backup Temperature confirm out of temperature conditions

Client understands and would like to proceed with analysis

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Date/Time:

Appendix B Release Notification & Corrective Action (Form C-141)

District I 625 N. French Dr., Hobbs, M District II 1301 W. Grand Avenue, Arte District III 1000 Rio Brazos Road, Azteo District IV 220 S. St. Francis Dr., Santa	NM 88240 sia, NM 88210 c, NM 87410 a Fe, NM 87502	5	St Energy Mi Oil C 1220 Sa	ate of inerals Conser South anta F	f New Mexico F s and Natural Resources Revised Octor ervation Division Submit 2 Copies to District Office in with Rule Fe NM 87505						orm C-141 ber 10, 2003 appropriate accordance 116 on back side of form
		Rele	ase Notifi	catio	n and Corr	ective A	ction				
		20010			OPERAT	OR		x Initia	al Report		Final Report
Name of Company Pla	ains Pipeline	;		T	Contact Camill	e Reynolds				<u>_</u>	
Address 3112 W. US	Hwy 82, Lo	vington, 1	NM 88260		Telephone No.	505-441-09	55)
Facility Name Loving	ton Gatherir	ig WTI	-		Facility Type 6	"Steel Pipeli	ne				
Surface Owner Rober	t Rice		Mineral (Owner	······································	·······		Lease N	lo.	<u> </u>	
	·····		LOC	ATIO	N OF RELE	ASE					
Unit Letter Section	Township	Range	Feet from the	North	South Line Fe	et from the	East/W	est Line	County		
Н 6	175	37E							Lea		
	<u>ا</u> ــــــــــــــــــــــــــــــــــــ	1		4			۱ <u>ـــــ</u>				
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			NA	TURE	OF RELEA	SE			<u></u>		
Type of Release Crude	Dil ol Diagling				Volume of Re	lease 12 barre	sis	Volume I	Recovered 8	barrels	
Source of Reicase of Sil	ser i ipenne	4-21-2006 @	13:00		4-21-200	6 @ 13:15	SCOVERY	• .			
Was Immediate Notice	Given?	If YES, To W	hom?				02324	1252			
D 111 0.0 11 D	<u> </u>	Pat Caperton	4.01.0007	0.16.05			<u>V</u>	~~<62			
By Whom? Camille Rey Was a Watercourse Rea	/nolds	If YES, Volume Impacting the Watercourse,									
		If YES, volume impacting the watercourse.									
If a Watercourse was In	ipacted, Desc	ribe Fully.							913141516	6. 1 6. 5%	
Describe Area Affected approximately 1,500 ft ²	and Cleanup	el gatherin of <10 ppm Action Ta	e is true and com	ted soil	the best of my kn	at the release stockpiled o	ed in fele si and th point. n plastic	Acrial cx	et crude oil f the sweet tent of surfa	1 fre fin crude oil	e has been was 34. ct was
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Printed Name: Camille	Reynolds				Approved by Di	sunct Supervi:	sor:				
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-mail Address: cjreynd	olds@paalp.co	om	•		Conditions of A	pproval:					
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Basin Environmental Service Technologies, LLC

3100 Plains Highway P. O. Box 301 Lovington, New Mexico 88260 bjarguijo@basinenv.com Office: (575) 396-2378 Fax: (575) 396-1429



QUARTERLY MONITORING REPORT April - June 2011

LOVINGTON GATHERING WTI Unit Letter "H" (SE/NE), Section 6, Township 17 South, Range 37 East Latitude 32° 51' 56.0" North, Longitude 103° 17' 07.2" West Lea County, New Mexico Plains SRS Number: 2006-0142 NMOCD Reference Number: 1RP-838

Prepared for:



Plains Marketing, LP 333 Clay Street, Suite 1600 Houston, Texas 77002

Prepared By:

Basin Environmental Service Technologies, LLC P. O. Box 301 Lovington, New Mexico 88260

July 2011

Ben J. Arguijo

Project Manager

- 96



July 22, 2011

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

RE: Plains Pipeline, L.P. Lovington Gathering WTI NMOCD Reference # 1R-838 / AP-96 Unit Letter H of Section 6, Township 17 South, Range 37 East Lea County, New Mexico

Dear Mr. Hansen:

Plains Pipeline, L.P. is pleased to submit the attached Quarterly Monitoring Report, dated July 2011, for the Lovington Gathering WTI release site located in Section 6 of Township 17 South, and Range 37 East of Lea County, New Mexico. This document summarizes the status of recent activities performed during the second quarter of 2011.

Should you have any questions or comments, please contact me at (575) 441-1099.

Sincerely,

Jason Henry Remediation Coordinator Plains Pipeline, L.P.

CC: Geoffrey R. Leking, NMOCD, Hobbs Office

Enclosure



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SITE DESCRIPTION & BACKGROUND INFORMATION	1
FIELD ACTIVITIES	2
LABORATORY RESULTS	3
ANTICIPATED ACTIONS.	4
LIMITATIONS	5
DISTRIBUTION	6

FIGURES

Figure 1 – Site Location Map Figure 2 – Inferred Groundwater Gradient Map – 2Q2011 Figure 3 – Groundwater Concentration Map – 2Q2011

TABLES

Table 1 – Groundwater Elevation Data - 2Q2011 Table 2 – Concentrations of BTEX, Fluoride & Chromium in Groundwater

APPENDICES

Appendix A – Laboratory Analytical Reports Appendix B - Release Notification and Corrective Action (Form C-141)

INTRODUCTION

Basin Environmental Service Technologies, LLC (Basin), on behalf of Plains Pipeline, LP (Plains), is pleased to submit this *Quarterly Monitoring Report* in compliance with the New Mexico Oil Conservation Division (NMOCD) request of April 5, 2011, requiring submittal of a Quarterly Monitoring Report within thirty (30) days of the end of each calendar quarter. This report is intended to be viewed as a complete document with text, figures, tables, and appendices. This report presents the results of the quarterly groundwater monitoring event conducted in the second quarter (April - June) of 2011 only.

SITE DESCRIPTION & BACKGROUND INFORMATION

The legal description of the site is Unit Letter "H" (SE/NE), Section 6, Township 17 South, Range 37 East. The geographic coordinates of the release site are 32° 51 56.0 North latitude and 103° 17 07.2 West longitude. A "Site Location Map" is provided as Figure 1.

On April 21, 2006, Basin responded to a pipeline release on behalf of Plains to repair the pipeline and excavate the impacted soil. The Lovington Gathering WTI Pipeline was repaired utilizing a pipeline clamp, and the visually stained soil was excavated and placed on plastic sheeting to mitigate any further hydrocarbon impact to the underlying soil. Approximately twelve (12) barrels of crude oil was released from the pipeline, and eight (8) barrels were recovered, resulting in a net loss of four (4) barrels of crude oil. The excavated area was fenced in and is characterized by a Plains pipeline right-of-way adjacent to an idled Plains pump station. The release occurred in a pasture containing various oil and gas production facilities. The release resulted in a visibly stained surface area covering approximately thirty (30) feet in length by twenty (27) feet in width. Excavation activities conducted during the initial response and subsequent remediation of the site covered an area approximately thirty (30) feet in length by twenty-seven (27) feet in width, and ranged from approximately five (5) to six (6) feet in depth. Excavated soil was placed on a six (6)-mil ploy-liner for future remedial action. Utilizing olfactory, visual, and photo-ionization detector (PID) technology, it was determined that Volatile Organic Compounds (VOC's) remained in the sidewalls and floor of the excavation.

In July 2006, a soil investigation was conducted to further delineate the horizontal and vertical extent of the on-site hydrocarbon impact. Eleven (11) soil borings were advanced to a depth of thirty (30) to seventy-five (75) feet below ground surface (bgs). Based on the laboratory results of the soil samples collected during advancement of the soil borings, three (3) groundwater monitor wells (MW-1, MW-2, and MW-3) were installed to evaluate the status of the groundwater.

Based on the laboratory results from the initial groundwater sampling event (October 5, 2006), four (4) additional monitor wells were installed in November 2006. During the installation of the groundwater monitor wells (MW-1 through MW-7), there was no visual evidence of PSH in any of the collected soil samples. Laboratory analytical results of the selected soil samples did not indicate benzene, toluene, ethylbenzene, and total xylenes (BTEX) or total petroleum hydrocarbon (TPH) concentrations above the appropriate laboratory method detection limit (MDL), with the exception of soil samples collected from monitor well MW-3, which exhibited a

TPH concentration of 2,080 mg/Kg and 121 mg/Kg, at fifty-five (55) and seventy-five (75) feet bgs, respectively.

Laboratory analytical results of groundwater sampling at monitor well MW-7 indicated additional monitor wells were required to fully delineate the down-gradient boundary of the dissolved-phase plume. On February 7, 2007, monitor well MW-8 was installed down-gradient of monitor well MW-7. Laboratory analytical results of soil samples collected during the installation of monitor well MW-8 indicated benzene and BTEX concentrations were less than the appropriate laboratory MDL and the NMOCD regulatory standard of 10 mg/Kg and 50 mg/Kg for benzene and BTEX, respectively. Laboratory analytical results indicate TPH concentrations were less than the laboratory MDL and twenty-five (25) feet bgs. Soil samples collected at fifty (50) and seventy-five (75) feet bgs exhibited a TPH concentration of 14 mg/Kg (below NMOCD standards) and 101 mg/Kg, respectively.

On August 13, 2007, monitor well MW-9 was installed to further delineate the down-gradient boundary of the dissolved-phase plume. Laboratory analytical results of the soil samples collected during the installation of monitor well MW-9 indicated benzene, BTEX, and TPH concentrations were less than the appropriate laboratory MDL and NMOCD regulatory standard in the five (5) laboratory submitted soil samples.

