

AP - 96

**QUARTERLY
MONITORING
REPORTS**

2012

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QUARTERLY MONITORING REPORT October - December 2012

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:

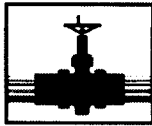
Basin Environmental Service Technologies, LLC

P. O. Box 301

Lovington, New Mexico 88260

January 2013

Ben J. Arguijo
Project Manager



PLAINS
PIPELINE, L.P.

RECEIVED OOD

2013 JAN 23 AM 9:28

January 23, 2013

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 January 2013, 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 at this site during the fourth quarter of 2012.

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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1.0 INTRODUCTION

Basin Environmental Service Technologies, LLC (Basin Environmental), on behalf of Plains Marketing, LP (Plains), is pleased to submit this *Quarterly Monitoring Report* for the release site known as Lovington Gathering WTI 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 groundwater monitoring events conducted during the fourth quarter (October - December) of 2012 only.

2.0 SITE DESCRIPTION & BACKGROUND INFORMATION

The legal description of the Lovington Gathering WTI release site is Unit Letter "H" (SE/NE), Section 6, Township 17 South, Range 37 East, in Lea County, New Mexico. 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 Environmental, on behalf of Plains, responded to a pipeline release to repair the pipeline and excavate impacted soil. The Lovington Gathering WTI Pipeline was repaired utilizing a pipeline clamp, and the visibly stained soil was excavated and placed on plastic sheeting to mitigate any further hydrocarbon impact to the underlying soil. Approximately twelve barrels (12 bbls) of crude oil was released from the pipeline, and eight barrels (8 bbls) were recovered, resulting in a net loss of four barrels (4 bbls) 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 measuring approximately one thousand, five hundred square feet (1,500 ft²). Excavation activities conducted during the initial response and subsequent remediation of the site covered an area approximately thirty feet (30') in length by twenty-seven feet (27') in width, and ranged from approximately five feet (5') to six feet (6') in depth. Excavated soil was placed on a six (6) mil polyurethane 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 feet (30') to seventy-five feet (75') below ground surface (bgs). Based on laboratory analytical results from soil samples collected during advancement of the soil borings, three (3) groundwater monitor wells (MW-1 through MW-3) were installed to evaluate the status of the groundwater.

Based on laboratory analytical results from the initial groundwater sampling event (October 5, 2006), four (4) additional monitor wells (MW-4 through MW-7) were installed in November 2006.

During 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

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 feet (55') and seventy-five feet (75') 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 both less than the appropriate laboratory MDL and less than the NMOCD regulatory standard of 10 mg/Kg and 50 mg/Kg for benzene and BTEX, respectively. Laboratory analytical results indicated TPH concentrations were both less than the laboratory MDL and less than the NMOCD regulatory standard of 100 mg/Kg for soil samples collected at ten feet (10') and twenty-five feet (25') bgs. Soil samples collected at fifty feet (50') and seventy-five feet (75') 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 soil samples collected during the installation of monitor well MW-9 indicated benzene, BTEX, and TPH concentrations were both less than the appropriate laboratory MDL and less than NMOCD regulatory standards in the five (5) 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) 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 Environmental 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.

Based on the reduction in dissolved-phase plume concentrations at the site, in the *April - June 2012 Quarterly Monitoring Report* (dated July 2012), Plains requested the bi-weekly recovery events from MW-9 and MW-10 be reduced to weekly. On August 2, 2012, the request was granted by an NMOCD representative, and weekly recovery from MW-9 and MW-10 commenced in September 2012.

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 27, 2012 (4Q2012), 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 two (2) large-capacity irrigation wells (Goff Dairy Well and Goff Dairy - Ctr. Pivot 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 monitor wells MW-9 and MW-10, as well as 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 27, and December 19, 2012.

A cross-connection hazard with a chemical storage tank on the Goff Dairy Well precluded sample collection from the irrigation well during the October and November 2012 monthly monitoring events. Parts for a dedicated sample port have been provided to the landowner, and it is anticipated that the sample port will be installed prior to the January 2013 monthly monitoring event.

Prior to the December 2012 monthly monitoring event, the Goff Dairy Well was valved off to facilitate harvesting activities in the Goff Dairy #9 Pivot. Sampling of the two (2) locations on the Goff Dairy Center Pivot (Goff Dairy - Ctr. Pivot Beginning and Goff Dairy - Ctr. Pivot End) was deemed unnecessary at the time, as the locations were not 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 November 27, 2012. Based on sampling criteria provided by the NMOCD, only monitor well MW-10 was subject to PAH monitoring during the 2012 calendar year.

Locations of groundwater monitoring wells and the inferred groundwater gradient, which was constructed from groundwater elevation measurements collected during the 4Q2012 sampling event, are depicted in Figure 2A, "Inferred Groundwater Gradient Map – 4Q2012". The groundwater gradient map indicates a general gradient of approximately 0.004 feet/foot to the southeast, as measured between monitor wells MW-1 and MW-10. The corrected groundwater elevation (measured in feet above mean sea level) ranged between 3,715.24 feet in monitor well

MW-10 and 3,717.87 feet in monitor wells MW-10 and MW-5. Groundwater elevation data is provided as Table 1, "2012 Groundwater Elevation Data".

No PSH was detected in any of the on-site monitor wells during the 4Q2012 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 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 4Q2012 groundwater monitoring event is summarized below. Groundwater contaminant concentrations are depicted in Figure 3A, "Groundwater Concentration Map - 4Q2012".

- 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, MW-9, and MW-10 to 0.0120 mg/L in the groundwater sample collected from monitor well MW-3. 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, with the exception of the sample collected from monitor well MW-3.
- Toluene concentrations were less than the laboratory MDL in all submitted groundwater samples, with the exception of the sample collected from monitor well MW-3, which exhibited a concentration of 0.00284 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 sample collected from monitor well MW-3, which exhibited a concentration of 0.00109 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, MW-8, MW-9, and MW-10 to 0.0414 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 31, November 27, and December 19, 2012, monthly monitoring events is summarized below. Groundwater contaminant concentrations for the July and September monitoring events are depicted in Figures 3B and 3C, "Groundwater Concentration Map - October 2012" and "Groundwater Concentration Map - December 2012", respectively. Groundwater contaminant concentrations for the November sampling event are included in Figure 3A, "Groundwater Concentration Map - 4Q2012".

- **Monitor Well MW-9:**
 - 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.
- **Monitor Well MW-10:**
 - Benzene and toluene concentrations were less than the appropriate laboratory MDL in all submitted groundwater samples. Ethylbenzene concentrations ranged from less than the laboratory MDL in November 2012 and December 2012 to 0.0124 mg/L in October 2012. Total xylene concentrations ranged from less than the laboratory MDL in November 2012 and December 2012 to 0.00457 mg/L in October 2012. 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 polycyclic aromatic hydrocarbons (PAH) was conducted at monitor well MW-10 on November 12, 2012. PAH constituent concentrations were both less than the appropriate laboratory MDL and less than NMWQCC regulatory standards in all submitted groundwater samples.

5.0 ANTICIPATED ACTIONS

Quarterly monitoring and groundwater sampling of monitor wells MW-1 through MW-8 will continue throughout the 2013 calendar year. Monthly monitoring of monitor wells MW-9 and MW-10 and five (5) locations on/adjacent to the Goff Dairy #9 Pivot (Goff Dairy Well, Goff Dairy - Ctr. Pivot Well, Goff Dairy - Ctr. Pivot Beginning, Goff Dairy - Ctr. Pivot End, and JW Well) will continue throughout the 2013 calendar year.

Pursuant to the *April - June 2012 Quarterly Monitoring Report*, dated July 2012, and correspondence from an NMOCD representative, dated August 2, 2012, 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.

Following the 1Q2013 quarterly monitoring event, an Oxygen Release Compound (ORC®) filter sock will be installed in monitor well MW-3 to facilitate enhanced aerobic biodegradation of the dissolved-phase plume. The filter sock will be inspected and replaced on a quarterly basis.

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 2012 reporting period will be submitted to the NMOCD by April 1, 2013.

6.0 LIMITATIONS

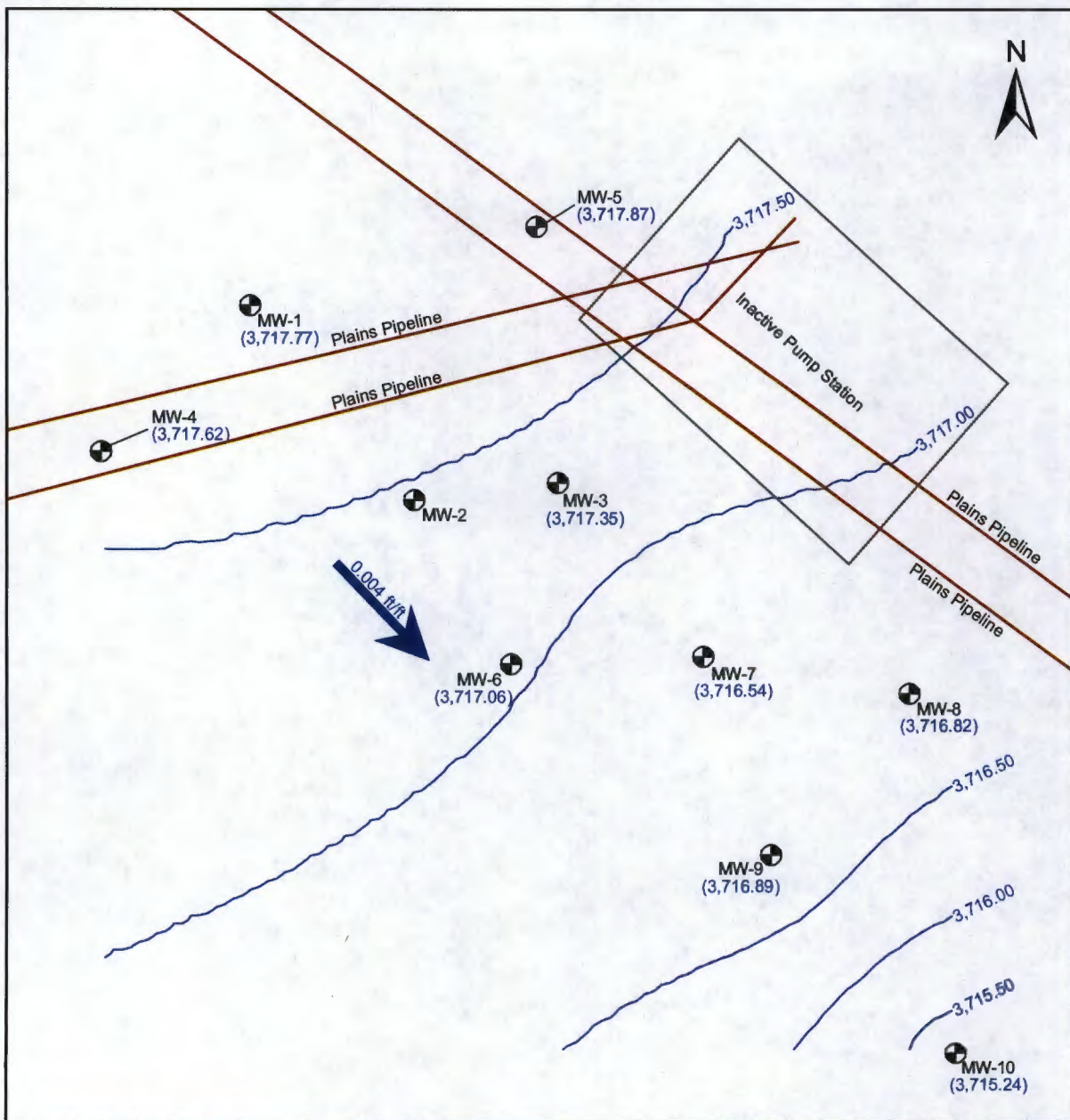
Basin Environmental Service Technologies, LLC, has prepared this *Quarterly Monitoring Report* to the best of its ability. No other warranty, expressed or implied, is made or intended. Basin Environmental has examined and relied upon documents referenced in the report and on oral statements made by certain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

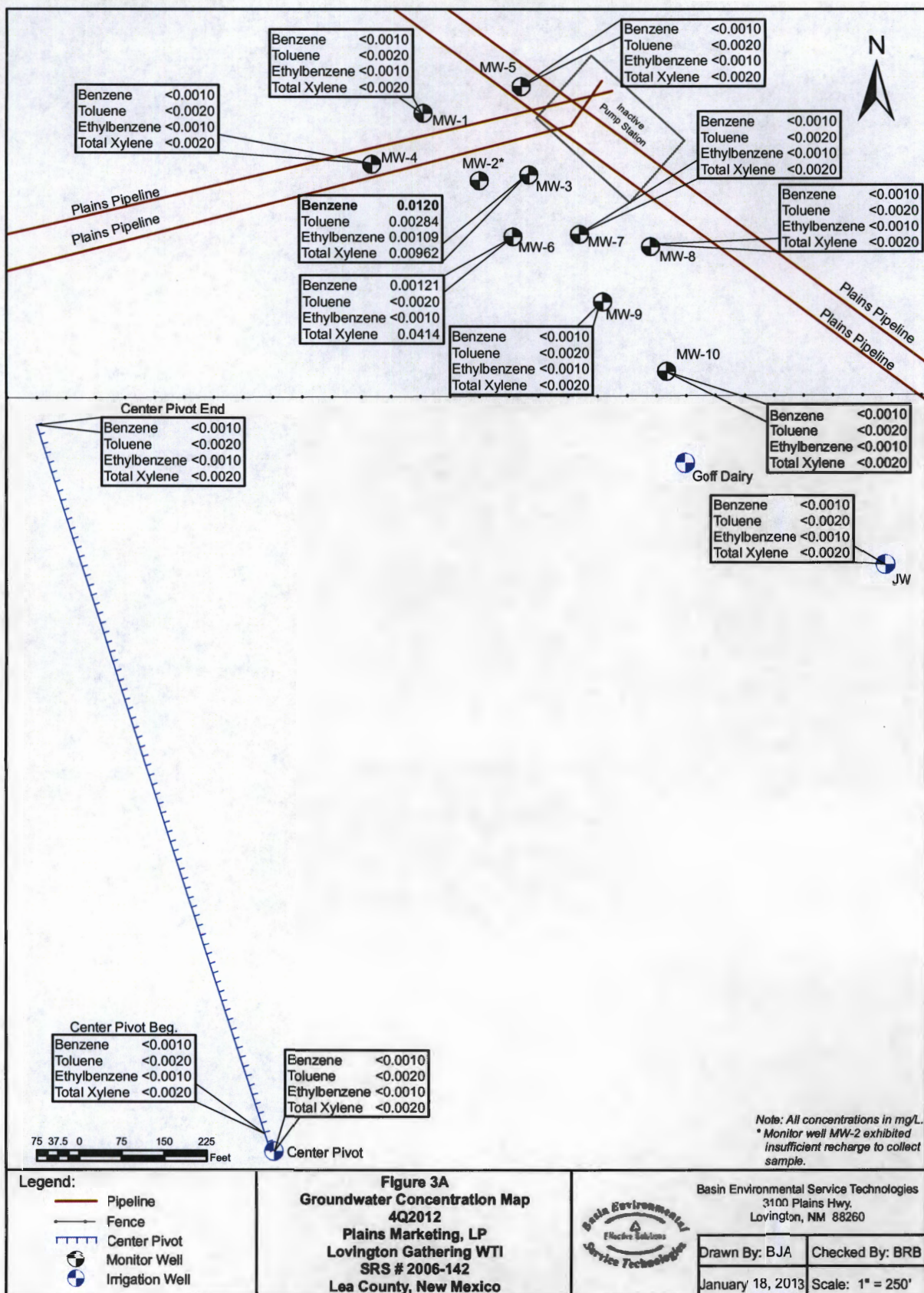
This report has been prepared for the benefit of Plains Marketing, LP. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of Basin Environmental Service Technologies, LLC, and/or Plains Marketing, LP.