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On October 28, 2009, monitor well MW-10 was installed to further delineate the down-gradient boundary of the dissolved-phase plume. Laboratory analytical results of soil samples collected during the installation of monitor well MW-10 indicated benzene, BTEX, and TPH concentrations were less than NMOCD regulatory standards in the seven (7) laboratory submitted soil samples.

Currently, there are ten (10) groundwater monitoring wells on-site: MW-1 which is up-gradient of the release site; MW-4 and MW-5, which are cross-gradient; and MW-2, MW-3, and MW-6 through MW-9, which are down-gradient of the release site.

:

FIELD ACTIVITIES

Groundwater Recovery Efforts

Basin began manual, bi-weekly recovery of hydrocarbon-impacted groundwater from monitor well MW-9 in November 2009 to control the down-gradient migration of the dissolved-phase plume. Bi-weekly recovery from monitor well MW-10 commenced in April 2011 at the behest of the NMOCD. All recovered fluids are disposed of at an NMOCD- approved disposal facility near Monument, New Mexico.

Groundwater Monitoring

Groundwater monitoring was conducted on May 27, 2011 (2Q2011), to assess the levels and extent of dissolved-phase constituents and phase-separated hydrocarbons (PSH). The groundwater monitoring event consisted of measuring static water levels in the ten (10) on-site

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monitor wells, checking for the presence of PSH, and purging and sampling of each well exhibiting sufficient recharge. Monitor wells were purged using a PVC bailer of a minimum of three (3) well volumes of water, or until the wells were dry. Groundwater was allowed to recharge, and samples were obtained using disposable Teflon bailers. Water samples were stored in clean, glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a trailer-mounted polystyrene tank and disposed of at an NMOCD-approved disposal facility near the site.

Per NMOCD request, an irrigation well (Goff Dairy Well) approximately two hundred (200) feet south-southwest of MW-10 on property adjacent to the release site was also sampled during the 2Q2011 reporting period.

Locations of the groundwater monitoring wells and the inferred groundwater gradient, which was constructed from groundwater elevation measurements collected during the 2Q2011 sampling event, are depicted in Figure 2, "Inferred Groundwater Gradient Map – 2Q2011". The groundwater gradient map indicates a general gradient of approximately 0.009 feet/foot to the southeast, as measured between monitor wells MW-1 and MW-10. The corrected groundwater elevation ranged between 3,714.86 and 3,721.04 feet above mean sea level in monitor wells MW-10 and MW-5, respectively. Groundwater elevation data is provided as Table 1, "Groundwater Elevation Data - 2Q2011".

No PSH was detected in any of the on-site monitor wells during the 2Q2011 reporting period.

LABORATORY RESULTS

Groundwater samples collected from the on-site monitor wells and the Goff Dairy irrigation well during the quarterly sampling event were delivered to Xenco Laboratories in Odessa, Texas, for determination of BTEX constituent concentrations by EPA Method SW846-8021b. Groundwater samples collected from monitor well MW-4 were also analyzed for fluoride and chromium concentrations using EPA Methods 300.1 and SW846-6010C, respectively. Table 2 summarizes the "Concentrations of BTEX, Fluoride & Chromium in Groundwater". Well locations and contaminant concentrations are depicted in Figure 3, "Groundwater Concentration Map - 2Q2011".

Laboratory analytical results were compared to NMOCD regulatory limits based on the New Mexico groundwater standards found in Section 20.6.2.3103 of the New Mexico Administrative Code (NMAC).

Data collected during the 2Q2011 groundwater monitoring event is summarized below:

 Benzene concentrations ranged from less than the laboratory MDL in the groundwater samples collected from monitor wells MW-1, MW-4, MW-5, MW-6, MW-7, and MW-8 to 1.52 mg/L in the groundwater sample collected from monitor well MW-10. Benzene concentrations exceeded the New Mexico Water Quality Control Commission (NMWQCC) regulatory standard of 0.010 mg/L in groundwater samples collected from monitor wells MW-3 and MW-10.

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- Toluene concentrations were both less than the laboratory MDL and less than the NMWQCC regulatory standard of 0.750 mg/L in all submitted groundwater samples.
- Ethylbenzene concentrations were less than the laboratory MDL in all submitted groundwater samples, with the exception of the groundwater sample from MW-10, which exhibited an ethylbenzene concentration of 0.00107 mg/L. Ethylbenzene concentrations were less than the NMWQCC regulatory standard of 0.750 mg/L in all submitted groundwater samples.
- Total xylene concentrations ranged from less than the laboratory MDL in the groundwater samples collected from the Goff Dairy Well and monitor wells MW-1, MW-4, MW-5, MW-6 and MW-7 to 0.0113 mg/L in the groundwater sample collected from monitor well MW-10. Total xylene concentrations were less than the NMWQCC regulatory standard of 0.620 mg/L in all submitted groundwater samples.
- The fluoride concentration in the groundwater sample collected from monitor well MW-4 was 4.76 mg/L. The fluoride concentration exceeded the NMWQCC regulatory standard of 1.6 mg/L.
- The chromium concentration in the groundwater sample collected from monitor well MW-4 was both less than the laboratory MDL and less than the NMWQQ regulatory standard of 0.05 mg/L.

ANTICIPATED ACTIONS

Quarterly monitoring and groundwater sampling of monitor wells MW-1 through MW-9 will continue throughout the 2011 calendar year. Monthly monitoring of MW-10 and five (5) representative locations on the Goff Dairy property adjacent to the site (Goff Dairy Well, Goff Dairy Center Pivot Well, Center Pivot Beginning, Center Pivot End, and JW Well) will commence in July and continue throughout the 2011 calendar year.

Pursuant to the *Amendment to Stage 2 Abatement Plan*, dated August 2010, and correspondence from an NMOCD representative, dated April 5, 2011, bi-weekly recovery of hydrocarbonimpacted groundwater from monitor wells MW-9 and MW-10 will continue throughout the 2011 calendar year. Diminished well volume and recharge in monitor well MW-10 attributable to the use of a large-capacity irrigation well (Goff Dairy Well) on property adjacent to the release site has rendered recovery from monitor well MW-10 alone insufficient to control the down-gradient migration of the dissolved-phase plume.

Quarterly monitoring reports will be submitted within thirty (30) days of the end of each calendar quarter, unless or until directed otherwise by the NMOCD. A cumulative Annual Monitoring Report for the 2011 reporting period will be submitted to the NMOCD by April 1, 2012.

LIMITATIONS

Basin Environmental Service Technologies, LLC, has prepared this *Quarterly Monitoring Report* to the best of its ability. No other warranty, expressed or implied, is made or intended. Basin has examined and relied upon documents referenced in the report and on oral statements made by certain individuals. Basin has not conducted an independent examination of the facts contained in referenced materials and statements. Basin has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Basin has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin notes that the facts and conditions referenced in this report may change over time, and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Plains Marketing, LP. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of Basin Environmental Service Technologies, LLC, and/or Plains Marketing, LP.

DISTRIBUTION

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Figures

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Tables

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TABLE 1

GROUNDWATER ELEVATION DATA - 2Q2011

PLAINS MARKETING, L.P. LOVINGTON GATHERING WTI LEA COUNTY, NEW MEXICO PLAINS SRS NO: 2006-142 NMOCD REF NO: 1RP-838

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW-1	05/27/11	3,806.60	-	86.56		3,720.04
MW-2	05/27/11	3,807.31	-	87.11	-	3,720.20
MW-3	05/27/11	3,807.19	-	86.98	-	3,720.21
MW-4	05/27/11	3,807.67	_	86.77	-	3,720.90
MW-5	05/27/11	3,807.30	-	86.26	_	3,721.04
MW-6	05/27/11	3,807.08	-	87.34	-	3,719.74
MW-7	05/27/11	3,807.05	-	87.93	-	3,719.12
MW-8	05/27/11	3,806.89	-	87.68	-	3,719.21
MW-9	05/27/11	3,807.02	-	88.61	-	3,718.41
MW-10	05/27/11	3,806.08	-	91.22	-	3,714.86
	「学校になって生活」に	ALL	Berthe tetration	Part in the		State March

- = Not applicable.

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PLAINS MARKETING, LP LOVINGTON GATHERING WTI LEA COUNTY, NEW MEXICO PLAINS SRS NO: 2006-142 NMOCD REF NO: 1RP-838

					300.1	SW846-6010C				
SAMPLE LOCATION	SAMPLE DATE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL- BENZENE (mg/L)	M,P- XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENES (mg/L)	TOTAL BTEX (mg/L)	FLUORIDE (mg/L)	CHROMIUM (mg/L)
MW-1	10/05/06	<0.0010	<0.0010	< 0.0010	< 0.0010	<0.0010	< 0.0010	<0.0010	-	-
	12/28/06	<0.0010	<0.0010	<0.0010	0.002	<0.0010	0.002	0.002	-	-
	03/16/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	- -	
	05/31/07	<0.0010	< 0.0010	<0.0010	< 0.0010	< 0.0010	< 0.0010	<0.0010	-	-
	09/25/07	<0.0010	< 0.0010	<0.0010	<0.0020	<0.0010	<0.0020	< 0.0020	-	-
	11/30/07	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	< 0.0020	-	-
	03/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
· · · · · · · · · · · · · · · · · · ·	06/14/08	<0.0010	< 0.0020	<0.0010	<0.0020	<0.0010	<0.0020	< 0.0020	-	-
	09/17/08	0.020	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.020	-	• ·
	12/02/08	0.035	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.035	-	.
	03/03/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	< 0.0020	-	-
	06/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/01/09	< 0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/18/09	< 0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/04/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/25/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/30/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	< 0.0020	-	-
	11/11/10	<0.0010	< 0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/22/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	5/27/2011	<0.0010	< 0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
			1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	· · · · ·		ىر ^{ىن} ى ئەلەيچەر مۇناۋ		Station of the		
MW-2	10/05/06	0.010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.010	-	-
	12/28/06	0.161	<0.0010	<0.0010	0.024	<0.0010	0.024	0.185	-	-
	03/16/07	0.154	<0.0010	<0.0010	0.015	<0.0010	0.015	0.169	-	-
	05/31/07	0.005	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.005	-	-
	09/25/07	0.050	<0.0010	<0.0010	0.003	<0.0010	0.003	0.053	-	-
	11/30/07	0.928	< 0.0010	<0.005	0.036	< 0.005	0.036	0.964	-	-
	03/11/08	0.095	<0.0020	<0.0010	0.0032	<0.0010	0.0032	0.098	-	•
	06/14/08	0.003	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.003	-	-
	09/17/08	0.159	<0.0020	<0.0010	0.004	<0.0010	0.004	0.163	-	-
	12/02/08	0.050	0.002	<0.0010	0.007	0.001	0.008	0.060	-	•
	03/03/09	0.036	< 0.0020	< 0.0010	0.0026	<0.0010	0.0026	0.038	-	-