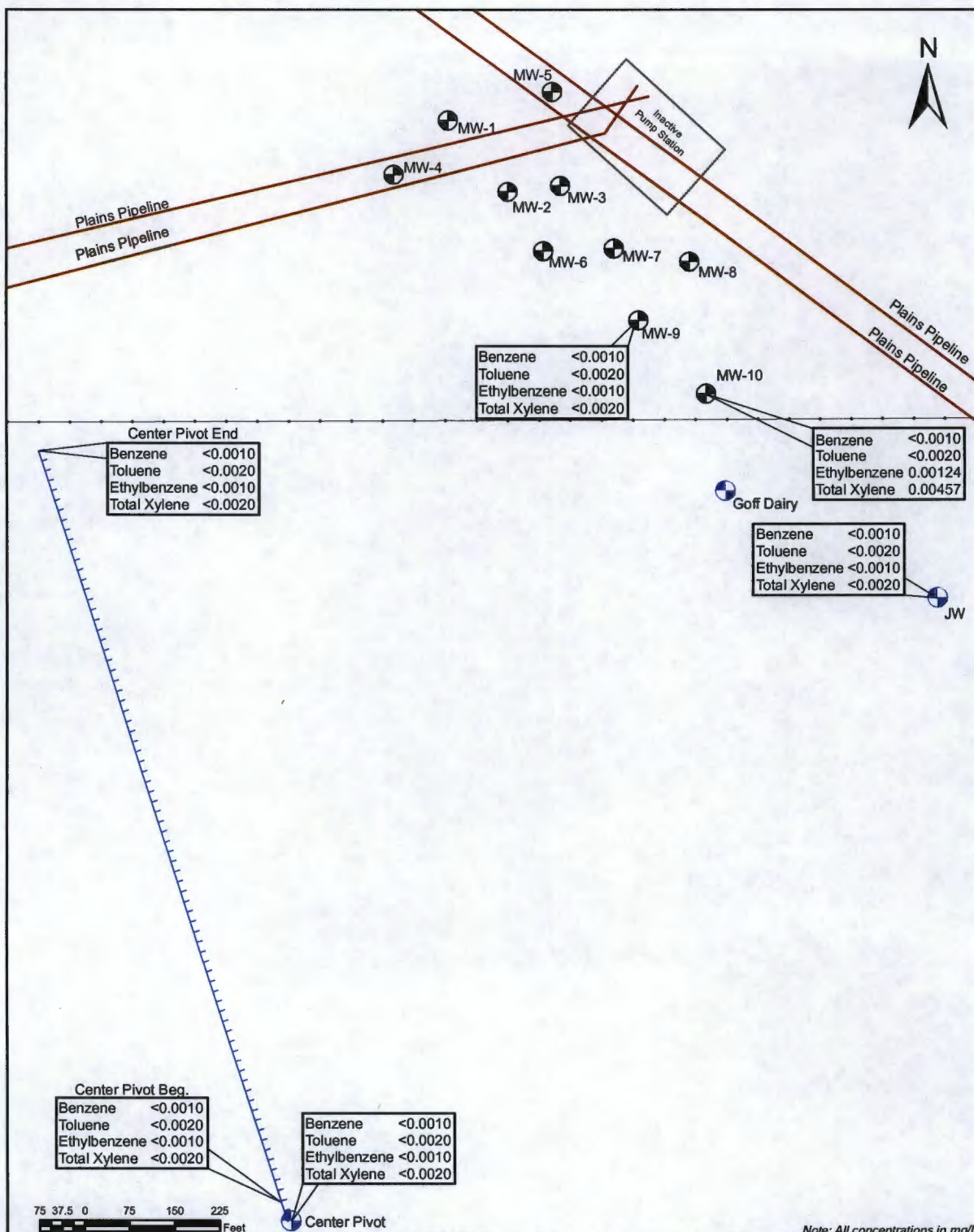
7.0 DISTRIBUTION

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Figures







Legend:

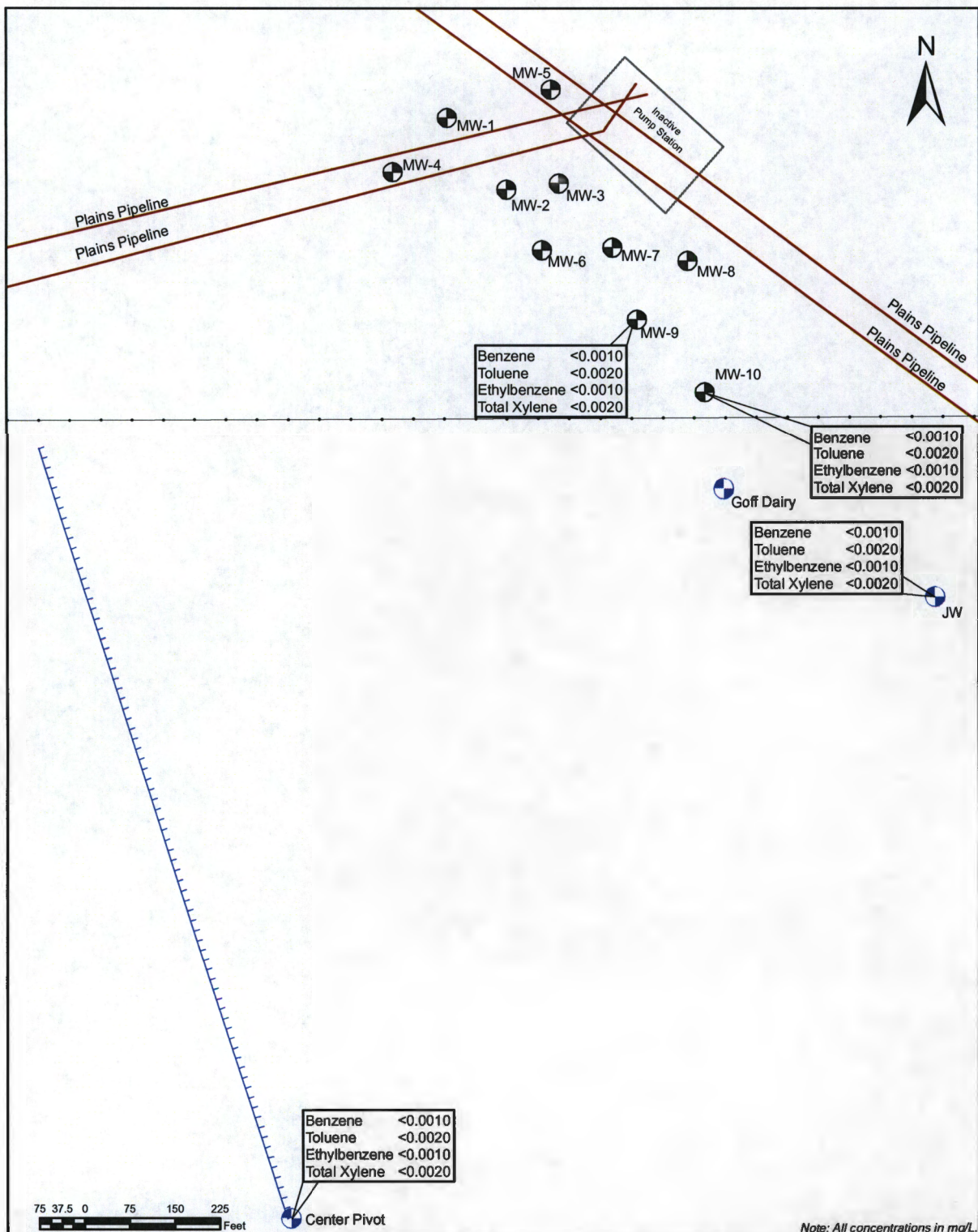
- Pipeline
- Fence
- Center Pivot
- Monitor Well
- Irrigation Well

Figure 3B
Groundwater Concentration Map
October 2012
Plains Marketing, LP
Lovington Gathering WTI
SRS # 2006-142
Lea County, New Mexico



Basin Environmental Service Technologies
 3100 Plains Hwy.
 Lovington, NM 88260

Drawn By: BJA	Checked By: BRB
January 18, 2013	Scale: 1" = 250'



- Legend:**
- Pipeline
 - Fence
 - | Center Pivot
 - Monitor Well
 - Irrigation Well

Figure 3C
Groundwater Concentration Map
 December 2012
 Plains Marketing, LP
 Lovington Gathering WTI
 SRS # 2006-142
 Lea County, New Mexico



Basin Environmental Service Technologies
 3100 Plains Hwy.
 Lovington, NM 88260

Drawn By: BJA	Checked By: BRB
January 18, 2013	Scale: 1" = 250'

Tables

**TABLE 1
2012 GROUNDWATER ELEVATION DATA**

**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	02/06/12	3,806.60	-	86.30	-	3,720.30
"	05/23/12	3,806.60	-	87.88	-	3,718.72
"	08/28/12	3,806.60	-	89.25	-	3,717.35
"	11/27/12	3,806.60	-	88.83	-	3,717.77
MW-2	02/06/12	3,806.31	-	84.20	-	3,722.11
"	05/23/12	3,806.31	-	Dry	-	Dry
"	08/28/12	3,806.31	-	Dry	-	Dry
"	11/27/12	3,806.31	-	Dry	-	Dry
MW-3	02/06/12	3,806.19	-	85.90	-	3,720.29
"	05/23/12	3,806.19	-	88.20	-	3,717.99
"	08/28/12	3,806.19	-	89.40	-	3,716.79
"	11/27/12	3,806.19	-	88.84	-	3,717.35
MW-4	02/06/12	3,806.67	-	86.45	-	3,720.22
"	05/23/12	3,806.67	-	88.15	-	3,718.52
"	08/28/12	3,806.67	-	89.87	-	3,716.80
"	11/27/12	3,806.67	-	89.05	-	3,717.62
MW-5	02/06/12	3,806.30	-	86.00	-	3,720.30
"	05/23/12	3,806.30	-	87.60	-	3,718.70
"	08/28/12	3,806.30	-	88.95	-	3,717.35
"	11/27/12	3,806.30	-	88.43	-	3,717.87
MW-6	02/06/12	3,806.08	-	86.00	-	3,720.08
"	05/23/12	3,806.08	-	89.58	-	3,716.50
"	08/28/12	3,806.08	-	89.40	-	3,716.68
"	11/27/12	3,806.08	-	89.02	-	3,717.06
MW-7	02/06/12	3,806.05	-	86.35	-	3,719.70
"	05/23/12	3,806.05	-	89.25	-	3,716.80
"	08/28/12	3,806.05	-	89.90	-	3,716.15
"	11/27/12	3,806.05	-	89.51	-	3,716.54

**TABLE 1
2012 GROUNDWATER ELEVATION DATA**

**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-8	02/06/12	3,805.89	-	85.80	-	3,720.09
"	05/23/12	3,805.89	-	88.78	-	3,717.11
"	08/28/12	3,805.89	-	89.99	-	3,715.90
"	11/27/12	3,805.89	-	89.07	-	3,716.82
MW-9	02/06/12	3,806.02	-	86.20	-	3,719.82
"	05/23/12	3,806.02	-	88.82	-	3,717.20
"	08/28/12	3,806.02	-	92.34	-	3,713.68
"	11/27/12	3,806.02	-	89.13	-	3,716.89
MW-10	02/06/12	3,806.08	-	90.10	-	3,715.98
"	05/23/12	3,806.08	-	91.55	-	3,714.53
"	08/28/12	3,806.08	-	94.98	-	3,711.10
"	11/27/12	3,806.08	-	90.84	-	3,715.24

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1 FLUORIDE (mg/L)	SW846-6010C CHROMIUM (mg/L)
		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)		
MW-1	10/5/2006	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
"	12/28/2006	<0.0010	<0.0010	<0.0010	0.002	<0.0010	0.002	0.002	-	-
"	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	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	9/17/2008	0.020	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.020	-	-
"	12/2/2008	0.035	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.035	-	-
"	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	-	-
"	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	<0.0010	<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	-	-
"	2/6/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	5/23/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	8/28/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	11/27/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
MW-2	10/5/2006	0.010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.010	-	-
"	12/28/2006	0.161	<0.0010	<0.0010	0.024	<0.0010	0.024	0.185	-	-
"	3/16/2007	0.154	<0.0010	<0.0010	0.015	<0.0010	0.015	0.169	-	-
"	5/31/2007	0.005	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.005	-	-
"	9/25/2007	0.050	<0.0010	<0.0010	0.003	<0.0010	0.003	0.053	-	-
"	11/30/2007	0.928	<0.0010	<0.005	0.036	<0.005	0.036	0.964	-	-
"	3/11/2008	0.095	<0.0020	<0.0010	0.0032	<0.0010	0.0032	0.098	-	-
"	6/14/2008	0.003	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.003	-	-
"	9/17/2008	0.159	<0.0020	<0.0010	0.004	<0.0010	0.004	0.163	-	-
"	12/2/2008	0.050	0.002	<0.0010	0.007	0.001	0.008	0.060	-	-
"	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	-	-

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1		SW846-6010C
		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	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	0.0091	<0.0010	0.0091	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	-	-	-
"	11/9/2011										
"	2/6/2012	0.00187	<0.0020	<0.0010	0.00212	0.00102	0.00314	0.00501	-	-	-
"	5/23/2012										
"	8/28/2012										
"	11/27/2012										
MW-3	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	-	-	-
"	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	-	-	-
"	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	-	-	-
"	2/6/2012	0.0214	0.00306	0.00126	0.00751	0.00345	0.0110	0.0367	-	-	-
"	5/23/2012	0.00929	0.00201	<0.0010	0.00584	0.00261	0.00845	0.0198	-	-	-

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1 FLUORIDE (mg/L)	SW846-6010C CHROMIUM (mg/L)
		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)		
MW-3	8/28/2012	0.00747	<0.0020	<0.0010	<0.0020	0.00136	0.00136	0.00883	-	-
"	11/27/2012	0.0120	0.00284	0.00109	0.00710	0.00252	0.00962	0.0256	-	-
MW-4	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	-	-
"	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	-	-
"	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	-	-
"	11/9/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	2/6/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	5/23/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	8/28/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	11/27/2012	<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	-	-
"	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	-	-

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1		SW846-6010C
		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	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	-	-	-
"	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	<0.0010	<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	-	-	-
"	2/6/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
"	5/23/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
"	8/28/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
"	11/27/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
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	-	-	-
"	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	-	-	-
"	5/25/2010	0.0059	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0059	-	-	-
"	8/30/2010	0.0053	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0053	-	-	-
"	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	-	-	-
"	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	<0.0010	0.0628	0.168	-	-	-
"	11/9/2011	0.00356	<0.0020	<0.0010	0.0388	<0.0010	0.0388	0.0424	-	-	-
"	2/6/2012	0.0129	<0.0020	0.00106	0.133	<0.0010	0.133	0.147	-	-	-
"	5/23/2012	0.00768	<0.0010	<0.0010	0.157	<0.0010	0.157	0.165	-	-	-

TABLE 2
CONCENTRATIONS OF BTX, FLUORIDE & CHROMIUM IN GROUNDWATER

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1 FLUORIDE (mg/L)	SW846-6010C CHROMIUM (mg/L)
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL- BENZENE (mg/L)	M,P- XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENES (mg/L)	TOTAL BTX (mg/L)		
MW-6	8/28/2012	<0.0010	<0.0020	<0.0010	0.0026	<0.0010	0.0026	0.0026	-	-
"	11/27/2012	0.00121	<0.0020	<0.0010	0.0414	<0.0010	0.0414	0.0426	-	-
MW-7	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	-	-
"	3/3/2009	0.0775	<0.0020	<0.0010	0.0327	<0.0010	0.0327	0.1102	-	-
"	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	-	-
"	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	-	-
"	2/6/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	5/23/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	8/28/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	11/27/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
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	-	-
"	12/2/2008	0.234	0.046	0.008	0.041	0.013	0.054	0.342	-	-
"	3/3/2009	0.0284	<0.0020	<0.0010	0.0068	<0.0010	0.0068	0.0352	-	-
"	6/18/2009	0.0045	<0.0020	0.0016	0.0032	<0.0010	0.0032	0.0093	-	-

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1		SW846-6010C
		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	9/1/2009	0.0013	<0.0020	0.0011	0.0141	<0.0010	<0.0010	0.0165	-	-	-
"	12/18/2009	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
"	3/4/2010	<0.0010	<0.0020	0.0011	<0.0020	<0.0010	<0.0020	0.0011	-	-	-
"	5/25/2010	0.0012	<0.0020	0.001	<0.0020	<0.0010	<0.0020	0.0022	-	-	-
"	8/30/2010	<0.0010	<0.0020	0.0014	<0.0020	<0.0010	<0.0020	0.0014	-	-	-
"	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	0.00154	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	-	-	-
"	11/9/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
"	2/6/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
"	5/23/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
"	8/28/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
"	11/27/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
MW-9	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	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
"	9/1/2009	0.9717	0.0641	<0.0100	0.0867	0.0422	0.1289	1.1647	-	-	-
"	9/10/2009	1.838	<0.0200	<0.0100	0.0537	<0.0100	0.0537	1.8917	-	-	-
"	10/5/2009	0.985	<0.0020	<0.0010	0.0442	<0.0010	0.0442	1.0292	-	-	-
"	12/18/2009	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
"	3/4/2010	0.0192	<0.0020	<0.0010	0.0027	<0.0010	0.0027	0.0219	-	-	-
"	5/25/2010	0.0421	<0.0020	<0.0010	0.0063	<0.0010	0.0063	0.0484	-	-	-
"	8/30/2010	0.1259	<0.0020	<0.0010	0.0344	<0.0010	0.0344	0.1603	-	-	-
"	11/11/2010	0.0265	<0.0020	<0.0010	0.0097	<0.0010	0.0097	0.0362	-	-	-
"	3/22/2011	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	-	-	-
"	11/9/2011	0.00179	<0.0020	<0.0010	0.00349	<0.0010	0.00349	0.00528	-	-	-
"	12/14/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
"	1/5/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
"	2/6/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
"	3/1/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1		SW846-6010C
		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-9	4/18/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
"	5/23/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
"	6/19/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
"	7/30/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
"	8/28/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
"	9/11/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
"	10/31/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
"	11/27/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
"	12/19/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
MW-10	11/2/2009	<0.005	<0.005	<0.005	<0.010	<0.005	<0.010	<0.010	-	-	-
"	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	0.0350	<0.0020	<0.0010	0.0035	<0.0010	0.0035	0.0385	-	-	-
"	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	-	-	-
"	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	-	-	-
"	1/5/2012	0.00432	<0.0020	<0.0010	0.0126	<0.0010	0.0126	0.0169	-	-	-
"	2/6/2012	0.00233	<0.0020	<0.0010	0.00644	<0.0010	0.00644	0.00877	-	-	-
"	3/1/2012	0.00134	<0.0020	<0.0010	0.00423	<0.0010	0.00423	0.00557	-	-	-
"	4/18/2012	0.00338	<0.0020	<0.0010	0.0175	<0.0010	0.0175	0.0209	-	-	-
"	5/23/2012	0.00387	<0.0010	<0.0010	0.103	<0.0010	0.103	0.107	-	-	-
"	6/19/2012	<0.0010	<0.0010	<0.0010	0.0157	<0.0010	0.0157	0.0157	-	-	-
Dry											
"	7/30/2012										
"	8/28/2012	<0.0010	<0.0020	<0.0010	0.0134	0.00138	0.0148	0.0148	-	-	-
"	9/11/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
"	10/31/2012	<0.0010	<0.0020	0.00124	0.00308	0.00149	0.00457	0.00581	-	-	-
"	11/27/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
"	12/19/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
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	-	-	-

TABLE 2
CONCENTRATIONS OF BTX, FLUORIDE & CHROMIUM IN GROUNDWATER

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1 FLUORIDE (mg/L)	SW846-6010C CHROMIUM (mg/L)
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL- BENZENE (mg/L)	M.P. XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENES (mg/L)	TOTAL BTX (mg/L)		
Goff Dairy Well	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	-	-
"	12/14/2011	<0.0010	<0.0020	0.00111	<0.0020	<0.0010	<0.0020	0.00111	-	-
"	1/5/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	2/6/2012	<0.0010	<0.0020	0.00111	0.00201	<0.0010	0.00201	0.00201	-	-
"	3/1/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	4/18/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	5/23/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	7/30/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	8/28/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	9/11/2012	<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	-	-
"	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	-	-
"	12/14/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	1/5/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	2/6/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	3/1/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	4/18/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	5/23/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	6/19/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	7/30/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	8/28/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	9/11/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	10/31/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	11/27/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	12/19/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
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	-	-
"	3/1/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	4/18/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1		SW846-6010C
		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)	
Goff Dairy - Ctr. Pivot Beg.	5/23/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
"	6/19/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
"	7/30/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
"	9/11/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
"	10/31/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
"	11/27/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
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	-	-	
"	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	-	-	
"	3/1/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
"	4/18/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
"	5/23/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
"	6/19/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
"	7/30/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
"	9/11/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
"	10/31/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
"	11/27/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
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	-	-	
"	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	-	-	
"	3/1/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
"	4/18/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
"	5/23/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
"	6/19/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
"	7/30/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
"	8/28/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
"	9/11/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
"	10/31/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
"	11/27/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
"	12/19/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
NMOCD CRITERIA		0.01	0.75	0.75	TOTAL XYLENES 0.62				1.6	0.05	

Appendices

Appendix A

Laboratory Analytical Reports

Analytical Report 451745
for
PLAINS ALL AMERICAN EH&S

Project Manager: Ben Arguijo

Lovington Gathering WTI

2006-142

08-NOV-12

Collected By: Client



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), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)

Xenco-Lakeland: Florida (E84098)

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: AZ00901): Arizona (AZM757)

Xenco Tucson (EPA Lab code: AZ000989): Arizona (AZ0758)

Analytical Report 451745
for
PLAINS ALL AMERICAN EH&S

Project Manager: Ben Arguijo

Lovington Gathering WTI

2006-142

08-NOV-12

Collected By: Client



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), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
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Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)

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Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)

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)



08-NOV-12

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

Reference: XENCO Report No: **451745**
Lovington Gathering WTI
Project Address: Lea County, NM

Ben Arguijo:

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 451745. 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. The uncertainty of measurement associated with the results of analysis reported is available upon request. 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. 451745 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,

Nicholas Straccione
Project Manager

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Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America



Sample Cross Reference 451745



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-9	W	10-31-12 14:10		451745-001
MW-10	W	10-31-12 14:20		451745-002
JW Well	W	10-31-12 14:40		451745-003
Goff Dairy-Ctr.Pivot Well	W	10-31-12 15:10		451745-004
Goff Dairy-Ctr.Pivot Beg.	W	10-31-12 15:40		451745-005
Goff Dairy-Ctr.Pivot End	W	10-31-12 15:20		451745-006



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

Project Name: Lovington Gathering WTI



Project ID: 2006-142

Work Order Number: 451745

Report Date: 08-NOV-12

Date Received: 11/01/2012

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analysis Summary 451745

PLAINS ALL AMERICAN EH&S, Midland, TX



Project Name: Lovington Gathering WTI

Project Id: 2006-142

Contact: Ben Arguijo

Project Location: Lea County, NM

Date Received in Lab: Thu Nov-01-12 12:20 pm

Report Date: 08-NOV-12

Project Manager: Nicholas Straccione

Analysis Requested	Lab Id:	451745-001	451745-002	451745-003	451745-004	451745-005	451745-006
	Field Id:	MW-9	MW-10	JW Well	Goff Dairy-Ctr:Pivot Well	Goff Dairy-Ctr:Pivot Beg.	Goff Dairy-Ctr:Pivot End
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
	Sampled:	Oct-31-12 14:10	Oct-31-12 14:20	Oct-31-12 14:40	Oct-31-12 15:10	Oct-31-12 15:40	Oct-31-12 15:20
BTEx by EPA 8021B	Extracted:	Nov-06-12 10:00	Nov-06-12 10:00	Nov-06-12 10:00	Nov-06-12 10:00	Nov-06-12 10:00	Nov-06-12 10:00
	Analyzed:	Nov-07-12 13:47	Nov-07-12 15:31	Nov-07-12 15:48	Nov-07-12 16:04	Nov-07-12 16:37	Nov-07-12 16:54
	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	ND 0.00100	ND 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
m, p-Xylenes	Ethylbenzene	ND 0.00100	0.00124 0.00100	ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100
	o-Xylene	ND 0.00200	0.00308 0.00200	ND 0.00200	ND 0.00200	ND 0.00200	ND 0.00200
Total Xylenes		ND 0.00100	0.00149 0.00100	ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100
Total BTEx		ND 0.00100	0.00457 0.00100	ND 0.00100	ND 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 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.

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

Nicholas Straccione
Project 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.

* 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 **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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 9701 Harry Hines Blvd, Dallas, TX 75220
 5332 Blackberry Drive, San Antonio TX 78238
 2505 North Falkenburg Rd, Tampa, FL 33619
 12600 West I-20 East, Odessa, TX 79765
 6017 Financial Drive, Norcross, GA 30071
 3725 E. Atlanta Ave, Phoenix, AZ 85040

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
(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 451745,

Project ID: 2006-142

Lab Batch #: 900357

Sample: 451745-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 11/07/12 13:47

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0271	0.0300	90	80-120	
4-Bromofluorobenzene	0.0264	0.0300	88	80-120	

Lab Batch #: 900357

Sample: 451745-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 11/07/12 15:31

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0255	0.0300	85	80-120	
4-Bromofluorobenzene	0.0337	0.0300	112	80-120	

Lab Batch #: 900357

Sample: 451745-003 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 11/07/12 15:48

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0316	0.0300	105	80-120	
4-Bromofluorobenzene	0.0332	0.0300	111	80-120	

Lab Batch #: 900357

Sample: 451745-004 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 11/07/12 16:04

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0245	0.0300	82	80-120	
4-Bromofluorobenzene	0.0288	0.0300	96	80-120	

Lab Batch #: 900357

Sample: 451745-005 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 11/07/12 16:37

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0272	0.0300	91	80-120	
4-Bromofluorobenzene	0.0304	0.0300	101	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 : 451745,

Project ID: 2006-142

Lab Batch #: 900357

Sample: 451745-006 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 11/07/12 16:54

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0242	0.0300	81	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

Lab Batch #: 900357

Sample: 629616-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 11/07/12 11:51

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0267	0.0300	89	80-120	
4-Bromofluorobenzene	0.0253	0.0300	84	80-120	

Lab Batch #: 900357

Sample: 629616-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 11/07/12 11:18

SURROGATE RECOVERY STUDY

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

Lab Batch #: 900357

Sample: 629616-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 11/07/12 11:35

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0346	0.0300	115	80-120	
4-Bromofluorobenzene	0.0359	0.0300	120	80-120	

Lab Batch #: 900357

Sample: 451745-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 11/07/12 14:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0325	0.0300	108	80-120	
4-Bromofluorobenzene	0.0353	0.0300	118	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 : 451745,

Project ID: 2006-142

Lab Batch #: 900357

Sample: 451745-001 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 11/07/12 14:20

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0336	0.0300	112	80-120	
4-Bromofluorobenzene	0.0350	0.0300	117	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

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. Arguilo

Company Name: Basin Environmental Service Technologies, LLC

Company Address: P. O. Box 301

City/State/Zip: Lovington, NM 88260

Telephone No: (575)396-2378

Sampler Signature: Mark Lind

Fax No: (575)396-1429

e-mail: bjarguilo@basinenv.com

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

PO #: PAA- J. Henry

Project Loc: Lea County, NM

Project #: 2006-142

Project Name: Lovington Gathering WTI

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers	Matrix	Analyze For:	Standard TAT 4 DAY
01	MW-9			10/31/2012	14:10		3	Ice HNO ₃ HCl H ₂ SO ₄ NaOH Na ₂ S ₂ O ₃ None Other (Specify) DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	GW	TPH: 418.1 8015M 8015B TPH: TX 1005 TX 1006 Cations (Ca, Mg, Na, K) Anions (Cl, SO ₄ , Alkalinity) SAR / ESP / CEC Metals: As Ag Ba Cd Cr Pb Hg Se Volatiles Semi-volatiles BTEX 8280 or BTEX 8260 RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	X
02	MW-10			10/31/2012	14:20		3		GW		X
03	JW Well			10/31/2012	14:40		3		GW		X
04	Goff Dairy - Ctr. Pivot Well			10/31/2012	15:10		3		GW		X
05	Goff Dairy - Ctr. Pivot Beg.			10/31/2012	15:40		3		GW		X
06	Goff Dairy - Ctr. Pivot End			10/31/2012	15:20		3		GW		X

Relinquished by:	Date	Time	Received by:	Date	Time
<u>Mark Lind</u>	11/1/12	12:20			

Relinquished by:	Date	Time	Received by:	Date	Time

Relinquished by:	Date	Time	Received by:	Date	Time

Special Instructions:

Laboratory Comments:

Sample Containers Intact? ☒ N

VOCs Free of Headspace? ☒ N

Labels on Containers? ☒ N

Custody seals on containers? ☒ N

Custody seals on coolers? ☒ N

Sample Hand Delivered by Sampler/Client Rep.? ☒ N

by Courier? ☒ UPS DHL FedEx Lone Star

Temperature Upon Receipt: 4.5 °C



XENCO Laboratories



Prelogin/Nonconformance Report- Sample Log-In

Client: PLAINS ALL AMERICAN EH&S

Date/ Time Received: 11/01/2012 12:20:00 PM

Work Order #: 451745

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	9.7
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6 *Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Sample instructions complete on Chain of Custody?	Yes
#9 Any missing/extra samples?	No
#10 Chain of Custody signed when relinquished/ received?	Yes
#11 Chain of Custody agrees with sample label(s)?	Yes
#12 Container label(s) legible and intact?	Yes
#13 Sample matrix/ properties agree with Chain of Custody?	Yes
#14 Samples in proper container/ bottle?	Yes
#15 Samples properly preserved?	Yes
#16 Sample container(s) intact?	Yes
#17 Sufficient sample amount for indicated test(s)?	Yes
#18 All samples received within hold time?	Yes
#19 Subcontract of sample(s)?	Yes
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	Yes
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	Yes
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	Yes

* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:	PH Device/Lot#:
----------	-----------------

Checklist completed by: _____

Date: _____

Checklist reviewed by: _____

Date: _____

Analytical Report 453290,453291

for

PLAINS ALL AMERICAN EH&S

Project Manager: Ben Arguijo

Lovington Gathering WTI

2006-142

07-DEC-12

Collected By: Client



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), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)

Xenco-Lakeland: Florida (E84098)

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: AZ00901): Arizona (AZM757)

Xenco Tucson (EPA Lab code: AZ000989): Arizona (AZ0758)



07-DEC-12

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

Reference: XENCO Report No(s): **453290,453291**
Lovington Gathering WTI
Project Address: Lea County, NM

Ben Arguijo:

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(s) 453290,453291. 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. The uncertainty of measurement associated with the results of analysis reported is available upon request. 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. 453290 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,

Nicholas Straccione

Project Manager

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Sample Cross Reference 453290,453291



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-1	W	11-27-12 11:00		453290-001
MW-3	W	11-27-12 11:20		453290-002
MW-4	W	11-27-12 11:35		453290-003
MW-5	W	11-27-12 11:55		453290-004
MW-6	W	11-27-12 12:10		453290-005
MW-7	W	11-27-12 12:40		453290-006
MW-8	W	11-27-12 13:05		453290-007
MW-9	W	11-27-12 13:20		453290-008
MW-10	W	11-27-12 14:05		453290-009
J.W. Well	W	11-27-12 13:00		453291-001
Center Pivot well	W	11-27-12 13:20		453291-002
Center Pivot Well Beg.	W	11-27-12 13:30		453291-003
Center Pivot Well End.	W	11-27-12 13:10		453291-004



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

Project Name: Lovington Gathering WTI



Project ID: 2006-142
Work Order Number(s): 453290,453291

Report Date: 07-DEC-12
Date Received: 11/30/2012

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-902224 TCLP SVOCs by EPA 8270C
SW8270C

Batch 902224, 2-Methylnaphthalene recovered below QC limits in the Matrix Spike.

Samples affected are: 453290-009.

The Laboratory Control Sample for 2-Methylnaphthalene is within laboratory Control Limits



Certificate of Analysis Summary 453290,453291

PLAINS ALL AMERICAN EH&S, Midland, TX



Project Id: 2006-142

Contact: Ben Arguijo

Project Location: Lea County, NM

Project Name: Lovington Gathering WTI

Date Received in Lab: Fri Nov-30-12 04:23 pm

Report Date: 07-DEC-12

Project Manager: Nicholas Straccione

Analysis Requested	Lab Id:	453290-001	453290-002	453290-003	453290-004	453290-005	453290-006
	Field Id:	MW-1	MW-3	MW-4	MW-5	MW-6	MW-7
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
	Sampled:	Nov-27-12 11:00	Nov-27-12 11:20	Nov-27-12 11:35	Nov-27-12 11:55	Nov-27-12 12:10	Nov-27-12 12:40
	Extracted:	Dec-03-12 08:15	Dec-03-12 08:15	Dec-03-12 08:15	Dec-03-12 08:15	Dec-03-12 08:15	Dec-03-12 08:15
Analyzed:	Dec-03-12 12:33	Dec-03-12 12:49	Dec-03-12 15:52	Dec-03-12 13:40	Dec-03-12 13:56	Dec-03-12 14:13	
Units/RL:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Benzene	ND	0.00100	ND	0.00100	ND	0.00121	ND
Toluene	ND	0.00200	ND	0.00200	ND	ND	ND
Ethylbenzene	ND	0.00100	ND	0.00100	ND	ND	ND
m_p-Xylenes	ND	0.00200	0.00710	0.00200	ND	0.0414	ND
o-Xylene	ND	0.00100	0.00252	0.00100	ND	ND	ND
Total Xylenes	ND	0.00100	0.00962	0.00100	ND	0.0414	ND
Total BTEX	ND	0.00100	0.0256	0.00100	ND	0.0426	ND

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

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Nicholas Straccione
Project Manager



Certificate of Analysis Summary 453290,453291

PLAINS ALL AMERICAN EH&S, Midland, TX



Project Id: 2006-142
Contact: Ben Arguijo
Project Location: Lea County, NM

Project Name: Lovington Gathering WTI

Date Received in Lab: Fri Nov-30-12 04:23 pm
Report Date: 07-DEC-12

Project Manager: Nicholas Straccione

Analysis Requested	Lab Id:	453290-007	453290-008	453290-009	
	Field Id:	MW-8	MW-9	MW-10	
	Depth:				
	Matrix:	WATER	WATER	WATER	
	Sampled:	Nov-27-12 13:05	Nov-27-12 13:20	Nov-27-12 14:05	
BTEx by EPA 8021B	Extracted:	Dec-03-12 08:15	Dec-03-12 08:15	Dec-03-12 08:15	
	Analyzed:	Dec-03-12 14:30	Dec-03-12 14:46	Dec-03-12 15:03	
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	
Benzene		ND 0.00100	ND 0.00100	ND 0.00100	
Toluene		ND 0.00200	ND 0.00200	ND 0.00200	
Ethylbenzene		ND 0.00100	ND 0.00100	ND 0.00100	
m_p-Xylenes		ND 0.00200	ND 0.00200	ND 0.00200	
o-Xylene		ND 0.00100	ND 0.00100	ND 0.00100	
Total Xylenes		ND 0.00100	ND 0.00100	ND 0.00100	
Total BTEx		ND 0.00100	ND 0.00100	ND 0.00100	

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Nicholas Straccione
Project Manager



Certificate of Analytical Results 453290



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id: MW-10
Lab Sample Id: 453290-009

Matrix: Water
Date Collected: 11.27.12 14.05

Date Received: 11.30.12 16.23

Analytical Method: SVOA PAHs List by EPA 8270C

Prep Method: SW3510C

Tech: LRA

% Moisture:

Analyst: WEW

Date Prep: 12.04.12 12.48

Seq Number: 902224

SUB: TX104704215

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Acenaphthene	83-32-9	ND	0.00510	0.000376	mg/L	12.05.12 18.23	U	1
Acenaphthylene	208-96-8	ND	0.00510	0.000349	mg/L	12.05.12 18.23	U	1
Anthracene	120-12-7	ND	0.00510	0.000167	mg/L	12.05.12 18.23	U	1
Benzo(a)anthracene	56-55-3	ND	0.00510	0.000253	mg/L	12.05.12 18.23	U	1
Benzo(a)pyrene	50-32-8	ND	0.00510	0.000204	mg/L	12.05.12 18.23	U	1
Benzo(b)fluoranthene	205-99-2	ND	0.00510	0.000385	mg/L	12.05.12 18.23	U	1
Benzo(k)fluoranthene	207-08-9	ND	0.00510	0.000524	mg/L	12.05.12 18.23	U	1
Benzo(g,h,i)perylene	191-24-2	ND	0.00510	0.000294	mg/L	12.05.12 18.23	U	1
Chrysene	218-01-9	ND	0.00510	0.000236	mg/L	12.05.12 18.23	U	1
Dibenz(a,h)Anthracene	53-70-3	ND	0.00510	0.000202	mg/L	12.05.12 18.23	U	1
Fluoranthene	206-44-0	ND	0.00510	0.000258	mg/L	12.05.12 18.23	U	1
Fluorene	86-73-7	ND	0.00510	0.000314	mg/L	12.05.12 18.23	U	1
Indeno(1,2,3-c,d)Pyrene	193-39-5	ND	0.00510	0.000344	mg/L	12.05.12 18.23	U	1
1-Methylnaphthalene	90-12-0	ND	0.00510	0.000327	mg/L	12.05.12 18.23	U	1
2-Methylnaphthalene	91-57-6	ND	0.00510	0.000504	mg/L	12.05.12 18.23	U	1
Naphthalene	91-20-3	ND	0.00510	0.000323	mg/L	12.05.12 18.23	U	1
Phenanthrene	85-01-8	ND	0.00510	0.000283	mg/L	12.05.12 18.23	U	1
Pyrene	129-00-0	ND	0.00510	0.000287	mg/L	12.05.12 18.23	U	1
Surrogate	Cas Number	% Recovery	Units	Limits		Analysis Date	Flag	
2-Fluorophenol	367-12-4	31	%	30-100		12.05.12 18.23		
Phenol-d6	13127-88-3	18	%	15-94		12.05.12 18.23		
Nitrobenzene-d5	4165-60-0	58	%	46-111		12.05.12 18.23		
2-Fluorobiphenyl	321-60-8	57	%	44-117		12.05.12 18.23		
2,4,6-Tribromophenol	118-79-6	68	%	48-117		12.05.12 18.23		
Terphenyl-D14	1718-51-0	84	%	46-126		12.05.12 18.23		



Certificate of Analysis Summary 453290,453291

PLAINS ALL AMERICAN EH&S, Midland, TX



Project Id: 2006-142
Contact: Ben Arguijo
Project Location: Lea County, NM

Project Name: Lovington Gathering WTI

Date Received in Lab: Fri Nov-30-12 04:23 pm
Report Date: 07-DEC-12

Project Manager: Nicholas Straccione

<i>Analysis Requested</i>	<i>Lab Id:</i>	<i>Field Id:</i>	<i>Depth:</i>	<i>Matrix:</i>	<i>Sampled:</i>	<i>Extracted:</i>	<i>Analyzed:</i>	<i>Units/RL:</i>
	453291-001	J.W. Well		WATER	Nov-27-12 13:00	Dec-04-12 13:00	Dec-04-12 17:02	mg/L RL
	453291-002	Center Pivot well		WATER	Nov-27-12 13:20	Dec-04-12 13:00	Dec-04-12 17:19	mg/L RL
	453291-003	Center Pivot Well Beg.		WATER	Nov-27-12 13:30	Dec-04-12 13:00	Dec-05-12 08:50	mg/L RL
	453291-004	Center Pivot Well End.		WATER	Nov-27-12 13:10	Dec-04-12 13:00	Dec-04-12 18:08	mg/L RL
BTEX by EPA 8021B								
Benzene	ND	0.00100				ND	0.00100	ND
Toluene	ND	0.00200				ND	0.00200	ND
Ethylbenzene	ND	0.00100				ND	0.00100	ND
m,p-Xylenes	ND	0.00200				ND	0.00200	ND
o-Xylene	ND	0.00100				ND	0.00100	ND
Total Xylenes	ND	0.00100				ND	0.00100	ND
Total BTEX	ND	0.00100				ND	0.00100	ND

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Nicholas Straccione
Project 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.

* 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 **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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(210) 509-3334	(210) 509-3335
(813) 620-2000	(813) 620-2033
(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 453290, 453290, 453291

Project ID: 2006-142

Lab Batch #: 902020

Sample: 453290-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/03/12 12:33

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0256	0.0300	85	80-120	
4-Bromofluorobenzene	0.0258	0.0300	86	80-120	

Lab Batch #: 902020

Sample: 453290-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/03/12 12:49

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0247	0.0300	82	80-120	
4-Bromofluorobenzene	0.0240	0.0300	80	80-120	

Lab Batch #: 902020

Sample: 453290-004 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/03/12 13:40

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0267	0.0300	89	80-120	
4-Bromofluorobenzene	0.0282	0.0300	94	80-120	

Lab Batch #: 902020

Sample: 453290-005 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/03/12 13:56

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0267	0.0300	89	80-120	
4-Bromofluorobenzene	0.0305	0.0300	102	80-120	

Lab Batch #: 902020

Sample: 453290-006 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/03/12 14:13

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0247	0.0300	82	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 : 453290, 453290, 453291

Project ID: 2006-142

Lab Batch #: 902020

Sample: 453290-007 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/03/12 14:30

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0299	0.0300	100	80-120	

Lab Batch #: 902020

Sample: 453290-008 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/03/12 14:46

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0250	0.0300	83	80-120	
4-Bromofluorobenzene	0.0241	0.0300	80	80-120	

Lab Batch #: 902020

Sample: 453290-009 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/03/12 15:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0259	0.0300	86	80-120	
4-Bromofluorobenzene	0.0279	0.0300	93	80-120	

Lab Batch #: 902020

Sample: 453290-003 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/03/12 15:52

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0313	0.0300	104	80-120	
4-Bromofluorobenzene	0.0278	0.0300	93	80-120	

Lab Batch #: 902112

Sample: 453291-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/04/12 17:02

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0251	0.0300	84	80-120	
4-Bromofluorobenzene	0.0282	0.0300	94	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] = $100 \times A / B$

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

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 453290, 453290, 453291

Project ID: 2006-142

Lab Batch #: 902112

Sample: 453291-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/04/12 17:19

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0258	0.0300	86	80-120	
4-Bromofluorobenzene	0.0253	0.0300	84	80-120	

Lab Batch #: 902112

Sample: 453291-004 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/04/12 18:08

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0246	0.0300	82	80-120	
4-Bromofluorobenzene	0.0255	0.0300	85	80-120	

Lab Batch #: 902112

Sample: 453291-003 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/05/12 08:50

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0276	0.0300	92	80-120	
4-Bromofluorobenzene	0.0313	0.0300	104	80-120	

Lab Batch #: 902224

Sample: 453290-009 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/05/12 18:23

SURROGATE RECOVERY STUDY

SVOA PAHs List by EPA 8270C	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2-Fluorophenol	15.4	50.0	31	30-100	
Phenol-d6	8.82	50.0	18	15-94	
Nitrobenzene-d5	28.9	50.0	58	46-111	
2-Fluorobiphenyl	28.6	50.0	57	44-117	
2,4,6-Tribromophenol	34.1	50.0	68	48-117	
Terphenyl-D14	42.1	50.0	84	46-126	

* 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 : 453290, 453290, 453291

Project ID: 2006-142

Lab Batch #: 902020

Sample: 630666-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/03/12 10:20

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0292	0.0300	97	80-120	
4-Bromofluorobenzene	0.0289	0.0300	96	80-120	

Lab Batch #: 902112

Sample: 630732-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/04/12 14:52

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0293	0.0300	98	80-120	
4-Bromofluorobenzene	0.0309	0.0300	103	80-120	