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PLAINS MARKETING, LP LOVINGTON GATHERING WTI LEA COUNTY, NEW MEXICO PLAINS SRS NO: 2006-142 NMOCD REF NO: 1RP-838

					300.1	SW846-6010C				
SAMPLE LOCATION		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL- BENZENE (mg/L)	M,P- XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENES (mg/L)	TOTAL BTEX (mg/L)	FLUORIDE (mg/L)	CHROMIUM (mg/L)
MW-2	06/18/09	0.0097	<0.0020	< 0.0010	<0.0020	<0.0010	<0.0020	0.010	-	-
	09/01/09	0.084	<0.0020	< 0.0010	0.0083	<0.0010	0.0083	0.093		•
	12/18/09	0.0129	< 0.0020	<0.0010	0.0095	<0.0010	0.0095	0.022	-	-
	03/04/10	0.0026	<0.0020	<0.0010	< 0.0020	<0.0010	<0.0020	0.0026	-	-
	05/25/10	0.0023	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0023	-	-
	08/30/10	0.0406	<0.0020	< 0.0010	0.0132	< 0.0010	0.0132	0.0538	-	-
	11/11/10	0.0087	<0.0020	<0.0010	0.091	< 0.0010	0.091	0.0997	-	-
	03/22/11	0.0361	<0.0020	< 0.0010	0.0605	0.0011	0.0616	0.0977	-	-
	5/27/2011	0.00222	<0.0020	<0.0010	0.00297	<0.0010	0.00297	0.00519	-	-
			Sy			Strand Strand Strand	al the second	en e	a start and a start and	
MW-3	10/05/06	6.60	<0.0010	<0.0010	0.072	< 0.0010	0.072	6.67	-	-
	12/28/06	1.02	<0.0010	0.005	0.028	<0.0010	0.028	1.05	-	-
	03/16/07	1.48	<0.0010	0.013	0.034	<0.0010	0.034	1.53	-	-
	05/31/07	1.66	0.010	0.034	0.029	0.012	0.041	1.75	-	-
	09/25/07	0.494	0.023	0.020	0.014	0.007	0.021	0.56	-	-
	11/30/07	5.93	0.027	0.273	0.141	0.074	0.215	6.45	-	-
	03/11/08	1.159	0.107	0.177	0.066	0.139	0.205	1.65	-	-
	06/14/08	0.214	0.002	0.007	0.012	0.005	0.017	0.24	-	-
	09/17/08	0.026	<0.0020	<0.0010	0.002	<0.0010	0.002	0.03	-	•
	12/02/08	0.024	<0.0020	<0.0010	0.004	0.001	0.005	0.03	-	-
	03/03/09	1.367	0.0305	0.0251	0.0173	0.0158	0.0331	1.46	-	-
	06/18/09	0.0031	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/01/09	0.0073	0.0033	<0.0010	0.0028	0.0015	0.0043	0.01	-	-
	12/18/09	< 0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/04/10	0.0011	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0011	-	-
	05/25/10	0.0109	0.0033	<0.0010	0.0048	0.0027	0.0075	0.0217	-	-
	08/30/10	0.0092	0.0036	<0.0010	0.006	0.0033	0.0093	0.0221	-	-
	11/11/10	0.0033	<0.0020	<0.0010	0.0023	0.0013	0.0036	0.0069	-	-
	03/22/11	0.00904	0.00283	<0.0010	0.00815	0.00375	0.0119	0.0238	-	-
	5/27/2011	0.0205	<0.0020	< 0.0010	0.00308	0.00116	0.00424	0.0247	-	-
- 1			1.15	1 • •	· · · · · · · · · · · · · · · · · · ·	· Joseph Bark	· · · · · · · · · · · · · · · · · · ·	a	the state	at a long of the state

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PLAINS MARKETING, LP LOVINGTON GATHERING WTI LEA COUNTY, NEW MEXICO PLAINS SRS NO: 2006-142 NMOCD REF NO: 1RP-838

					300.1	SW846-6010C				
SAMPLE LOCATION	SAMPLE DATE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL- BENZENE (mg/L)	M,P- XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENES (mg/L)	TOTAL BTEX (mg/L)	FLUORIDE (mg/L)	CHROMIUM (mg/L)
MW-4	12/28/06	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	03/16/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	05/30/07	< 0.0010	0.001	<0.0010	<0.0010	<0.0010	<0.0010	0.001	-	-
	09/25/07	<0.0010	.0.001	< 0.0010	<0.0020	< 0.0010	<0.0020	0.001	-	-
	11/30/07	<0.0010	<0.0020	< 0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/14/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/17/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/02/08	<0.0010	0.006	<0.0010	<0.0020	<0.0010	<0.0020	0.006	-	-
	03/03/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/01/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/04/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/25/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/30/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/11/10	<0.0010	<0.0020	<0.0010	<0.0020	< 0.0010	<0.0020	<0.0020	-	-
	03/22/11	<0.0010	<0.0020	<0.0010	<0.0020	< 0.0010	<0.0020	<0.0020	-	-
	5/27/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	4.76	< 0.0050
					and the second sec	SARA ENL			建立地的公共。	
MW-5	12/28/06	< 0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	03/16/07	<0.0010	<0.0010	< 0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	05/30/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	09/25/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/30/07	<0.0010	<0.0020	<0.0010	<0.0020	< 0.0010	<0.0020	<0.0020	-	-
	03/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/14/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	•
•	09/17/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/02/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	•
	03/03/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/18/09	< 0.0010	<0.0020	<0.0010	<0.0020	< 0.0010	<0.0020	<0.0020	-	-

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PLAINS MARKETING, LP LOVINGTON GATHERING WTI LEA COUNTY, NEW MEXICO PLAINS SRS NO: 2006-142 NMOCD REF NO: 1RP-838

			_		300.1	SW846-6010C				
SAMPLE LOCATION	SAMPLE DATE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL- BENZENE (mg/L)	M,P- XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENES (mg/L)	TOTAL BTEX (mg/L)	FLUORIDE (mg/L)	CHROMIUM (mg/L)
MW-5	09/01/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	·<0.0020	<0.0020	-	-
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/04/10	<0.0010	<0.0020	<0.0010	<0.0020	< 0.0010	<0.0020	<0.0020	-	•
	05/25/10	0.0014	<0.0020	<0.0010	<0.0020	< 0.0010	<0.0020	0.0014	-	-
	08/30/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/11/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/22/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	•
	5/27/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
										A State State State
MW-6	12/28/06	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	03/16/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	05/30/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	09/25/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/30/07	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/14/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/17/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/02/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/03/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/18/09	0.0044	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0044	-	-
	09/01/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	•
•	12/18/09	0.013	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0130	-	-
	03/04/10	0.0063	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0063	-	-
	05/25/10	0.0059	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0059	-	-
	08/30/10	0.0053	< 0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0053	-	-
	11/11/10	0.0082	<0.0020	<0.0010	0.0035	<0.0010	0.0035	0.0117	-	-
	03/22/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	5/27/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	
	anter and	TANK SAL	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	A PARTY OF				Wind States	TAR BERT SOL

PLAINS MARKETING, LP LOVINGTON GATHERING WTI LEA COUNTY, NEW MEXICO PLAINS SRS NO: 2006-142 NMOCD REF NO: 1RP-838

					300.1	SW846-6010C				
SAMPLE LOCATION	SAMPLE DATE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL- BENZENE (mg/L)	M,P- XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENES (mg/L)	TOTAL BTEX (mg/L)	FLUORIDE (mg/L)	CHROMIUM (mg/L)
MW-7	12/28/06	0.047	<0.0010	<0.0010	0.001	<0.0010	0.001	0.0480	-	-
	03/16/07	0.047	<0.0010	<0.0010	0.015	<0.0010	0.015	0.0620	-	-
	05/31/07	0.039	<0.0010	<0.0010	0.005	<0.0010	0.005	0.0440	-	-
	09/25/07	0.037	<0.0010	<0.0010	0.030	<0.0010	0.03	0.0670	-	-
	11/30/07	0.026	<0.0020	<0.0010	0.022	<0.0010	0.022	0.0480	-	-
	03/11/08	0.095	<0.0020	<0.0010	0.0032	<0.0010	0.0032	0.0982	-	-
	06/14/08	0.138	<0.0020	<0.0010	0.016	<0.0010	0.016	0.1540	-	-
	09/17/08	0.353	<0.0020	<0.0010	0.003	<0.0010	0.003	0.3560	-	-
	12/02/08	0.036	<0.0020	<0.0010	0.003	0.002	0.005	0.0410	-	-
	03/03/09	0.0775	<0.0020	<0.0010	0.0327	<0.0010	0.0327	0.1102	-	-
	06/18/09	0.057	<0.0020	<0.0010	0.0329	<0.0010	0.0329	0.0899	-	-
	09/01/09	0.012	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0120	-	-
	12/18/09	< 0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/04/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/25/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/30/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/11/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/22/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	5/27/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
		Constant and the constant	e de la composición d Composición de la composición de la comp	A Lot and a lot					the second s	and the second second
MW-8	03/16/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	05/31/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	09/25/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/30/07	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/14/08	0.008	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.008	-	-
	09/17/08	0.568	<0.0100	<0.005	<0.0100	<0.005	<0.0100	0.568	-	-
	12/02/08	0.234	0.046	0.008	0.041	0.013	0.054	0.342	-	-
	03/03/09	0.0284	<0.0020	<0.0010	0.0068	<0.0010	0.0068	0.0352	-	-
	06/18/09	0.0045	<0.0020	0.0016	0.0032	< 0.0010	0.0032	0.0093	-	-