Lab Batch #: 902224

Sample: 630675-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/05/12 16:29

SURROGATE RECOVERY STUDY

SVOA PAHs List by EPA 8270C	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2-Fluorophenol	18.8	50.0	38	30-100	
Phenol-d6	11.1	50.0	22	15-94	
Nitrobenzene-d5	38.1	50.0	76	46-111	
2-Fluorobiphenyl	40.5	50.0	81	44-117	
2,4,6-Tribromophenol	37.0	50.0	74	48-117	
Terphenyl-D14	50.1	50.0	100	46-126	

Lab Batch #: 902020

Sample: 630666-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/03/12 09:00

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0283	0.0300	94	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 : 453290, 453290, 453291

Project ID: 2006-142

Lab Batch #: 902112

Sample: 630732-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/04/12 13:45

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0262	0.0300	87	80-120	
4-Bromofluorobenzene	0.0326	0.0300	109	80-120	

Lab Batch #: 902224

Sample: 630675-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/05/12 16:45

SURROGATE RECOVERY STUDY

SVOA PAHs List by EPA 8270C	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2-Fluorophenol	24.8	50.0	50	30-100	
Phenol-d6	16.6	50.0	33	15-94	
Nitrobenzene-d5	50.5	50.0	101	46-111	
2-Fluorobiphenyl	53.8	50.0	108	44-117	
2,4,6-Tribromophenol	52.3	50.0	105	48-117	
Terphenyl-D14	57.0	50.0	114	46-126	

Lab Batch #: 902020

Sample: 630666-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/03/12 10:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0259	0.0300	86	80-120	
4-Bromofluorobenzene	0.0246	0.0300	82	80-120	

Lab Batch #: 902112

Sample: 630732-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/04/12 14:02

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0331	0.0300	110	80-120	
4-Bromofluorobenzene	0.0294	0.0300	98	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 : 453290, 453290, 453291

Project ID: 2006-142

Lab Batch #: 902224

Sample: 630675-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/06/12 11:14

SURROGATE RECOVERY STUDY

SVOA PAHs List by EPA 8270C	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2-Fluorophenol	20.7	50.0	41	30-100	
Phenol-d6	14.9	50.0	30	15-94	
Nitrobenzene-d5	41.3	50.0	83	46-111	
2-Fluorobiphenyl	43.0	50.0	86	44-117	
2,4,6-Tribromophenol	48.1	50.0	96	48-117	
Terphenyl-D14	47.6	50.0	95	46-126	

Lab Batch #: 902020

Sample: 453290-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/03/12 15:19

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0302	0.0300	101	80-120	
4-Bromofluorobenzene	0.0312	0.0300	104	80-120	

Lab Batch #: 902112

Sample: 453258-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/04/12 18:41

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0282	0.0300	94	80-120	
4-Bromofluorobenzene	0.0305	0.0300	102	80-120	

Lab Batch #: 902224

Sample: 453047-001 S / MS

Batch: 1 Matrix: Solid

Units: mg/L

Date Analyzed: 12/05/12 17:50

SURROGATE RECOVERY STUDY

SVOA PAHs List by EPA 8270C	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
2-Fluorophenol	37.6	50.0	75	30-100	
Phenol-d6	35.3	50.0	71	15-94	
Nitrobenzene-d5	45.8	50.0	92	46-111	
2-Fluorobiphenyl	48.7	50.0	97	44-117	
2,4,6-Tribromophenol	58.5	50.0	117	48-117	
Terphenyl-D14	57.6	50.0	115	46-126	

* 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 :** 453290, 453290, 453291**Project ID:** 2006-142**Lab Batch #:** 902020**Sample:** 453290-001 SD / MSD**Batch:** 1 **Matrix:** Water**Units:** mg/L**Date Analyzed:** 12/03/12 15:36**SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0241	0.0300	80	80-120	
4-Bromofluorobenzene	0.0332	0.0300	111	80-120	

Lab Batch #: 902112**Sample:** 453258-001 SD / MSD**Batch:** 1 **Matrix:** Water**Units:** mg/L**Date Analyzed:** 12/04/12 18:58**SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0274	0.0300	91	80-120	
4-Bromofluorobenzene	0.0329	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.

Project Name: Lovington Gathering WTI

Work Order #: 453290, 453290, 453291

Analyst: KEB

Lab Batch ID: 902020

Sample: 630666-1-BKS

Batch #: 1

Date Prepared: 12/03/2012

Project ID: 2006-142
Date Analyzed: 12/03/2012

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY															
Units: mg/L	BTEX by EPA 8021B	Analytes	Blank Sample Result	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate Result	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag		
			[A]	[B]	[C]	[D]	[E]	[F]	[G]						

Analyst: KEB

Lab Batch ID: 902112

Sample: 630732-1-BKS

Batch #: 1

Date Prepared: 12/04/2012

Date Analyzed: 12/04/2012
Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
Units: mg/L											
Analytes	BTEX by EPA 8021B										
	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	0.112	112	0.100	0.101	101	10	70-125	25
	Toluene	<0.00200	0.100	0.116	116	0.100	0.105	105	10	70-125	25
	Ethylbenzene	<0.00100	0.100	0.110	110	0.100	0.0962	96	13	71-129	25
	m,p-Xylenes	<0.00200	0.200	0.234	117	0.200	0.199	100	16	70-131	25
o-Xylene	<0.00100	0.100	0.116	116	0.100	0.100	100	15	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

Project Name: Lovington Gathering WTI

Work Order #: 453290, 453290, 453291

Analyst: WEW

Date Prepared: 12/04/2012

Project ID: 2006-142
Date Analyzed: 12/05/2012

Lab Batch ID: 902224

Sample: 630675-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
SVOA PAHs List by EPA 8270C	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
Analytes											
Acenaphthene	<0.00500	0.0500	0.0329	66	0.0500	0.0278	56	17	54-114	25	
Acenaphthylene	<0.00500	0.0500	0.0341	68	0.0500	0.0287	57	17	53-113	25	
Anthracene	<0.00500	0.0500	0.0349	70	0.0500	0.0294	59	17	56-116	25	
Benzo(a)anthracene	<0.00500	0.0500	0.0351	70	0.0500	0.0312	62	12	59-116	25	
Benzo(a)pyrene	<0.00500	0.0500	0.0356	71	0.0500	0.0315	63	12	58-118	25	
Benzo(b)fluoranthene	<0.00500	0.0500	0.0355	71	0.0500	0.0308	62	14	54-123	25	
Benzo(k)fluoranthene	<0.00500	0.0500	0.0346	69	0.0500	0.0324	65	7	52-122	25	
Benzo(g,h,i)perylene	<0.00500	0.0500	0.0349	70	0.0500	0.0311	62	12	47-129	25	
Chrysene	<0.00500	0.0500	0.0351	70	0.0500	0.0312	62	12	58-116	25	
Dibenz(a,h)Anthracene	<0.00500	0.0500	0.0360	72	0.0500	0.0315	63	13	46-131	25	
Fluoranthene	<0.00500	0.0500	0.0364	73	0.0500	0.0331	66	9	55-120	25	
Fluorene	<0.00500	0.0500	0.0345	69	0.0500	0.0287	57	18	56-114	25	
Indeno(1,2,3-c,d)Pyrene	<0.00500	0.0500	0.0358	72	0.0500	0.0312	62	14	44-132	25	
1-Methylnaphthalene	<0.00500	0.0500	0.0333	67	0.0500	0.0288	58	14	47-113	25	
2-Methylnaphthalene	<0.00500	0.0500	0.0331	66	0.0500	0.0287	57	14	57-106	25	
Naphthalene	<0.00500	0.0500	0.0326	65	0.0500	0.0274	55	17	53-110	25	
Phenanthrene	<0.00500	0.0500	0.0350	70	0.0500	0.0294	59	17	56-116	25	
Pyrene	<0.00500	0.0500	0.0361	72	0.0500	0.0290	58	22	57-119	25	

Relative Percent Difference RPD = $200 * [(C-F) / ((C+F) / 2)]$
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 #: 453290

Lab Batch #: 902224

Date Analyzed: 12/05/2012

Date Prepared: 12/04/2012

Project ID: 2006-142

Analyst: WEW

QC- Sample ID: 453047-001 S

Batch #: 1

Matrix: Solid

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

SVOA PAHs List by SW-846 8270C	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Acenaphthene	<0.0250	0.250	0.147	59	54-114	
Acenaphthylene	<0.0250	0.250	0.159	64	53-113	
Anthracene	<0.0250	0.250	0.173	69	56-116	
Benzo(a)anthracene	<0.0250	0.250	0.173	69	59-116	
Benzo(a)pyrene	<0.0250	0.250	0.184	74	58-118	
Benzo(b)fluoranthene	<0.0250	0.250	0.207	83	54-123	
Benzo(k)fluoranthene	<0.0250	0.250	0.163	65	52-122	
Benzo(g,h,i)perylene	<0.0250	0.250	0.185	74	47-129	
Chrysene	<0.0250	0.250	0.179	72	58-116	
Dibenz(a,h)Anthracene	<0.0250	0.250	0.177	71	46-131	
Fluoranthene	<0.0250	0.250	0.162	65	55-120	
Fluorene	<0.0250	0.250	0.160	64	56-114	
Indeno(1,2,3-c,d)Pyrene	<0.0250	0.250	0.178	71	44-132	
1-Methylnaphthalene	<0.0250	0.250	0.149	60	47-113	
2-Methylnaphthalene	<0.0250	0.250	0.138	55	57-106	X
Naphthalene	<0.0250	0.250	0.140	56	53-110	
Phenanthrene	<0.0250	0.250	0.174	70	56-116	
Pyrene	<0.0250	0.250	0.182	73	57-119	

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

Relative Percent Difference [E] = $200 \cdot (C-A)/(C+B)$

All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Project Name: Lovington Gathering WTI

Work Order #: 453290

Lab Batch ID: 902020

Date Analyzed: 12/03/2012

Reporting Units: mg/L

Project ID: 2006-142

QC- Sample ID: 453290-001 S

Batch #: 1 Matrix: Water

Date Prepared: 12/03/2012

Analyst: KEB

Reporting Units: mg/L											
MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Benzene	<0.00100	0.100	0.115	115	0.100	0.105	105	9	70-125	25
	Toluene	<0.00200	0.100	0.117	117	0.100	0.111	111	5	70-125	25
	Ethylbenzene	<0.00100	0.100	0.112	112	0.100	0.107	107	5	71-129	25
	m_p-Xylenes	<0.00200	0.200	0.239	120	0.200	0.229	115	4	70-131	25
	o-Xylene	<0.00100	0.100	0.115	115	0.100	0.109	109	5	71-133	25

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

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

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

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. Arguilo; Joel Lowry

Project Name: Lovington Gathering WTI

Company Name: Basin Environmental Service Technologies, LLC

Project #: 2006-162

Company Address: P.O. Box 301

Project Loc: Lea County, NM

City/State/Zip: Lovington, NM 88260

PO #:

Telephone No: (575) 396-2378

Fax No: (575) 396-1429

Report Format:

☒ Standard ☐ TRRP ☐ NPDES

Sampler Signature: Mark D. [Signature]

e-mail: pm@basinenvironment.com

(lab use only)

ORDER #: 453291

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Matrix	Preservation & # of Containers	Analyze For:
										TPH: 418.1 8015M 8015B
										TPH: TX 1005 TX 1006
										Calcium (Ca, Mg, Na, K)
										Anions (Cl, SO4, Alkalinity)
										SAR / ESP / CEC
										Metals: As Ag Ba Cd Cr Pb Hg Se
										Volatiles
										Semivolatiles
										BTEX 8021B/5030 or BTEX 8260
										RCI
										N.O.R.M.
										CHLORIDES
										Total Dissolved Solids
										RUSH TAT (Pre-Schedule) 24, 48, 72 hrs
										Standard TAT 4 DAY

Special Instructions:

Laboratory Comments:

Relinquished by: <u>Mark D. [Signature]</u>	Date: <u>11/29/12</u>	Time: <u>08:35</u>	Received by: <u>Steve Butler</u>	Date: <u>11/29/12</u>	Time: <u>0843</u>
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by: <u>Maureen Smith</u>	Date: <u>11/30/12</u>	Time: <u>11:23</u>

Sample Containers intact? ☒ N
VOCs Free of Headspace? ☒ N
Custody seals on container(s) ☒ N
Custody seals on cooler(s) ☒ N
Sample Hand Delivered by Sampler/Client Rep.? ☒ N
by Courier? ☒ UPS ☒ DHL ☒ FedEx ☒ Lone Star
Temperature Upon Receipt: -3 °C



XENCO Laboratories



Prelogin/Nonconformance Report- Sample Log-In

Client: PLAINS ALL AMERICAN EH&S

Date/ Time Received: 11/30/2012 04:23:00 PM

Work Order #: 453290

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	-3
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6 *Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Sample instructions complete on Chain of Custody?	Yes
#9 Any missing/extra samples?	No
#10 Chain of Custody signed when relinquished/ received?	Yes
#11 Chain of Custody agrees with sample label(s)?	Yes
#12 Container label(s) legible and intact?	Yes
#13 Sample matrix/ properties agree with Chain of Custody?	Yes
#14 Samples in proper container/ bottle?	Yes
#15 Samples properly preserved?	Yes
#16 Sample container(s) intact?	Yes
#17 Sufficient sample amount for indicated test(s)?	Yes
#18 All samples received within hold time?	Yes
#19 Subcontract of sample(s)?	Yes
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	Yes
#21 <2 for all samples preserved with HNO ₃ ,HCL, H ₂ SO ₄ ?	Yes
#22 >10 for all samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH?	Yes

* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:	PH Device/Lot#:
----------	-----------------

Checklist completed by: _____

Date: _____

Checklist reviewed by: _____

Date: _____

Analytical Report 454563
for
PLAINS ALL AMERICAN EH&S

Project Manager: Ben Arguijo
Lovington Gathering WTI

28-DEC-12

Collected By: Client



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), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)

Xenco-Lakeland: Florida (E84098)

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: AZ00901): Arizona (AZM757)

Xenco Tucson (EPA Lab code: AZ000989): Arizona (AZ0758)



28-DEC-12

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

Reference: XENCO Report No(s): **454563**
Lovington Gathering WTI
Project Address: Lovington

Ben Arguijo:

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(s) 454563. 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. The uncertainty of measurement associated with the results of analysis reported is available upon request. 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. 454563 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,

Nicholas Straccione

Project Manager

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Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America



Sample Cross Reference 454563



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-9	W	12-19-12 14:00		454563-001
MW-10	W	12-19-12 13:30		454563-002
JW Well	W	12-19-12 08:00		454563-003
Goff Dairy- Ctr.Pivot Well	W	12-19-12 08:30		454563-004



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

Project Name: Lovington Gathering WTI



Project ID:

Work Order Number(s): 454563

Report Date: 28-DEC-12

Date Received: 12/20/2012

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analysis Summary 454563
PLAINS ALL AMERICAN EH&S, Midland, TX
Project Name: Lovington Gathering WTI



Project Id:

Contact: Ben Arguijo

Project Location: Lovington

Date Received in Lab: Thu Dec-20-12 02:21 pm

Report Date: 28-DEC-12

Project Manager: Nicholas Straccione

Analysis Requested	Lab Id:	454563-001	454563-002	454563-003	454563-004
	Field Id:	MW-9	MW-10	JW Well	Goff Dairy- Ctr Pivot Well
	Depth:				
	Matrix:	WATER	WATER	WATER	WATER
	Sampled:	Dec-19-12 14:00	Dec-19-12 13:30	Dec-19-12 08:00	Dec-19-12 08:30
BTEx by EPA 8021B	Extracted:	Dec-27-12 09:15	Dec-27-12 09:15	Dec-27-12 09:15	Dec-27-12 09:15
	Analyzed:	Dec-27-12 12:13	Dec-27-12 12:29	Dec-27-12 12:46	Dec-27-12 13:03
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL
	Benzene	ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100
	Toluene	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
m, p-Xylenes		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
Total Xylenes		ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100
Total BTEx		ND 0.00100	ND 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 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.

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

Nicholas Straccione
Project 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.

* 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 **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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 5332 Blackberry Drive, San Antonio TX 78238
 2505 North Falkenburg Rd, Tampa, FL 33619
 12600 West I-20 East, Odessa, TX 79765
 6017 Financial Drive, Norcross, GA 30071
 3725 E. Atlanta Ave, Phoenix, AZ 85040

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
(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 454563, 454563

Project ID:

Lab Batch #: 903750

Sample: 454563-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/27/12 12:13

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0281	0.0300	94	80-120	
4-Bromofluorobenzene	0.0248	0.0300	83	80-120	

Lab Batch #: 903750

Sample: 454563-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/27/12 12:29

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0318	0.0300	106	80-120	
4-Bromofluorobenzene	0.0251	0.0300	84	80-120	

Lab Batch #: 903750

Sample: 454563-003 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/27/12 12:46

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0285	0.0300	95	80-120	
4-Bromofluorobenzene	0.0280	0.0300	93	80-120	

Lab Batch #: 903750

Sample: 454563-004 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/27/12 13:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0298	0.0300	99	80-120	
4-Bromofluorobenzene	0.0259	0.0300	86	80-120	

Lab Batch #: 903750

Sample: 631780-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/27/12 11:57

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0246	0.0300	82	80-120	
4-Bromofluorobenzene	0.0264	0.0300	88	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] = $100 \times A / B$

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



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 454563, 454563

Project ID:

Lab Batch #: 903750

Sample: 631780-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/27/12 10:02

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0348	0.0300	116	80-120	
4-Bromofluorobenzene	0.0348	0.0300	116	80-120	

Lab Batch #: 903750

Sample: 631780-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/27/12 11:40

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0323	0.0300	108	80-120	
4-Bromofluorobenzene	0.0317	0.0300	106	80-120	

Lab Batch #: 903750

Sample: 454563-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/27/12 13:35

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0259	0.0300	86	80-120	
4-Bromofluorobenzene	0.0285	0.0300	95	80-120	

Lab Batch #: 903750

Sample: 454563-001 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 12/27/12 13:52

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0287	0.0300	96	80-120	
4-Bromofluorobenzene	0.0272	0.0300	91	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

Work Order #: 454563, 454563

Analyst: KEB

Lab Batch ID: 903750

Sample: 631780-1-BKS

Project ID:
Date Analyzed: 12/27/2012

Matrix: Water

Date Prepared: 12/27/2012

Batch #: 1

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY												
Units: mg/L												
BTEX by EPA 8021B		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
Analytes												
Benzene		<0.00100	0.100	0.115	115	0.100	0.106	106	8	70-125	25	
Toluene		<0.00200	0.100	0.115	115	0.100	0.112	112	3	70-125	25	
Ethylbenzene		<0.00100	0.100	0.108	108	0.100	0.102	102	6	71-129	25	
m_p-Xylenes		<0.00200	0.200	0.230	115	0.200	0.214	107	7	70-131	25	
o-Xylene		<0.00100	0.100	0.118	118	0.100	0.110	110	7	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

Project Name: Lovington Gathering WTI

Work Order #: 454563

Lab Batch ID: 903750

Date Analyzed: 12/27/2012

Reporting Units: mg/L

Project ID:

QC- Sample ID: 454563-001 S Batch #: 1 Matrix: Water

Date Prepared: 12/27/2012 Analyst: KEB

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Benzene	<0.00100	0.100	0.0974	97	0.100	0.0959	96	2	70-125	25
	Toluene	<0.00200	0.100	0.101	101	0.100	0.103	103	2	70-125	25
	Ethylbenzene	<0.00100	0.100	0.0944	94	0.100	0.0955	96	1	71-129	25
	m_p-Xylenes	<0.00200	0.200	0.197	99	0.200	0.196	98	1	70-131	25
	o-Xylene	<0.00100	0.100	0.0988	99	0.100	0.0962	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, I = Interference, NA = Not

ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

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



XENCO Laboratories



Prelogin/Nonconformance Report- Sample Log-In

Client: PLAINS ALL AMERICAN EH&S

Date/ Time Received: 12/20/2012 02:21:00 PM

Work Order #: 454563

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.5
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6 *Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Sample instructions complete on Chain of Custody?	Yes
#9 Any missing/extra samples?	No
#10 Chain of Custody signed when relinquished/ received?	Yes
#11 Chain of Custody agrees with sample label(s)?	Yes
#12 Container label(s) legible and intact?	Yes
#13 Sample matrix/ properties agree with Chain of Custody?	Yes
#14 Samples in proper container/ bottle?	Yes
#15 Samples properly preserved?	Yes
#16 Sample container(s) intact?	Yes
#17 Sufficient sample amount for indicated test(s)?	Yes
#18 All samples received within hold time?	Yes
#19 Subcontract of sample(s)?	Yes
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	Yes
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	Yes
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	Yes

* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:	PH Device/Lot#:
----------	-----------------

Checklist completed by: _____

Date: _____

Checklist reviewed by: _____

Date: _____

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

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

x Initial Report ☐ Final Report

Name of Company Plains Pipeline	Contact Camille Reynolds	
Address 3112 W. US Hwy 82, Lovington, NM 88260	Telephone No. 505-441-0965	
Facility Name Lovington Gathering WTI	Facility Type 6" Steel Pipeline	
Surface Owner Robert Rice	Mineral Owner	Lease No.

LOCATION OF RELEASE

Unit Letter H	Section 6	Township 17S	Range 37E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea
------------------	--------------	-----------------	--------------	---------------	------------------	---------------	----------------	---------------

Latitude 32° 51' 56.0"

Longitude 103° 17' 07.2"

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 12 barrels	Volume Recovered 8 barrels
Source of Release 6" Steel Pipeline	Date and Hour of Occurrence 4-21-2006 @ 13:00	Date and Hour of Discovery 4-21-2006 @ 13:15
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Pat Caperton	
By Whom? Camille Reynolds	Date and Hour 4-21-2006 @ 15:35	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.*		

Describe Cause of Problem and Remedial Action Taken Internal corrosion while purging the line resulted in release of sweet crude oil. The line has been purged. The line is an idle 6-inch steel gathering line. The pressure on the line was approximately 50 psi and the gravity of the sweet crude oil was 34. The sweet crude has an H₂S content of <10 ppm. The line was approximately 1.5 feet bgs at the release point.

Describe Area Affected and Cleanup Action Taken.* The impacted soil was excavated and stockpiled on plastic. Aerial extent of surface impact was approximately 1,500 ft².

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

Signature <u>Camille Reynolds</u>	OIL CONSERVATION DIVISION	
Printed Name: Camille Reynolds	Approved by District Supervisor:	
Title: Remediation Coordinator	Approval Date:	Expiration Date:
E-mail Address: cjreynolds@paalp.com	Conditions of Approval:	
Date: 4/26/2006 noce	Phone: 505-441-	Attached ☐

AP-96

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 July - September 2012

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

RECEIVED

OCT 17 2012

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

Prepared By:

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

October 2012

Ben J. Arguijo
Project Manager



PLAINS
PIPELINE, L.P.

RECEIVED

October 11, 2012

OCT 17 2012

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

Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 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 October 2012, 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 at this site during the third quarter of 2012.

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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FIGURES

Figure 1 – Site Location Map

Figure 2A – Inferred Groundwater Gradient Map – 3Q2012

Figure 2B – Inferred Groundwater Gradient Map – 2Q2012

Figure 3A – Groundwater Concentration Map – 3Q2012

Figure 3B – Groundwater Concentration Map – July 2012

Figure 3C – Groundwater Concentration Map – September 2012

TABLES

Table 1 – 2012 Groundwater Elevation Data

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)

1.0 INTRODUCTION

Basin Environmental Service Technologies, LLC (Basin Environmental), on behalf of Plains Pipeline, LP (Plains), is pleased to submit this *Quarterly Monitoring Report* for the release site known as Lovington Gathering WTI 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 groundwater monitoring events conducted during the third quarter (July - September) of 2012 only.

2.0 SITE DESCRIPTION & BACKGROUND INFORMATION

The legal description of the Lovington Gathering WTI release site is Unit Letter "H" (SE/NE), Section 6, Township 17 South, Range 37 East, in Lea County, New Mexico. 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 Environmental, on behalf of Plains, responded to a pipeline release to repair the pipeline and excavate 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 barrels (12 bbls) of crude oil was released from the pipeline, and eight barrels (8 bbls) were recovered, resulting in a net loss of four barrels (4 bbls) 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 measuring approximately one thousand, five hundred square feet (1,500 ft²). Excavation activities conducted during the initial response and subsequent remediation of the site covered an area approximately thirty feet (30') in length by twenty-seven feet (27') in width, and ranged from approximately five feet (5') to six feet (6') in depth. Excavated soil was placed on a six (6) mil polyurethane 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 feet (30') to seventy-five feet (75') below ground surface (bgs). Based on laboratory analytical results from soil samples collected during advancement of the soil borings, three (3) groundwater monitor wells (MW-1 through MW-3) were installed to evaluate the status of the groundwater.

Based on laboratory analytical results from the initial groundwater sampling event (October 5, 2006), four (4) additional monitor wells (MW-4 through MW-7) were installed in November 2006.

During 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

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 feet (55') and seventy-five feet (75') 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 both less than the appropriate laboratory MDL and less than the NMOCD regulatory standard of 10 mg/Kg and 50 mg/Kg for benzene and BTEX, respectively. Laboratory analytical results indicated TPH concentrations were both less than the laboratory MDL and less than the NMOCD regulatory standard of 100 mg/Kg for soil samples collected at ten feet (10') and twenty-five feet (25') bgs. Soil samples collected at fifty feet (50') and seventy-five feet (75') 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 soil samples collected during the installation of monitor well MW-9 indicated benzene, BTEX, and TPH concentrations were both less than the appropriate laboratory MDL and less than NMOCD regulatory standards in the five (5) 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) 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 Environmental 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.

Based on the reduction in dissolved-phase plume concentrations at the site, in the *April - June 2012 Quarterly Monitoring Report* (dated July 2012), Plains requested the bi-weekly recovery events from MW-9 and MW-10 be reduced to weekly. On August 2, 2012, the request was granted by an NMOCD representative, and weekly recovery from MW-9 and MW-10 commenced in September 2012.

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 August 28, 2012 (3Q2012), 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.

Per NMOCD request, monthly monitoring events were conducted at monitor wells MW-9 and MW-10, as well as 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 July 30, August 28, and September 11, 2012.

Diminished well volume and recharge in monitor well MW-2 attributable to the use of a large-capacity irrigation well (Goff Dairy Well) on property adjacent to the release site precluded sample collection from the monitor well during the quarterly monitoring event. Similarly, diminished well volume and recharge in monitor well MW-10 precluded sample collection from the monitor well during the July 2012 monthly monitoring event.

Prior to the August 2012 monthly monitoring event, the Goff Dairy and Goff Dairy - Ctr. Pivot Wells were valved off to facilitate harvesting activities in the Goff Dairy #9 Pivot. Sampling of the two (2) locations on the Goff Dairy Center Pivot (Goff Dairy - Ctr. Pivot Beginning and Goff Dairy - Ctr. Pivot End) was deemed unnecessary at the time, as the locations were not representative of commingled water from the Goff Dairy and Goff Dairy - Ctr. Pivot Wells. Sampling of the two (2) Goff Dairy Center Pivot locations resumed during the September 2012 monthly monitoring event.

Locations of groundwater monitoring wells and the inferred groundwater gradient, which was constructed from groundwater elevation measurements collected during the 3Q2012 sampling event, are depicted in Figure 2A, "Inferred Groundwater Gradient Map – 3Q2012". 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 (measured in feet above mean sea level) ranged between 3,711.10 feet in monitor well MW-10 and 3,717.35 feet in monitor wells MW-1 and MW-5. Groundwater elevation data is provided as Table 1, "2012 Groundwater Elevation Data".

Due to increased usage of the Goff Dairy and Goff Dairy - Ctr. Pivot irrigation wells, groundwater elevations fluctuated dramatically during 3Q2012 as compared to groundwater elevation data recorded during the 2Q2012 quarterly monitoring event conducted on May 23, 2012. Changes in elevation between 2Q2012 and 3Q2012 ranged from approximately 0.18 feet

in monitor well MW-6 to approximately 3.52 feet in monitor well MW-9. An inferred groundwater gradient map from 2Q2012 has been included for comparison as Figure 2B, "Inferred Groundwater Gradient Map – 2Q2012".

No PSH was detected in any of the on-site monitor wells during the 3Q2012 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 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 3Q2012 groundwater monitoring event is summarized below. Groundwater contaminant concentrations are depicted in Figure 3A, "Groundwater Concentration Map - 3Q2012".

- 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, MW-8, MW-9, and MW-10 to 0.00747 mg/L in the groundwater sample collected from monitor well MW-3. 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-9 to 0.0148 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.

4.2 Monthly Monitoring Data

Data collected during the July 30, August 28, and September 11, 2012, monthly monitoring events is summarized below. Groundwater contaminant concentrations for the July and September monitoring events are depicted in Figures 3B and 3C, "Groundwater Concentration Map - July 2012" and "Groundwater Concentration Map - September 2012", respectively.

Groundwater contaminant concentrations for the August sampling event are included in Figure 3A, "Groundwater Concentration Map - 3Q2012".

- **Monitor Well MW-9:**

- 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.

- **Monitor Well MW-10:**

- Benzene, 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 September 2012 to 0.0157 mg/L in July 2012. Benzene, toluene, ethylbenzene, and total xylene concentrations were less than NMWQCC regulatory standards in all submitted groundwater samples.

- **Goff Dairy 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 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.

5.0 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 five (5) locations on/adjacent to the Goff Dairy #9 Pivot (Goff Dairy Well, Goff Dairy - Ctr. Pivot Well, Goff Dairy - Ctr. Pivot Beginning, Goff Dairy - Ctr. Pivot End, and JW Well) will continue throughout the 2012 calendar year.

Pursuant to the *April - June 2012 Quarterly Monitoring Report*, dated July 2012, and correspondence from an NMOCD representative, dated August 2, 2012, 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 2012 reporting period will be submitted to the NMOCD by April 1, 2013.