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PLAINS MARKETING, LP LOVINGTON GATHERING WTI LEA COUNTY, NEW MEXICO PLAINS SRS NO: 2006-142 NMOCD REF NO: 1RP-838

					300.1	SW846-6010C				
SAMPLE LOCATION	SAMPLE DATE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL- BENZENE (mg/L)	M,P- XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENES (mg/L)	TOTAL BTEX (mg/L)	FLUORIDE (mg/L)	CHROMIUM (mg/L)
` MW-8	09/01/09	0.0013	<0.0020	0.0011	0.0141	<0.0010	0.0141	0.0165	-	-
	12/18/09	<0.0010	<0.0020	<0.0010	< 0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/04/10	<0.0010	<0.0020	0.0011	<0.0020	<0.0010	<0.0020	0.0011	-	-
	05/25/10	0.0012	< 0.0020	0.001	<0.0020	<0.0010	<0.0020	0.0022	-	-
	08/30/10	<0.0010	<0.0020	0.0014	<0.0020	<0.0010	<0.0020	0.0014	-	· _
	11/11/10	<0.0010	<0.0020	<0.0010	<0:0020	<0.0010	<0.0020	<0.0020	-	-
	03/22/11	<0.0010	<0.0020	<0.0010	<0.0020	0.00154	0.00154	0.00154	-	-
	5/27/2011	<0.0010	< 0.0020	<0.0010	<0.0020	0.00260	0.00260	0.00260	-	-
的情况的方法	375 53 8768			in/stake	會認識及這次的心	N. S. Contractor		REAL COMPANY	言語語語	的时代, 在1995年1月1日,1995年1月11日,1995年1月11日,1995年1月11日,1995年1月11日,1995年1月11日,1995年1月11日,1995年1月11月1月1日,1995年1月11日,1995年1月11日,1995年1月11日,1995年1月11月11日,1995年1月11月11月1月,1995年1月11月,1995年1月11月,1995年1月11月,1995年1月11月,1995年1月11月,1995年1月10月,1995年1月10月,1995年1月10月,1005555555555555555555555555555555
MW-9	09/25/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/30/07	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	•
	03/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/14/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/17/08	<0.0010	<0.0020	<0.0010	< 0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/02/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/03/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	•
	09/01/09	0.9717	0.0641	<0.0100	0.0867	0.0422	0.1289	1.1647	-	-
	09/10/09	1.838	<0.0200	<0.0100	0.0537	<0.0100	0.0537	1.8917	-	-
	10/05/09	0.985	<0.0020	<0.0010	0.0442	<0.0010	0.0442	1.0292	-	-
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/04/10	0.0192	<0.0020	<0.0010	0.0027	<0.0010	0.0027	0.0219	-	
	05/25/10	0.0421	<0.0020	<0.0010	0.0063	<0.0010	0.0063	0.0484	-	
	08/30/10	0.1259	<0.0020	<0.0010	0.0344	<0.0010	0.0344	0.1603	-	-
	11/11/10	0.0265	<0.0020	< 0.0010	0.0097	<0.0010	0.0097	0.0362	-	-
	03/22/11	0.00335	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.00335	-	-
	5/27/2011	0.00406	<0.0020	<0.0010	0.00326	<0.0010	0.00326	0.00732	•	-
		6	š				استان المراجع المراجع الموقع المراجع ا المراجع المراجع	al		

PLAINS MARKETING, LP LOVINGTON GATHERING WTI LEA COUNTY, NEW MEXICO PLAINS SRS NO: 2006-142 NMOCD REF NO: 1RP-838

				METH	ODS: EPA S	W 846-8021b			300.1	SW846-6010C
SAMPLE LOCATION	SAMPLE DATE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL- BENZENE (mg/L)	M,P- XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENES (mg/L)	TOTAL BTEX (mg/L)	FLUORIDE (mg/L)	CHROMIUM (mg/L)
MW-10	11/02/09	<0.005	<0.005	<0.005	<0.010	< 0.005	<0.010	<0.010	-	-
	03/04/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/25/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
•	08/30/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/11/10	0.0350	<0.0020	<0.0010	0.0035	<0.0010	0.0035	0.0385	-	-
	03/22/11	0.0568	<0.0020	<0.0010	0.00333	<0.0010	0.00333	0.0601	-	-
	5/27/2011	1.52	<0.0020	0.00107	0.0113	<0.0010	0.0113	1.53	-	-
		1.1.1.1.1.1	· · · · · · · · · · · · · · · · · · ·	Are Charles		**************************************		ر فی م ^ع م گر سر م		
Goff Dairy Well	5/27/2011	0.00125	<0.0020	<0.0010	<0.00200	<0.0010	<0.0020	0.00123	-	-
NIS MORE ST			the space of the second		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		Sec. 1. State		1. "我们们有这个:	
NMOCD CR	ITERIA	0.01	0.75	0.75		TOTAL XY	LENES 0.62		1.6	0.05

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Appendices

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Appendix A Laboratory Analytical Reports

Analytical Report 418116

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

06-JUN-11

Collected By: Client



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12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122): Texas (T104704215-10-6-TX), Arizona (AZ0738), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002) Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054) New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610) Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046): Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AAL11), West Virginia (362), Kentucky (85) Louisiana (04176), USDA (P330-07-00105)

> Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330) Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900) Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX) Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX) Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370) Xenco-Boca Raton (EPA Lab Code: FL01273): Florida(E86240),South Carolina(96031001), Louisiana(04154), Georgia(917) North Carolina(444), Texas(T104704468-TX), Illinois(002295), Florida(E86349)

> Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757), Texas(104704435-10-2), Nevada(NAC-445A), DoD(65816) Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757) Xenco Tucson (EPA Lab code: AZ000989): Arizona (AZ0758)



06-JUN-11

Project Manager: Jason Henry PLAINS ALL AMERICAN EH&S 1301 S. COUNTY ROAD 1150 Midland, TX 79706

Reference: XENCO Report No: 418116 Lovington Gathering WTI Project Address: Lea County, NM

Jason Henry:

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 418116. 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. 418116 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 418116

PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-1	. W	May-27-11 08:40		418116-001
MW-2	W	May-27-11 08:35		418116-002
MW-3	W	May-27-11 08:25		418116-003
MW-4	W	May-27-11 08:50		418116-004
MW-5	W	May-27-11 08:20		418116-005
MW-6	W	May-27-11 09:00		418116-006
MW-7	W	May-27-11 09:10		418116-007
MW-8	W	May-27-11 09:20		418116-008
MW-9	W	May-27-11 09:25		418116-009
MW-10	W	May-27-11 09:35		418116-010



CASE NARRATIVE

Client Name: PLAINS ALL' AMERICAN EH&S Project Name: Lovington Gathering WTI



 Project ID:
 2006-142

 Work Order Number:
 418116

Report Date: 06-JUN-11 Date Received: 05/27/2011

Sample receipt non conformances and comments: None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-858300 Inorganic Anions In Water by E300 E300MI

Batch 858300, Fluoride RPD was outside laboratory control limits. Samples affected are: 418116-004

E300MI

Batch 858300, Fluoride recovered below QC limits in the Matrix Spike. Samples affected are: 418116-004. The Laboratory Control Sample for Fluoride is within laboratory Control Limits

Batch: LBA-858485 BTEX by EPA 8021 SW8021BM

Batch 858485, 1,4-Difluorobenzene recovered above QC limits . Matrix interferences is suspected; data confirmed by re-analysis Samples affected are: 418116-010.



Certificate of Analysis Summary 418116 PLAINS ALL AMERICAN EH&S, Midland, TX



Project Name: Lovington Gathering WTI

Date Received in Lab: Fri May-27-11 04:42 pm Report Date: 06-JUN-11

Contact: Jason Henry Project Location: Lea County, NM

Project Id: 2006-142

								Project Ma	nager:	Brent Barron,	11		
	Lab Id:	418116-0	001	418116-0	002	418116-0	003	418116-0	004	418116-0	005	418116-0	. 606
Anglusia Descented	Field Id:	MW-1		MW-2	: [MW-3	; [MW-4	. (MW-5	. (MW-6	i
Analysis Kequestea	Depth:												
	Matrix:	WATE	R	WATE	R	WATE	R	WATE	R	WATE	R	WATE	R
	Sampled:	May-27-11	08:40	May-27-11	08:35	May-27-11	08:25	May-27-11	08:50	May-27-11	08:20	May-27-11	09:00
BTEX by EPA 8021	Extracted:	Jun-01-11	11:34	Jun-01-11	11:34	Jun-01-11	11:34	Jun-01-11	11:34	Jun-01-11	11.34	Jun-01-11	11:34
	Analyzed:	Jun-02-11	13:57	Jun-02-11	14:20	Jun-02-11	14:43	Jun-02-11	15:06	Jun-02-11	15:29	Jun-02-11	15:52
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		ND	0.0010	0.00222	0.0010	0.0205	0.0010	ND	0.0010	ND	0.0010	ND	0 0010
Toluene		ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020
Ethylbenzene		ND	0.0010	ND	0.0010	ND	0 0010	ND	0.0010	ND	0.0010	ND	0.0010
m_p-Xylenes		ND	0.0020	0.00297	0.0020	0.00308	0.0020	ND	0.0020	ND	0 0020	ND	0.0020
o-Xylene		ND	0.0010	ND	0.0010	0.00116	0 0010	ND	0.0010	ND	0.0010	ND	0.0010
Xylenes, Total		ND	0 0010	0.00297	0.0010	0.00424	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Total BTEX		ND	0.0010	0.00519	0.0010	0.0247	0 0010	ND	0.0010	ND	0.0010	ND	0.0010
Inorganic Anions In Water by E300	Extracted:												
	Analyzed:							Jun-01-11	10:44				
•	Units/RL:							mg/L	RL				
Fluoride							•	4.76	2.00				
Chloride					1			24.3	5.00				
Metals, Total by SW846 6010C	Extracted:							Jun-02-11	11:44				
SUB: E87429	Analyzed:							Jun-05-11	13:49				
	Units/RL:	•						mg/L	RL				
Chromium								ND	0.0500				