6.0 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 Environmental has examined and relied upon documents referenced in the report and on oral statements made by certain individuals. Basin Environmental has not conducted an independent examination of the facts contained in referenced materials and statements. Basin Environmental has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Basin Environmental has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin Environmental 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.

7.0 DISTRIBUTION

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Figures

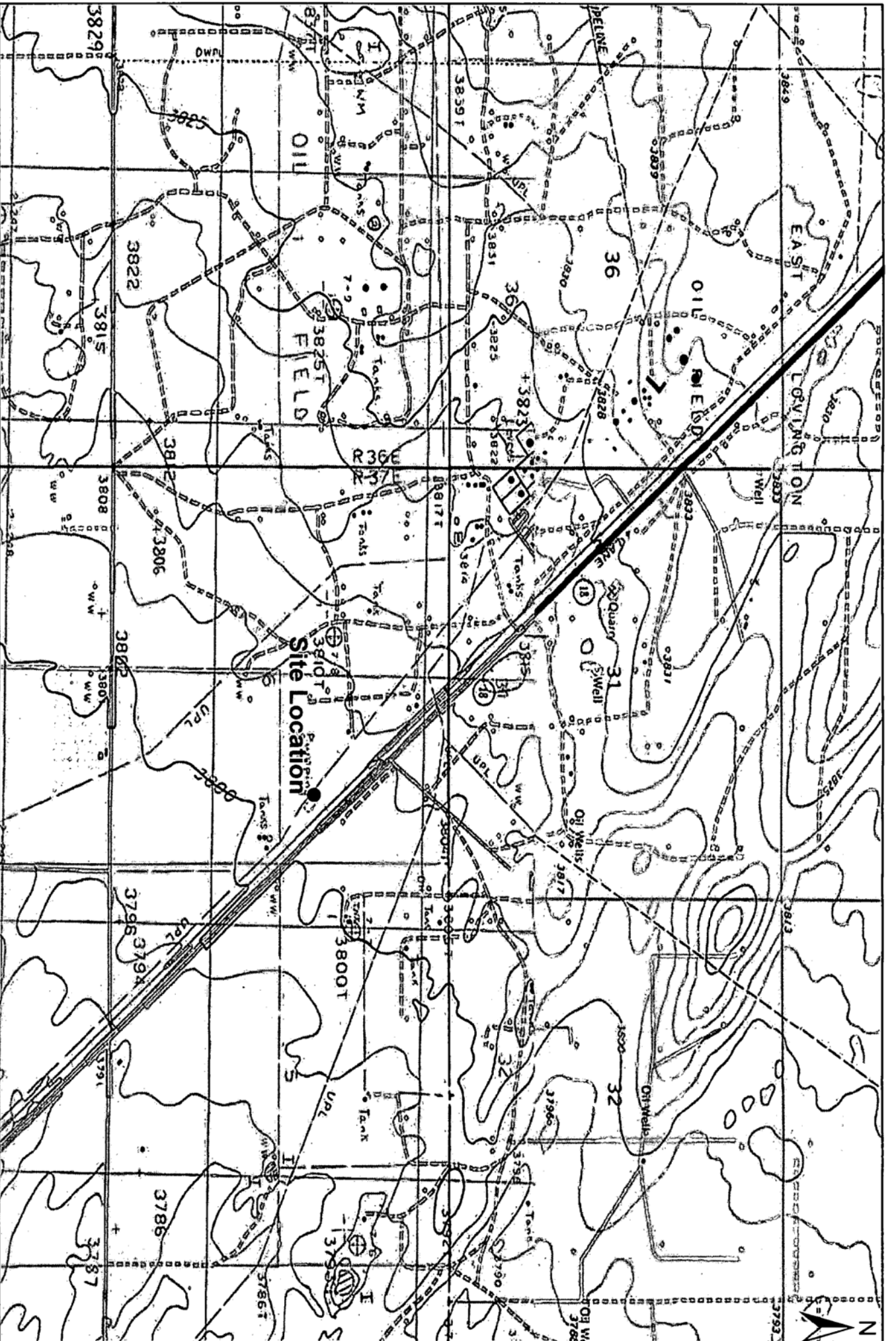
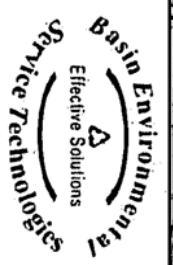


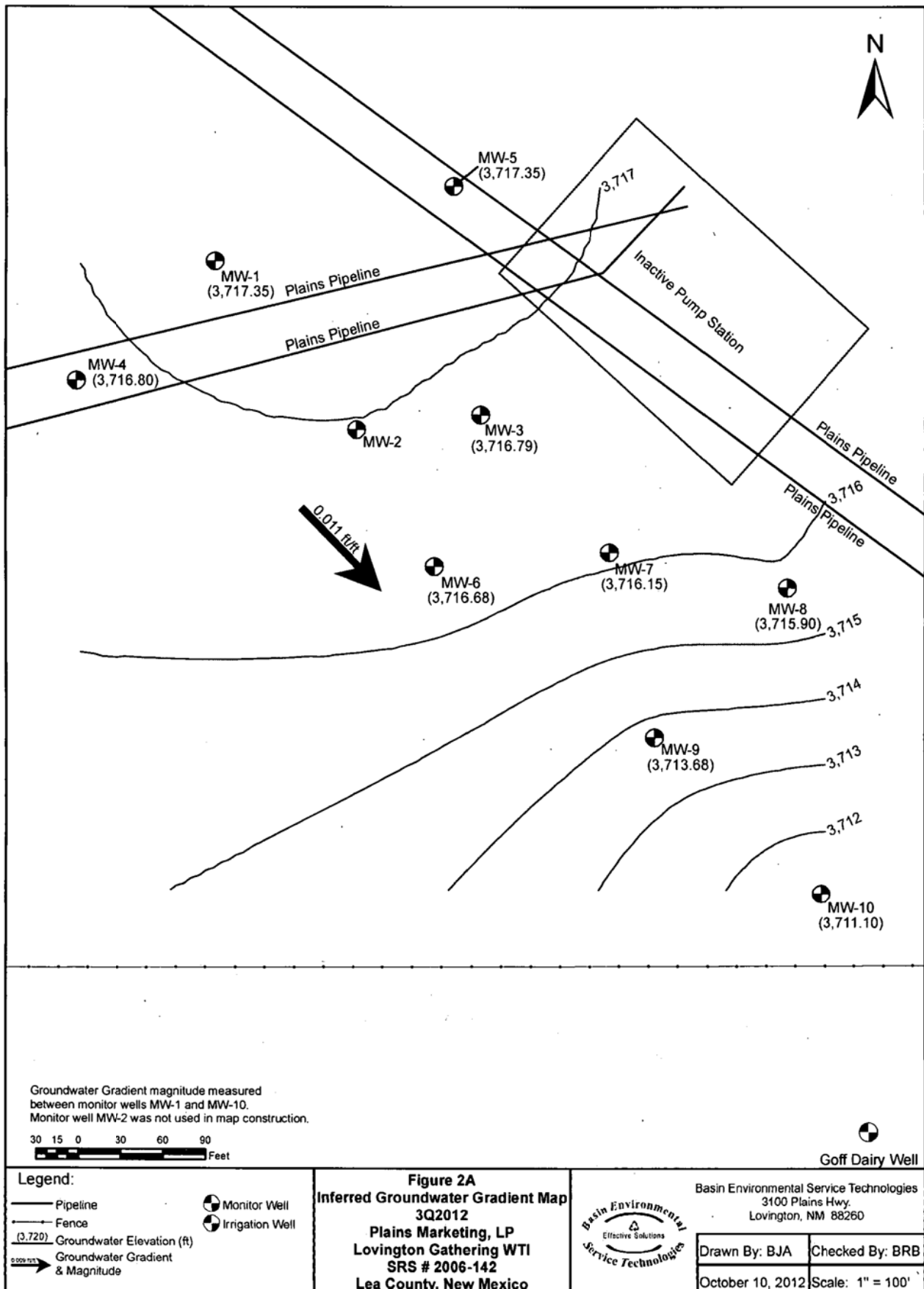
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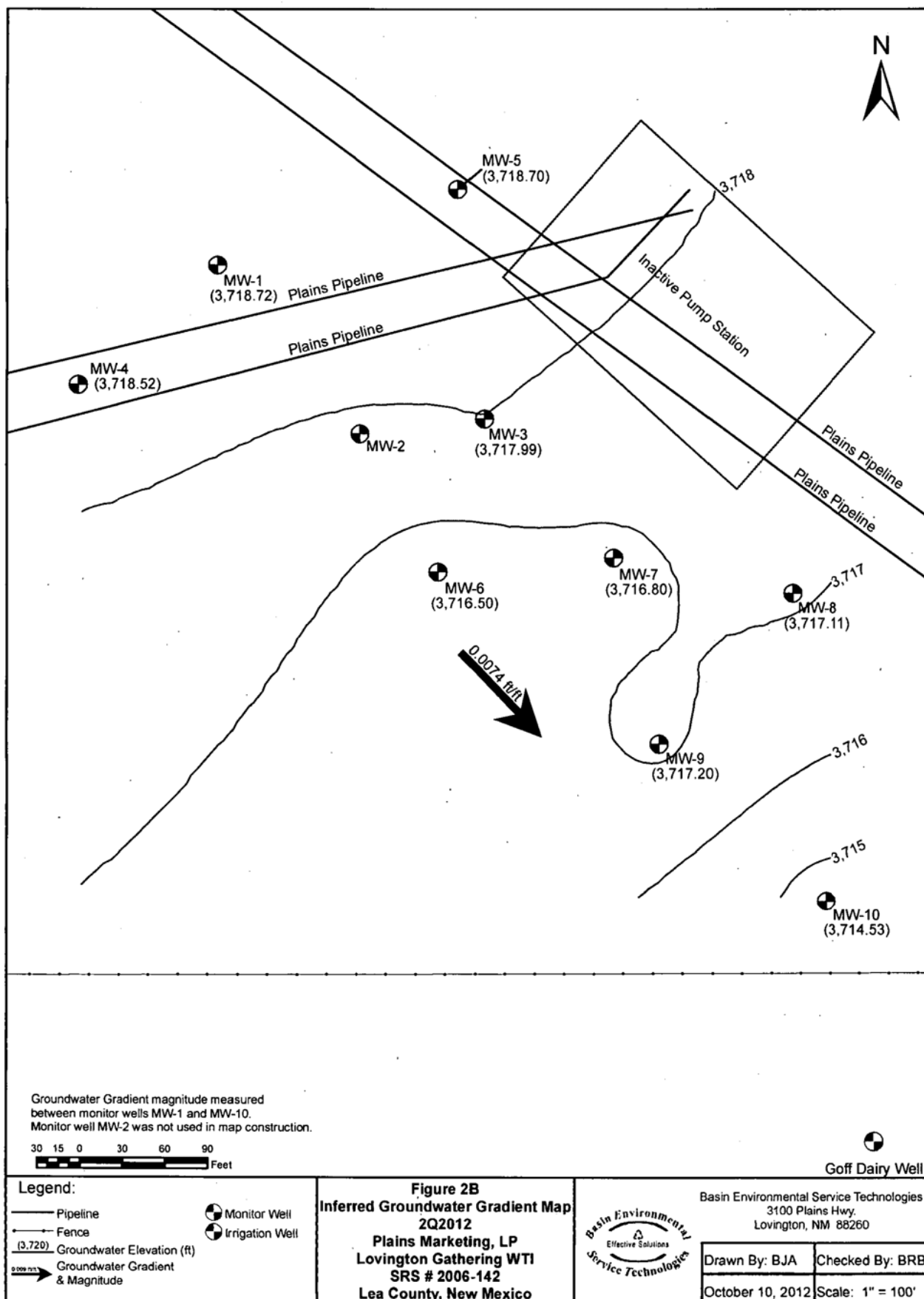
Site Location Map
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 Lovington Gathering WTI
 SRS # 2006-142
 Lea County, New Mexico