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

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Brent Barron, II

Odessa Laboratory Manager



- `*

Project Id: 2006-142

Contact: Jason Henry

Certificate of Analysis Summary 418116 PLAINS ALL AMERICAN EH&S, Midland, TX



Project Name: Lovington Gathering WTI

Date Received in Lab: Fri May-27-11 04:42 pm

Report Date: 06-JUN-11

roject Location: Lea County, NM								Report	Date:	00-JUN-11	
	_							Project Ma	nager:	Brent Barron, II	
	Lab Id:	418116-0	007	418116-0	008	418116-0	009	418116-0	010		
Analysis Requested	Field Id:	MW-7	,	MW-8	8	MW-9	9	MW-1	0		
Anuiysis Kequesieu	Depth:										
	Matrix:	WATE	R	WATE	R	WATE	R	WATE	R		
~ .	Sampled:	May-27-11	09:10	May-27-11	09:20	May-27-11	09:25	May-27-11	09:35		
BTEX by EPA 8021	Extracted:	Jun-02-11	12:15	Jun-02-11	12:15	Jun-02-11	12:15	Jun-02-11	12:15		
· ·	Analyzed:	Jun-02-11	19:19	Jun-02-11	19:41	Jun-02-11	20:04	Jun-02-11	20:27		
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL		
Benzene		ND	0.0010	ND	0.0010	0.00406	0.0010	1.52 D	0.0250		
Toluene		ND	0.0020	ND	0.0020	ND	0.0020	ND	0 0 0 2 0)	
Ethylbenzene	-	ND	0.0010	ND	0.0010	ND	0.0010	0.00107	0.0010		
m_p-Xylenes		ND	0.0020	ND	0.0020	0.00326	0.0020	0.0113	0.0020		
o-Xylene		ND	0.0010	0 00260	0.0010	ND	0.0010	ND	0.0010		
Xylenes, Total		ND	0.0010	0 00260	0.0010	0.00326	0.0010	0.0113	0.0010		
Total BTEX		ND	0.0010	0 00260	0.0010	0.00732	0.0010	1.53 D	0.0010		

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 Laboratorics assumes no responsibility and makes no warranty to the end use of the data hereby presented Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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,

Brent Barron, II Odessa Laboratory Manager



Flagging Criteria

- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect 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.
- JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit

PQL Practical Quantitation Limit

LOD Limit of Detection

LOQ Limit of Quantitation

DL Method Detection Limit

- NC Non-Calculable
- + Outside XENCO's scope of NELAC Accreditation.

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Phone Fax (281) 240-4200 (281) 240-4280 (214) 902 0300 (214) 351-9139 (210) 509-3334 (210) 509-3335 (813) 620-2000 (813) 620-2033 (305) 823-8500 (305) 823-8555 (432) 563-1800 (432) 563-1713 (361) 884-0371 (361) 884-9116 (602) 437-0330



Project Name: Lovington Gathering WTI

Work Orders : 418116	, ,		Project II	D: 2006-142		
Lab Batch #: 8384/1	Sample: 604212-1-BKS / E	SKS Bate	h: 1 Matrix	ECOVERY	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
14 Diffuench annun	Analytes	0.0310	0.0300	102	00.120	
4-Bromofluorobenzene		0.0310	0.0300	103	80-120	
		0.0333	0.0300		80-120	
Lab Batch #: 858471	Sample: 604212-1-BSD / B	SD Bate	h: Matrix:	Water		
Units: mg/L	Date Analyzed: 06/01/11 12:33	SU	RROGATE RI	COVERY	STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0321	0.0300	107	80-120	
4-Bromofluorobenzene	·	0.0337	0.0300	112	80-120	
Lab Batch #: 858471	Sample: 604212-1-BLK / E	LK Batel	h: 1 Matrix:	Water	L.,	
Units: mg/L	Date Analyzed: 06/01/11 13:42	SU	RROGATE RI	ECOVERY	STUDY	
BTE	X by EPA 8021	· Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0285	0.0300	95	80-120	
4-Bromofluorobenzene	<u></u> ,	0.0311	0.0300	104	80-120	
Lab Batch #: 858471	Sample: 418009-008 S / M	S Batel	h· 1 Matrix	Water	<u> </u>	
Units: mg/L	Date Analyzed: 06/01/11 17:52	SU.	RROGATE RI	ECOVERY	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes		_	[D]		
1,4-Difluorobenzene		0.0302	0.0300	101	80-120	
4-Bromofluorobenzene		0.0314	0.0300	105	80-120	
Lab Batch #: 858471	Sample: 418116-001 / SMF	Bate	h: 1 Matrix:	Water		
Units: mg/L	Date Analyzed: 06/02/11 13:57	SU	RROGATE RI	ECOVERY	STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0305	0.0300	102	80-120	
4-Bromofluorobenzene		0.0289	0.0300	96	80-120	<u></u>

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



Project Name: Lovington Gathering WTI

Work Orders : 418116	5,		Project II	D: 2006-142		
Lab Batch #: 858471	Sample: 418116-002 / SMP	Bate	h: 1 Matrix:	Water		
Units: mg/L	Date Analyzed: 06/02/11 14:20	SU	RROGATE RI	ECOVERY	STUDY	
BTE	EX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
14.0.0						
1,4-Difluorobenzene		0.0279	0.0300	93	80-120	
4-Bromonuorobenzene		0.0302	0.0300	101	80-120	
Lab Batch #: 858471	Sample: 418116-003 / SMP	Bate	h: ¹ Matrix:	Water		
Units: mg/L	Date Analyzed: 06/02/11 14:43	SU	RROGATE RI	ECOVERY	STUDY	
BTI	EX by EPA 8021 Analytes	Amount Found [A]	True Amount (Bj	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0286	0.0300	95	80-120	
4-Bromofluorobenzene		0.0307	0.0300	102	80-120	
Lab Batch #: 858471	Sample: 418116-004 / SMP	Bate	h: ¹ Matrix:	Water	·	
Units: mg/L	Date Analyzed: 06/02/11 15:06	SU	RROGATE RE	ECOVERY S	STUDY	
BTE	EX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	-	0.0283	0.0300	94	80-120	
4-Bromofluorobenzene		0.0293	0.0300	98	80-120	
Lab Batch #: 858471	Sample: 418116-005 / SMP	Bate	h: 1 Matrix:	Water		
Units: mg/L	Date Analyzed: 06/02/11 15:29	SU	RROGATE RE	ECOVERY S	STUDY	
BTH	EX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R ID1	Control Limits %R	Flags
1.4 Difluorabergena	Analytes	0.0307	0.0200	100	80.120	
4-Bromofluorobenzene		0.0327	0.0300	109	80-120	
	2	0.0320		Water	00-120	
Lab Batch #: 8384/1	Sample: 418116-0067 SMP	Bate	h: Matrix:	water	STUDV	
Units: mg/L	Date Analyzed: 06/02/11 15:52		KROGATE RI			
BTH	EX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0322	0.0300	107	80-120	
4-Bromofluorobenzene		0.0327	0.0300	109	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



Project Name: Lovington Gathering WTI

Vork Orders: 418116	· ,		Project II): 2006-142		
Lab Batch #: 858485	Sample: 604236-1-BKS / E	KS Bate	h: 1 Matrix:	Water		
Units: mg/L	Date Analyzed: 06/02/11 17:25	SU	RROGATE RE	COVERY	STUDY	
вте	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[0]		I
I,4-Difluorobenzene		0.0300	0.0300	100	80-120	I
4-Bromofluorobenzene		0.0327	0.0300	109	80-120	
Lab Batch #: 858485	Sample: 604236-1-BSD / B	SD Bate	h: ¹ Matrix:	Water		
Units: mg/L	Date Analyzed: 06/02/11 17:48	SU	RROGATE RF	COVERY	STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0 0315	0.0300	105	80-120	
4-Bromofluorobenzene		0.0324	0.0300	108	80-120	l
Lab Ratch #: 858485		I	L. 1 Matrix:	Water	L	<u> </u>
Units: mg/L	Date Analyzed: 06/02/11 18:56	SU	RROGATE RF	COVERY	STUDY	
ВТЕ	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
14 D'Auss-bangana	Analytes	0.0200	0.0200		20.100	
1,4-Difluorobenzene		0.0288	0.0300	96	80-120	l
4-Bromonuorobenzene		0.0294	0.0300	98	80-120	L
Lab Batch #: 858485	Sample: 418116-007 / SMF	Batel	h: 1 Matrix:	Water		
Units: mg/L	Date Analyzed: 06/02/11 19:19	SU	RROGATE RE	COVERY	STUDY	
вте	X by EPA 8021 Analytes	A'mount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Dıfluorobenzene		0.0298	0.0300	99	80-120	i
4-Bromofluorobenzene		0.0316	0.0300	105	80-120	
Lab Batch #: 858485	Sample: 418116-008 / SMF	Bate	h: 1 Matrix:	Water	<u> </u>	
Units: mg/L	Date Analyzed: 06/02/11 19:41	SU	RROGATE RF	COVERY	STUDY	
ВТЕ	X by EPA 8021 Analytes	A <u>mount</u> Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0262	0.0300	87	80-120	[
4-Bromofluorobenzene	· · · · · · · · · · · · · · · · · · ·	0.0276	0.0300	92	80-120	

* Surrogate outside of Laboratory QC limits

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

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

^{***} Poor recoveries due to dilution



Project Name: Lovington Gathering WTI

Vork Orders: 418110	5,		Project II	D: 2006-142		
Lab Batch #: 858485	Sample: 418116-009 / SMP	Batcl	h: l Matrix:	Water		
Units: mg/L	Date Analyzed: 06/02/11 20:04	SU	RROGATE RI	ECOVERY	STUDY	
BTE	EX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
1,4-Difluorobenzene		0.0281	0.0300	94	80-120	
4-Bromofluorobenzene		0.0319	0.0300	106	80-120	
Lab Batch #: 858485	Sample: 418116-010 / SMP	Batcl	h: 1 Matrix:	Water		
Units: mg/L	Date Analyzed: 06/02/11 20:27	SU	RROGATE RI	ECOVERY	STUDY	
BTE	EX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0496	0.0300	165	80-120	**
4-Bromofluorobenzene		0.0320	0.0300	107	80-120	
Lab Batch #: 858485		Batc	h· 1 Matrix:	Water	<u>i </u>	
Units: mg/L	Date Analyzed: 06/02/11 23:05	SU	RROGATE RE	ECOVERY S	STUDY	
BTE	EX by EPA 8021	Amount Found [A]	True Amount B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0321	0.0300	107	80-120	
4-Bromofluorobenzene		0.0339	0.0300	113	80-120	
Lab Batch #: 858485	Sample: 418116-007 SD / M	ISD Batcl	h: 1 Matrix:	Water		
Units: mg/L	Date Analyzed: 06/02/11 23:28	SU	RROGATE RI	ECOVERY	STUDY	
BTE	EX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes		200			ļ
1,4-Difluorobenzene		0.0286	0 0300	95	80-120	
4-Bromofluorobenzene		0.0324	0.0300	108	80-120	L
Lab Batch #: 858712	Sample: 604361-1-BKS / BB	KS Batel	h: 1 Matrix:	Water		
Units: mg/L	Date Analyzed: 06/03/11 22:11	SU.	RROGATE KI	COVERY	STUDY	
BTE	EX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0311	0.0300	104	80-120	
4-Bromofluorobenzene	~	0.0331	0.0300	110	80-120	

* Surrogate outside of Laboratory QC limits

** 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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Project Name: Lovington Gathering WTI

Vork Orders: 418116	3		Project II	D: 2006-142		
Lab Batch #: 858712	Sample: 604361-1-BSD / B	SD Bate	h: l Matrix	:Water		
Units: mg/L	Date Analyzed: 06/03/11 22:34	SU	RROGATE R	ECOVERY	STUDY	
ВТЕ	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[U]		
1,4-Difluorobenzene		0.0306	0.0300	102	80-120	
4-Bromofluorobenzene		0.0318	0.0300	106	80-120	
Lab Batch #: 858712	Sample: 604361-1-BLK / B	LK Bate	h: ¹ Matrix	:Water		
Units: mg/L	Date Analyzed: 06/03/11 23:42	SU	RROGATE RI	ECOVERY S	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1.4-Difluorobenzene		0.0292	0.0300	97	80-120	
4-Bromofluorobenzene		0.0304	0 0300	101	80-120	
Lab Batch #: 858712	Sample: 418116-010 / DL	Batc	h: ¹ Matrix	:Water	L	
Units: mg/L	Date Analyzed: 06/04/11 06:52	SU	RROGATE RI	ECOVERY	STUDY	
BTE	X by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0309	0.0300	103	80-120	
4-Bromofluorobenzene		0.0347	0.0300	116	80-120	

* Surrogate outside of Laboratory QC limits

** 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.





Work Order #: 418116	P	(D	1 00/01/201				Proj	ject ID: 2	2006-142		
Analyst: ASA Lob Batch ID: 252471 Sample: 604212-1-1	Da	ite Prepar Batel	ed: 00/01/201	1			Date A	Matrix: V	Vater		
Units: mg/L		BLAN	K /BLANK S	SPIKE / E	BLANK S	PIKE DUPI	ICATE	RECOVE	CRY STUD	Y	. <u> </u>
BTEX by EPA 8021 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.101	101	0.100	0.103	103	2	70-125	25	
Toluene	<0.00200	0.100	0.104	104	0.100	0.106	106	2	70-125	25	
Ethylbenzene	<0.00100	0.100	0.102	102	0.100	0.105	105	3	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.219	110	0.200	0.224	112	2	70-131	25	
o-Xylene	<0.00100	0.100	0.118	118	0.100	0.121	121	3	71-133	25	
Analyst: ASA	Da	ate Prepar	ed: 06/02/201	1			Date A	nalyzed: ()	6/02/2011		
Lab Batch ID: 858485 Sample: 604236-1-1	BKS	Batc	h #: 1					Matrix: V	Vater		
Units: mg/L		BLAN	K /BLANK S	SPIKE / E	BLANK S	PIKE DUPI	ICATE	RECOVE	ERY STUD	Y	
BTEX by EPA 8021	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate Basult (El	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes		נאן		լոյ	្រេ		[G]				
Benzene	<0.00100	0.100	0.0967	97	0.100	0.101	101	4	70-125	25	
Toluene	<0.00200	0.100	0.0979	98	0.100	0.103	103	5	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0946	95	0.100	0.0982	98	4	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.199	100	0.200	0.206	103	3	70-131	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+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





Work Order #: 418116							Pro	ject ID: 2	2006-142		
Analyst: ASA	D	ate Prepar	ed: 06/03/20	11			Date A	nalyzed: (6/03/2011		
Lab Batch ID: 858712 Sample: 60	04361-1-BKS	Batc	h #: 1					Matrix: \	Water		
Units: mg/L		BLAN	K/BLANK	SPIKE / I	BLANK S	SPIKE DUP	LICATE	RECOVI	ERY STUD	Y	
BTEX by EPA 8021	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	. <0.00100	0.100	0.0917	92	0.100	0.0994	99	8	70-125	25	
Toluene	<0.00200	0.100	0.0925	93	0.100	0.102	102	10	70-125	25	
Ethylbenzene	<0.00100	0.100	. 0.0911	91	0.100	0.0996	100	9	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.196	98	0.200	0.212	106	8	70-131	25	
o-Xylene	<0.00100	0.100	0.109	109	0.100	0.115	115	5	71-133	25	
Analyst: LATCOR	D	ate Prepar	ed: 06/01/20	11			Date A	nalyzed: (6/01/2011		
Lab Batch ID: 858300 Sample: 85	58300-1-BKS	Batc	h #: 1					Matrix: \	Water		
Units: mg/L		BLAN	K/BLANK	SPIKE / I	BLANK S	PIKE DUP	LICATE	RECOVE	ERY STUD	Ŷ	
Inorganic Anions In Water by E3 Analytes	00 Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Fluoride	<0.200	1.30	1.15	88	1.30	1.46	112	24	80-120	20	F

Relative Percent Difference RPD = 200*|(C-F)/(C+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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Work Order #: 418116 Analyst: 4150		Da	te Preparo	ed: 06/02/201	1			Pro Date A	ject ID: 2 nalyzed: (2006-142 06/05/2011		
Lab Batch ID: 858659	Sample: 604134-1-Bk	KS	Batch	n#: 1					Matrix: V	Water		
Units: mg/L			BLAN	K/BLANK S	SPIKE / E	BLANK S	PIKE DUPI	ICATE	RECOVI	ERY STUD	Y	
Metals, Total by SW	V846 6010C	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Bik. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes			[B]	[C]	[D]	[E]	Result [F]	[G]				
Chromium		<0.0500	1.00	0.913	91	1.00	0.929	93	2	80-120	20	

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



Form 3 - MS Recoveries



Project Name: Lovington Gathering WTI

Work Order #: 418116						
Lab Batch #: 858471			Pro	oject ID:	2006-142	
Date Analyzed: 06/01/2011	Date Prepared: 06/0	1/2011	Α	analyst: A	SA	
QC- Sample ID: 418009-008 S	Batch #: 1		1	Matrix: V	Vater	
Reporting Units: mg/L	MATH	RIX / MA	TRIX SPIKE	RECO	VERY STU	DY
BTEX by EPA 8021B	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Benzene	0.00219	0.100	0.0889	87	70-125	
Toluene	< 0.00200	0.100	0.0899	90	70-125	
Ethylbenzene	<0.00100	0.100	0.0867	87	71-129	
m_p-Xylenes	<0.00200	0.200	0.182	91	70-131	
o-Xylene	0.00271	0.100	0.0997	97	71-133	
Lab Batch #: 858300						
Date Analyzed: 06/01/2011	Date Prepared: 06/0	1/2011	A	nalyst: L	ATCOR	
QC- Sample ID: 418228-001 S	Batch #: 1		I	Matrix: W	/ater	
Reporting Units: mg/L	MATH	NX / MA	TRIX SPIKE	RECO	VERY STU	DY
Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result {C}	%R [D]	Control Limits %R	Flag
Fluoride	41.3	130	112	54	80-120	x

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

RL - Below Reporting Limit



v. Ria

Form 3 - MS / MSD Recoveries

Project Name: Lovington Gathering WTI



Chromium

Matrix Spike Percent Recovery [D] = 100*(C-A)/B Relative Percent Difference RPD = $200^{+}(C-F)/(C+F)$ Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

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





Work Order #: 418116

Lab Batch #: 858300		•	Project I	D: 2006-142	2
Date Analyzed: 06/01/2011 10:44 Date Prepa	r ed: 06/01/2011	Anal	yst:LATC	OR	
QC- Sample ID: 418228-001 D Bate	h #: 1	Mat	rix: Water		
Reporting Units: mg/L	SAMPLE	/ SAMPLE	DUPLIC	ATE REC	OVERY
Inorganic Anions In Water by E300	Parent Sample Result [A]	Sample Duplicate Result	RPD	Control Limits %RPD	Flag
Analyte		(B)			
Fluoride	41.3	42 2	2	20	
Lab Batch #: 858659					
Date Analyzed: 06/05/2011 13:32 Date Prepa	red: 06/02/2011	l Ana	lyst:4150		
Date Analyzed: 06/05/2011 13:32 Date Prepa QC- Sample ID: 418038-001 D Batc	red:06/02/2011 h #: 1	l Anal Mat	lyst:4150 rix: Water		
Date Analyzed: 06/05/2011 13:32 Date Prepa QC- Sample ID: 418038-001 D Batc Reporting Units: mg/L Batc	red: 06/02/2011 h #: 1 SAMPLE	Anal Mat SAMPLE	lyst:4150 rix: Water DUPLIC	ATE REC	OVERY
Date Analyzed: 06/05/2011 13:32 Date Prepa QC- Sample ID: 418038-001 D Batc Reporting Units: mg/L Metals, Total by SW846 6010C Analyte Analyte	red: 06/02/2011 h #: 1 SAMPLE Parent Sample Result [A]	Anal Mat / SAMPLE Sample Duplicate Result [B]	lyst:4150 rix: Water DUPLIC RPD	ATE RECO Control Limits %RPD	OVERY Flag

Spike Relative Difference RPD 200 * | (B-A)/(B+A) | All Results are based on MDL and validated for QC purposes. BRL - Below Reporting Limit

Xenco Laboratories

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CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

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

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	Project Manager:	Ben J. Arguijo															-	Pr	ojec	t Na	me:	Lo	/ing	ton	Gat	<u>:her</u>	ing	WT	I			
	Company Name	Basin Environmen	tal Ser	vice T	chnol	ogies, LLC	<u> </u>										_		P.	rojec	:t #:	200	6-14	42								
	Company Address:	P. O. Box 301				······											_		Proj	ect L	.oc:	Lea	Cou	nty,	NM							
	City/State/Zip:	Lovington, NM 882	60				····										_			P) #:	PA/	<u>- J. I</u>	Hen	<u>у</u>							
	Telephone No.	(575)396-2378				·····	Fax No:		(57	(5) 3	396-1	429					R	lepor	t Fo	rmat	::	X	Stand	dard		С] TR	.RP		П и	PDES	3
	Sampler Signature:	pr lin	6				e-mail:		bja	rgu	iijo@	basi	nen	v.cor	n				_	•				-								_
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XENCO Laboratories

Atlanta, Boca Raton, Corpus Christi, Dallas

Houston, Miami, Odessa, Philadelphia Phoenix, San Antonio, Tampa

Document Title: Sample Receipt Checklist Document No.: SYS-SRC Revision/Date: No. 01, 5/27/2010 Effective Date: 6/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

Client:	Plains	من ومعرف المحرف المحرف المحرف المحرف المحرف
Date/Time:	5-27-11 16:42	
Lab ID # :	418116	
Initials:	LM	

Sample Receipt Checklist

1. Samples on ice?	Blue	Water	No	·····
2. Shipping container in good condition?	Tes	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	(Yes)	No	-0443	7
4. Chain of Custody present?	(B)	No		
5. Sample instructions complete on chain of custody?	(es)	No		
6. Any missing / extra samples?	Men	No		
7. Chain of custody signed when relinquished / received?	শিক্ত	No	l	
8. Chain of custody agrees with sample label(s)?	(Jee)	No		
9. Container labels legible and intact?	Yes	No		
10. Sample matrix / properties agree with chain of custody?	(Yeg)	No ·		
11. Samples in proper container / bottle?	Yes	No		
12. Samples property preserved?	Yes	No	N/A	
13. Sample container intact?	Yes	No	1	
14. Sufficient sample amount for indicated test(s)?	YES	No		
15. All samples received within sufficient hold time?	(Yes)	No		
16. Subcontract of sample(s)?	YES	No	N/A	
17. VOC sample have zero head space?	(Tes)	No	N/A	
18. Cooler 1 No. Cooler 2 No. Cooler 3 No.	Cooler 4 No	0.	Cooler 5 No	•
Ibs 5.6 °C Ibs °C Ibs °C	lbs	°() ibs	°C

Nonconformance Documentation

Contact: Contacted by: Date/Time:____ **Regarding:** . Corrective Action Taken: .

Check all that apply: Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1. Initial and Backup Temperature confirm out of temperature conditions

Client understands and would like to proceed with analysis

- .

Analytical Report 418093

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

03-JUN-11

Collected By: Client



Celebrating 20 Years of commitment to excellence in Environmental Testing Services



12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122): Texas (T104704215-10-6-TX), Arizona (AZ0738), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002) Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054) New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610) Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046): Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AAL11), West Virginia (362), Kentucky (85) Louisiana (04176), USDA (P330-07-00105)

> Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330) Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900) Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX) Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX) Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370) Xenco-Boca Raton (EPA Lab Code: FL01273): Florida(E86240),South Carolina(96031001), Louisiana(04154), Georgia(917) North Carolina(444), Texas(T104704468-TX), Illinois(002295), Florida(E86349)

> Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757), Texas(104704435-10-2), Nevada(NAC-445A), DoD(65816) Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757) Xenco Tucson (EPA Lab code: AZ000989): Arizona (AZ0758)





03-JUN-11

Project Manager: Jason Henry PLAINS ALL AMERICAN EH&S 1301 S. COUNTY ROAD 1150 Midland, TX 79706

Reference: XENCO Report No: 418093 Lovington Gathering WTI Project Address: Lea County, NM

Jason Henry:

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 418093. 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. 418093 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 418093



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Goff Dairy Well	W	May-27-11 10:10		418093-001
Travel Blank	W	May-27-11 07:15		418093-002



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S Project Name: Lovington Gathering WTI



Project ID:2006-142Work Order Number:418093

Report Date: 03-JUN-11 Date Received: 05/27/2011

Sample receipt non conformances and comments: None

Sample receipt non conformances and comments per sample:

None



Project Id: 2006-142

Project Location: Lea County, NM

Contact: Jason Henry

Certificate of Analysis Summary 418093 PLAINS ALL AMERICAN EH&S, Midland, TX



Project Name: Lovington Gathering WTI

Date Received in Lab: Fri May-27-11 04:42 pm

Report Date: 03-JUN-11

Project Manager: Brent Barron, II

	Lab Id:	418093-0	01	418093-0	02				
Analysis Paguastad	Field Id:	Goff Dairy	Well	Travel Bla	ank				
Analysis Requested	Depth:								
	Matrix:	WATEI	R	WATE	R				
	Sampled:	May-27-11	10:10	May-27-11 (07:15				
BTEX by EPA 8021	Extracted:	Jun-01-11	11:34	Jun-01-11 1	1:34				
	Analyzed:	Jun-01-11	14:50	Jun-01-11 1	5:12				
	Units/RL:	mg/L	RL	mg/L	RL		_		
Benzene		0.00123	0.0010	ND	0.0010				
Toluene		ND	0.0020	ND	0 0020				
Ethylbenzene		ND	0.0010	ND	0 00 10				
m_p-Xylenes		ND	0.0020	ND	0.0020	٠			
o-Xylene		ND	0 0010	ND	0.0010				
Xylenes, Total		ND	0 0010	ND	0.0010				
Total BTEX		0.00123	0 0010	ND	0.0010			_	

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 bost judgment of XENCO Laboratorics XENCO Laboratorics assumes no responsibility and makes no warranty to the end use of the data hereby presented Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing

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Brent Barron, II

Odessa Laboratory Manager

Final 1.000



Flagging Criteria

- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect 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.
- JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
- BRL Below Reporting Limit.
- **RL** Reporting Limit
- MDL Method Detection Limit
- PQL Practical Quantitation Limit
- LOD Limit of Detection
- LOQ Limit of Quantitation
- **DL** Method Detection Limit
- NC Non-Calculable
- + Outside XENCO's scope of NELAC Accreditation.

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Final 1.000



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 418093 Lab Batch #: 858471	3, Sample: 604212-1-BKS / BB	CS Batch	Project II): 2006-142 Water		
Units: mg/L	Date Analyzed: 06/01/11 12:10	SUI	RROGATE RE	ECOVERY	STUDY	
BTE	EX by EPA 8021 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		0.0333	0.0300	111	80-120	
Lab Batch #: 858471	Sample: 604212-1-BSD / BS	SD Batch	: 1 Matrix:	Water		
Units: mg/L	Date Analyzed: 06/01/11 12:33	SUI	RROGATE RE	ECOVERY S	STUDY	
BTI	EX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0321	0.0300	107	80-120	
4-Bromofluorobenzene		0.0337	0.0300	112	80-120	
Lab Batch #: 858471	Sample: 604212-1-BLK / BI	LK Batch	: 1 Matrix:	Water		
Units: mg/L	Date Analyzed: 06/01/11 13:42	SUF	RROGATE RE	COVERY	STUDY	
BTI	EX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0285	0.0300	95	80-120	
4-Bromofluorobenzene		0.0311	0.0300	104	80-120	
Lab Batch #: 858471	Sample: 418093-001 / SMP	Batch	: 1 Matrix:	Water		
Units: mg/L	Date Analyzed: 06/01/11 14:50	SUF	RROGATE RE	ECOVERY S	STUDY	
BTE	EX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1.4-Difluorobenzene		0.0283	0.0300	94	80-120	
4-Bromofluorobenzene		0.0328	0.0300	109	80-120	
Lab Batch #: 858471	Sample: 418093-002 / SMP	Batch	: 1 Matrix:	Water		L
Units: mg/L	Date Analyzed: 06/01/11 15:12	SUI	RROGATE RE	ECOVERY	STUDY	
BTH	EX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0288	0.0300	96	80-120	
4-Bromofluorobenzene		0.0300	0.0300	100	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 418093	, 		Project I	D: 2006-142		
Lab Batch #: 838471 Units: mg/L	Sample: 418009-008 S / M Date Analyzed: 06/01/11 17:52	S Bate	RROGATE R	ECOVERY	STUDY	
BTE	X by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]	_	
1,4-Difluorobenzene		0.0302	0.0300	101	80-120	
4-Bromofluorobenzene		0.0314	0.0300	105	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

2

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





BS / BSD Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 418093 Analyst: ASA Lab Batch ID: 858471 Sample: 604212-1-	Date Prepared: 06/01/2011 Date Analyzed: 06/01/2011 3KS Batch #: 1 Matrix: Water										
Units: mg/L		BLAN	K /BLANK S	SPIKE / E	BLANK S	PIKE DUPI	ICATE 1	RECOVE	ERY STUD	Y	
BTEX by EPA 8021 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.101	101	0.100	0.103	103	2	70-125	25	
Toluene	<0.00200	0.100	0.104	104	0.100	0.106	106	2	70-125	25	
Ethylbenzene	<0.00100	0.100	0.102	102	0.100	0.105	105	3	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.219	110	0.200	0.224	112	2	70-131	25	
o-Xylene	<0.00100	0.100	0.118	118	0.100	0.121	121	3	71-133	25	

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



Form 3 - MS Recoveries



Project Name: Lovington Gathering WTI

Work Order #: 418093 **Project ID:** 2006-142 Lab Batch #: 858471 Date Prepared: 06/01/2011 Date Analyzed: 06/01/2011 Analyst: ASA QC- Sample ID: 418009-008 S Batch #: 1 Matrix: Water MATRIX / MATRIX SPIKE RECOVERY STUDY Reporting Units: mg/L Parent Spiked Sample Control BTEX by EPA 8021B Sample Spike Result %R Limits Flag Result Added |C|D %R [A] [B] Analytes Benzene 0.00219 0.100 0.0889 87 70-125 Toluene < 0.00200 0.100 0.0899 90 70-125 < 0.00100 0.100 0.0867 87 71-129 [Ethylbenzene 91 70-131 < 0.00200 0.200 0.182 m_p-Xylenes 0.00271 0.0997 97 71-133 o-Xylene 0.100

atrix Spike Percent Recovery $[D] = 100^{\circ}(C-A)/B^{\circ}$ Pelative Percent Difference $[E] = 200^{\circ}(C-A)/(C+B)^{\circ}$.ll Results are based on MDL and Validated for QC Purposes

RL - Below Reporting Limit

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

-

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

	Project Manager:	Ben J. Arguijo	<u> </u>														P	roje	et Na	ime:	Lo	ving	gtor	n Ga	ithe	aring	<u>g </u>	<u>/TI</u>				
	Company Name	Basin Environmental	Service T	echnol	ogies, LLC													P	roje	ct #:	20	06-1	42									
	Company Address:	P. O. Box 301														_		Pro	ect	Loc:	Lea	Co	unty	r, N₩	1							
	City/State/Zip:	Lovington, NM 88260)									_							P	0 #:	PA	<u>A- J</u>	. Hei	nry								
	Telephone No:	(575)396-2378				Fax No:		<u>(57</u>	(5) 3	96-1	429)				_	Repo	ort Fo	ma	t:	X	Star	ndan	d	ł	Пτ	RRI	Р	Γ] NP	DES	;
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XENCO Laboratories

Atlanta, Boca Raton, Corpus Christi, Dallas Houston, Miami, Odessa, Philadelphia

Phoenix, San Antonio, Tampa

Document Title: Sample Receipt Checklist Document No.: SYS-SRC Revision/Date: No. 01, 5/27/2010 Effective Date: 6/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

<u>Client:</u>	PIdID	15
Date/Time:	5-27-11	16:42
Lab ID # : L	118093	
Initials:	LM	

Sample Receipt Checklist

1. Samples on ice?	Blue	Water	No	
2. Shipping container in good condition?	Tes	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	(Yes)	No		94
4. Chain of Custody present?	(B)	No		·
5. Sample instructions complete on chain of custody?	()	No		L
6. Any missing / extra samples?	M. Qon	No		
7. Chain of custody signed when relinguished / received?	(6)	No		
8. Chain of custody agrees with sample label(s)?	(Jee)	No		
9. Container labels legible and intact?	Yes	No		
10. Sample matrix / properties agree with chain of custody?	(Yes)	No ·		
11. Samples in proper container / bottle?	(Pa	No		
12. Samples property preserved?	Yes	No	N/A	
13. Sample container intact?	Ye	No		
14. Sufficient sample amount for indicated test(s)?	Yes	No		
15. All samples received within sufficient hold time?	Yes	No		
16. Subcontract of sample(s)?	Yes	(No)	N/A	
17. VOC sample have zero head space?	(Yes)	No	N/A	
18. Cooler 1 No. Cooler 2 No. Cooler 3 No.	Cooler 4 No).	Cooler 5 No).
Ibs 5.6 °C Ibs °C Ibs °C	lbs	°C	ibs	°C

Nonconformance Documentation

Contact: Contacted by:_____ Date/Time:____ **Regarding:**

Corrective Action Taken:

Check all that apply: Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1. Initial and Backup Temperature confirm out of temperature conditions

Client understands and would like to proceed with analysis

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Appendix B Release Notification & Corrective Action (Form C-141)

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District I 625 N. French I District II 301 W. Grand A District III 000 Rio Brazos District IV 220 S. St. Fran	Dr., Hobbs, M Avenuc, Arte Road, Aztec cis Dr., Santa	NM 88240 ssia, NM 88210 s, NM 87410 a Fe, NM 87505		St Energy Mi Oil C 1220 Sa	ate of 1 nerals a Conserv South anta Fe	New Mexi and Natural vation Div St. Franc , NM 875	ico I Resources vision is Dr. 05			Re Submit 2 District W	Form C-141 vised October 10, 2003 Copies to appropriate Office in accordance ith Rule 116 on back side of form
			Rele	ase Notific	cation	and Co	orrective A	ction			
						OPERA	TOR		<u>x</u> Initi	al Report	Final Report
Name of Co	mpany Pla	ains Pipeline		B (000/0	(Contact Can	nille Reynolds				
Address 311	12 W. US	HWY 82, LOV ton Gatherin	ungton, N	NM 88200		Facility Typ	NO. 202-441-09	ine			
	IC LOVING		6 11 11		l.'						
Surface Ow	ner Robert	t Rice		Mineral (Jwner .	<u></u>		·····	Lease r	<u>NO.</u>	
				LOCA	ATION	VOF RE	LEASE	D 40			
Unit Letter H	Section 6	Township 17S	Range 37E	Feet from the	North/	South Line	Feet from the	East/V	West Line	Lea	
		Latitud	e 32° 51	' 56.0"		Longitude	e <u>103° 17' 07.2</u>	21			
				NAT	TIDE	UE DEI :	FASE				
Type of Rele	ase Crude (Dil				Volume of	Release 12 barre	ls	Volume	Recovered	8 barrels
Source of Re	lease 6" Ste	el Pipeline				Date and H	lour of Occurren	ce	Date and	Hour of Di	scovery
Was Immedi	ate Notice	Given?				If YES, To	whom?	`	4-21-200	0 @ 13.15	(222A 20)
		X	Yes [No Not R	equired	Pat Capert	on				22224252623
By Whom? (Was a Water	Camille Rey Course Rea	/nolds				Date and H	Hour 4-21-2006 (@ 15:35 the Wat	ercourse	{6}Q^*	
was a water			Yes 🛛	No		H . ILO , V	orome unpacting	uic wai	cicouise.	181	pre fil
If a Watercon	urse was In	pacted, Descr	ibe Fully."	•						131815161	С. Мол 125°
Describe Cat purged. The The sweet or Describe Are approximatel	use of Probl line is an id ude has an a Affected by 1,500 ft ² .	em and Reme dle 6-inch stee H ₂ S content o and Cleanup	dial Actio l gathering f <10 ppm Action Tal	n Taken Internal g line. The press . The line was a cen.* The impact	corrosion ure on the pproximation ed soil w	a while purgi e line was ap ttely 1.5 feet as excavated	ng the line result proximately 50 p bgs at the release and stockpiled o	ed in rele si and th point. n plastic	case of swe ac gravity of . Aerial co	et crude of f the sweet ctent of sur	I. The line has been crude oil was 34. face impact was
hereby certi- regulations a public health 'hould their o or the environ 'ederal, state	ify that the il operators or the envi operations h nment. In a or local la	information g are required t ronment. The nave failed to a addition, NMC ws and/or reg	iven above o report ar acceptance adequately OCD accept alations.	e is true and com ad/or file certain ce of a C-141 rep v investigate and ptance of a C-141	plete to the release ne ort by the remediate report d	he best of my otifications a e NMOCD m e contaminations oes not reliev	v knowledge and and perform corre- tarked as "Final F ion that pose a th ve the operator of	understa ctive act leport" o reat to g respons	nd that pur ions for rel locs not rel round wate ibility for c	suant to NM leases whic lieve the op r, surface v compliance	MOCD rules and h may endanger erator of liability water, human health with any other
Signature	am	fille	Kay	nolds	5	•	<u>OIL CON</u>	SERV	ATION	DIVISI	ON
^o rinted Name	e: Camille I	Reynolds	_/	·····		Approved by	District Supervis	sor:			
itle: Remed	iation Coor	dinator				Approval Da	te:		Expiration	Date:	
-mail Addre	ess: cjreyno	lds@paalp.co	m		'	Conditions o	f Approval:		·	Attache	۵ 🗋
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