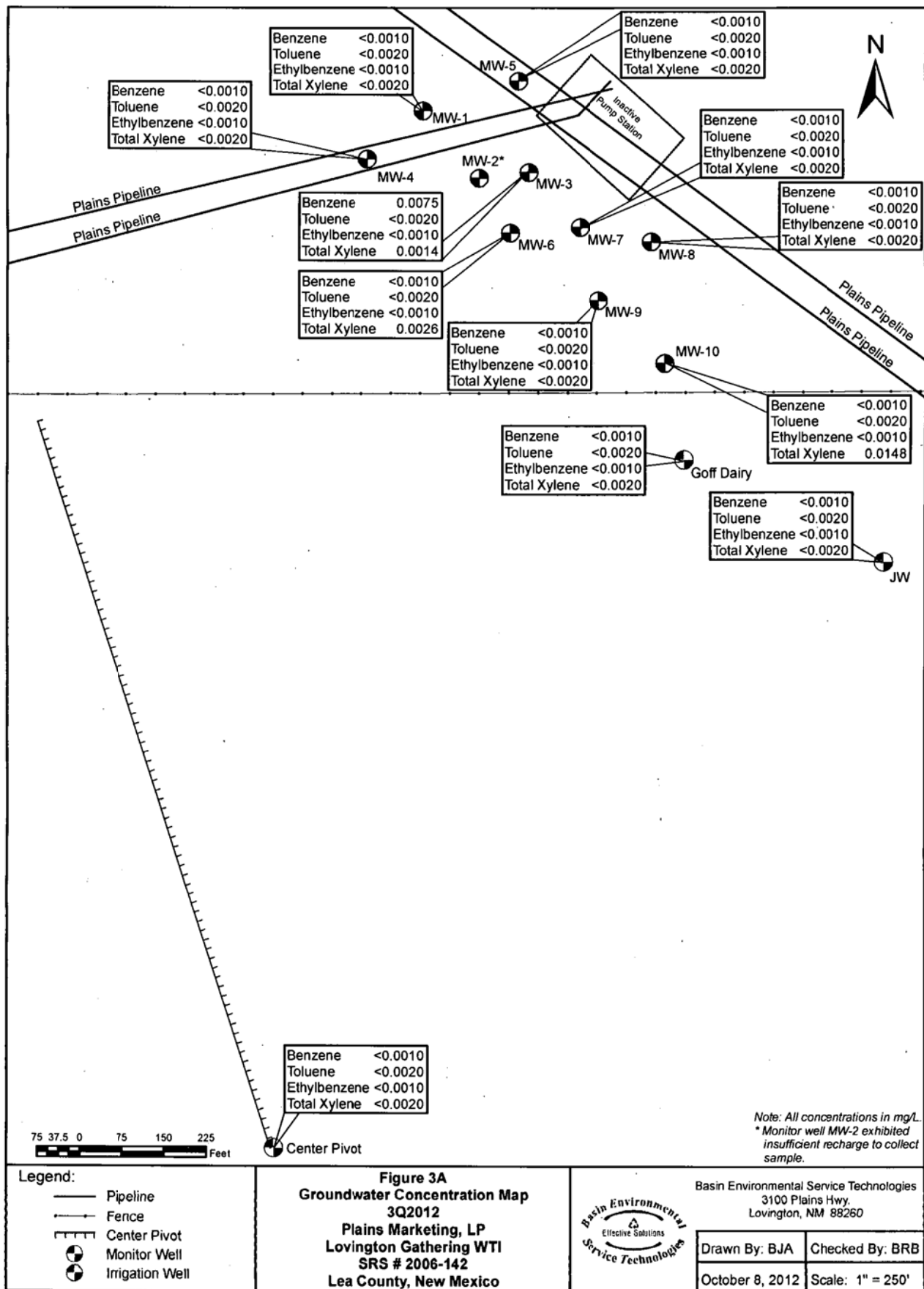


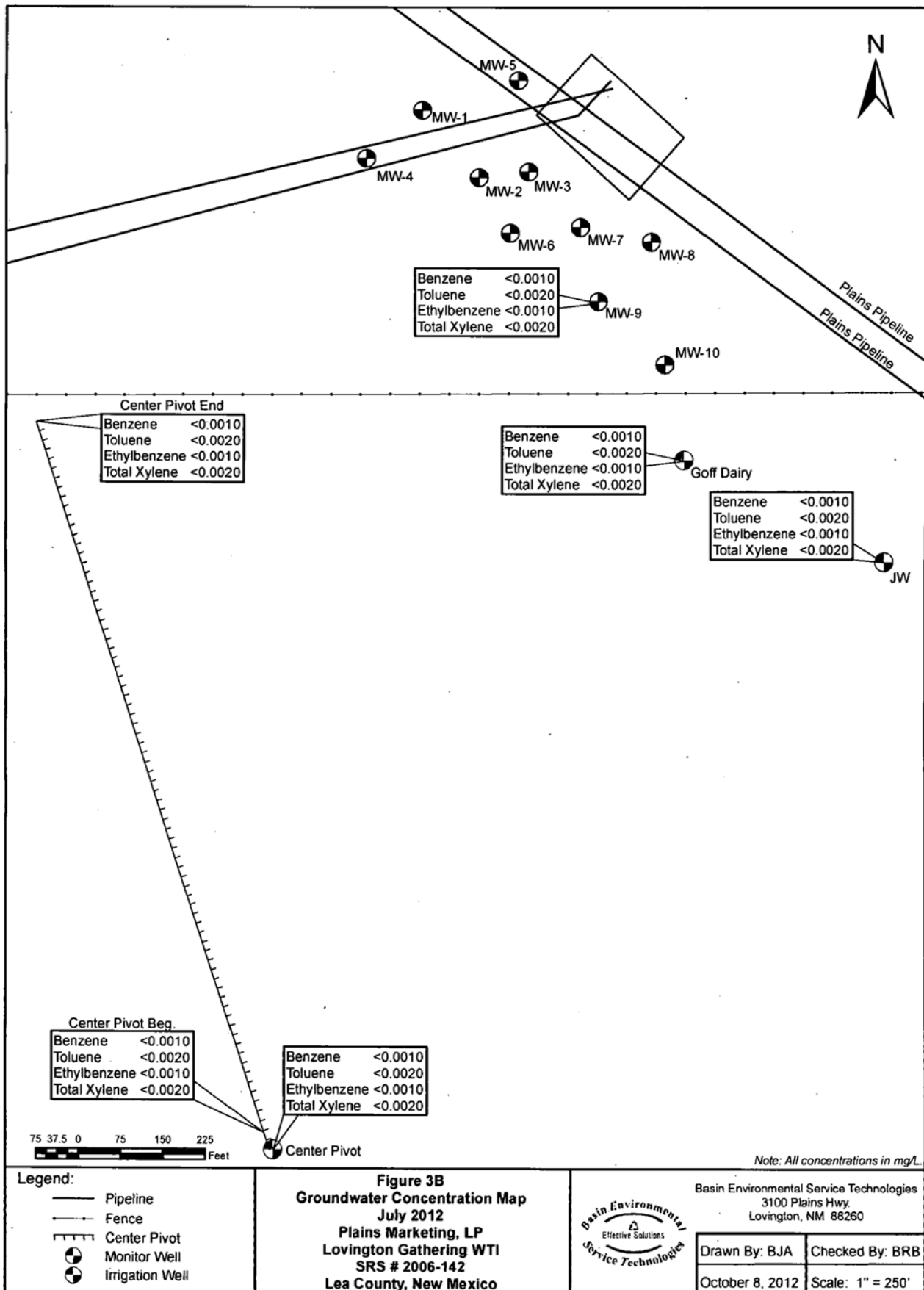
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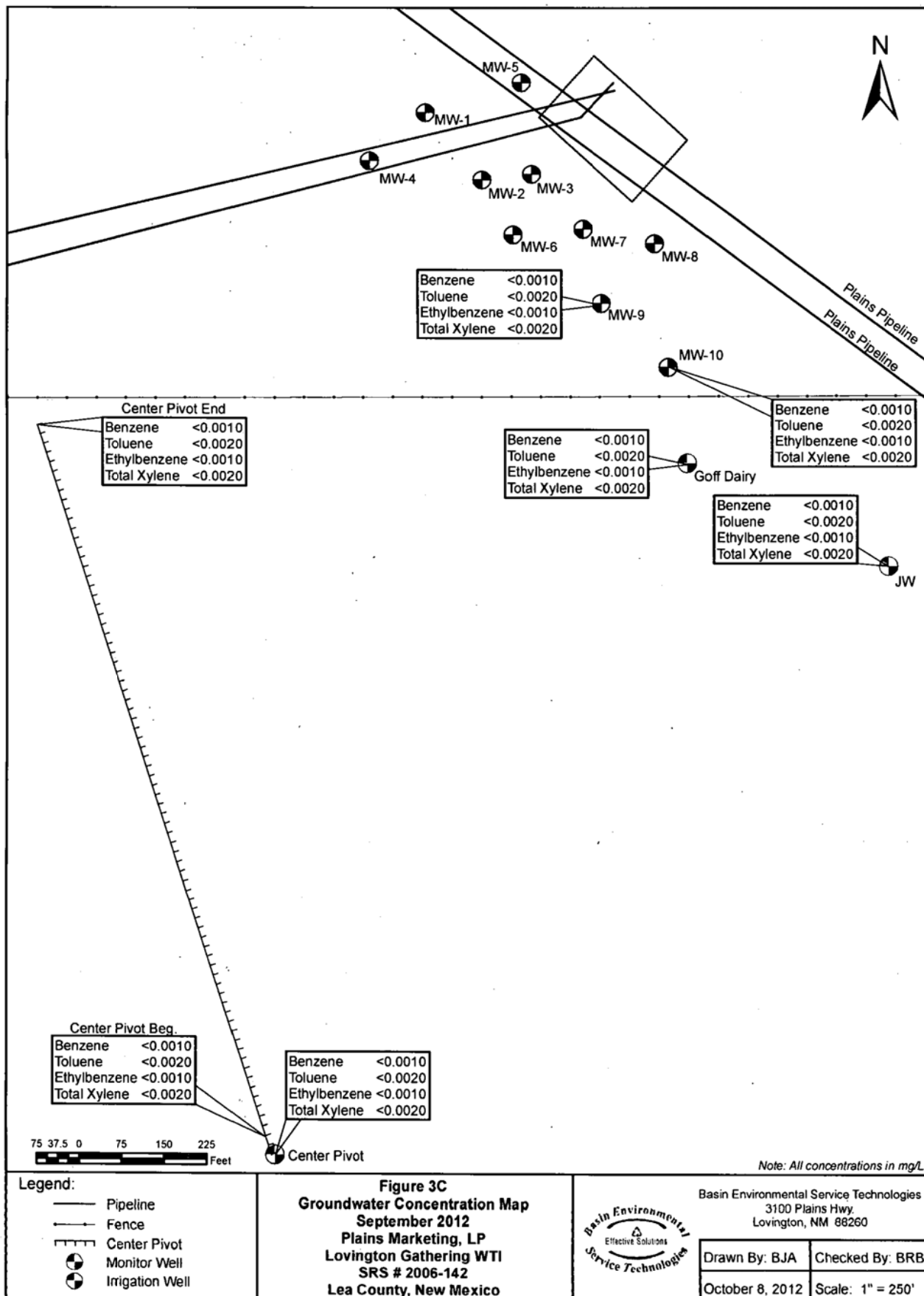
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July 8, 2011	Scale: 1" = 2000'











Tables

TABLE 1

2012 GROUNDWATER ELEVATION DATA

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	02/06/12	3,806.60	-	86.30	-	3,720.30
	05/23/12	3,806.60	-	87.88	-	3,718.72
	08/28/12	3,806.60	-	89.25	-	3,717.35
MW-2	02/06/12	3,806.31	-	84.20	-	3,722.11
	05/23/12	3,806.31	-	Dry	-	Dry
	08/28/12	3,806.31	-	Dry	-	Dry
MW-3	02/06/12	3,806.19	-	85.90	-	3,720.29
	05/23/12	3,806.19	-	88.20	-	3,717.99
	08/28/12	3,806.19	-	89.40	-	3,716.79
MW-4	02/06/12	3,806.67	-	86.45	-	3,720.22
	05/23/12	3,806.67	-	88.15	-	3,718.52
	08/28/12	3,806.67	-	89.87	-	3,716.80
MW-5	02/06/12	3,806.30	-	86.00	-	3,720.30
	05/23/12	3,806.30	-	87.60	-	3,718.70
	08/28/12	3,806.30	-	88.95	-	3,717.35
MW-6	02/06/12	3,806.08	-	86.00	-	3,720.08
	05/23/12	3,806.08	-	89.58	-	3,716.50
	08/28/12	3,806.08	-	89.40	-	3,716.68
MW-7	02/06/12	3,806.05	-	86.35	-	3,719.70
	05/23/12	3,806.05	-	89.25	-	3,716.80
	08/28/12	3,806.05	-	89.90	-	3,716.15
MW-8	02/06/12	3,805.89	-	85.80	-	3,720.09
	05/23/12	3,805.89	-	88.78	-	3,717.11
	08/28/12	3,805.89	-	89.99	-	3,715.90

TABLE 1**2012 GROUNDWATER ELEVATION DATA**

**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-9	02/06/12	3,806.02	-	86.20	-	3,719.82
	05/23/12	3,806.02	-	88.82	-	3,717.20
	08/28/12	3,806.02	-	92.34	-	3,713.68
MW-10	02/06/12	3,806.08	-	90.10	-	3,715.98
	05/23/12	3,806.08	-	91.55	-	3,714.53
	08/28/12	3,806.08	-	94.98	-	3,711.10

- = Not applicable

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1	SW846-6010C
		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)		
MW-1	10/5/2006	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
"	12/28/2006	<0.0010	<0.0010	<0.0010	0.002	<0.0010	0.002	0.002	-	-
"	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	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	9/17/2008	0.020	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.020	-	-
"	12/2/2008	0.035	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.035	-	-
"	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	-	-
"	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	<0.0010	<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	-	-
"	2/6/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	5/23/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	8/28/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
MW-2	10/5/2006	0.010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.010	-	-
"	12/28/2006	0.161	<0.0010	<0.0010	0.024	<0.0010	0.024	0.185	-	-
"	3/16/2007	0.154	<0.0010	<0.0010	0.015	<0.0010	0.015	0.169	-	-
"	5/31/2007	0.005	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.005	-	-
"	9/25/2007	0.050	<0.0010	<0.0010	0.003	<0.0010	0.003	0.053	-	-
"	11/30/2007	0.928	<0.0010	<0.005	0.036	<0.005	0.036	0.964	-	-
"	3/11/2008	0.095	<0.0020	<0.0010	0.0032	<0.0010	0.0032	0.098	-	-
"	6/14/2008	0.003	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.003	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1 FLUORIDE (mg/L)	SW846-6010C CHROMIUM (mg/L)
		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)		
MW-2	9/17/2008	0.159	<0.0020	<0.0010	0.004	<0.0010	0.004	0.163	-	-
"	12/2/2008	0.050	0.002	<0.0010	0.007	0.001	0.008	0.060	-	-
"	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	-	-
"	2/6/2012	0.00187	<0.0020	<0.0010	0.00212	0.00102	0.00314	0.00501	-	-
MW-3	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	-	-
"	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	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1	SW846-6010C
		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)		
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	-	-
"	2/6/2012	0.0214	0.00306	0.00126	0.00751	0.00345	0.0110	0.0367	-	-
"	5/23/2012	0.00929	0.00201	<0.0010	0.00584	0.00261	0.00845	0.0198	-	-
"	8/28/2012	0.00747	<0.0020	<0.0010	<0.0020	0.00136	0.00136	0.00883	-	-
MW-4	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	-	-
"	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	-	-
"	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	-	-
"	11/9/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	2/6/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	5/23/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	8/28/2012	<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	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1 FLUORIDE (mg/L)	SW846-6010C CHROMIUM (mg/L)
		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)		
MW-5	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	<0.0010	<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	-	-
"	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	<0.0010	<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	-	-
"	2/6/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	5/23/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	8/28/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
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	-	-
"	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	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1 FLUORIDE (mg/L)	SW846-6010C CHROMIUM (mg/L)
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL- BENZENE (mg/L)	M,P- XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENES (mg/L)	TOTAL BTX (mg/L)		
MW-6	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	-	-
"	5/25/2010	0.0059	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0059	-	-
"	8/30/2010	0.0053	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0053	-	-
"	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	-	-
"	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	-	-
"	2/6/2012	0.0129	<0.0020	0.00106	0.133	<0.0010	0.133	0.147	-	-
"	5/23/2012	0.00768	<0.0010	<0.0010	0.157	<0.0010	0.157	0.165	-	-
"	8/28/2012	<0.0010	<0.0020	<0.0010	0.0026	<0.0010	0.0026	0.0026	-	-
MW-7	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	-	-
"	3/3/2009	0.0775	<0.0020	<0.0010	0.0327	<0.0010	0.0327	0.1102	-	-
"	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	-	-
"	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	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1 FLUORIDE (mg/L)	SW846-6010C CHROMIUM (mg/L)
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL- BENZENE (mg/L)	M,P- XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENES (mg/L)	TOTAL BTX (mg/L)		
MW-7	11/9/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	2/6/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	5/23/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	8/28/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
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	-	-
"	12/2/2008	0.234	0.046	0.008	0.041	0.013	0.054	0.342	-	-
"	3/3/2009	0.0284	<0.0020	<0.0010	0.0068	<0.0010	0.0068	0.0352	-	-
"	6/18/2009	0.0045	<0.0020	0.0016	0.0032	<0.0010	0.0032	0.0093	-	-
"	9/1/2009	0.0013	<0.0020	0.0011	0.0141	<0.0010	0.0141	0.0165	-	-
"	12/18/2009	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	3/4/2010	<0.0010	<0.0020	0.0011	<0.0020	<0.0010	<0.0020	0.0011	-	-
"	5/25/2010	0.0012	<0.0020	0.001	<0.0020	<0.0010	<0.0020	0.0022	-	-
"	8/30/2010	<0.0010	<0.0020	0.0014	<0.0020	<0.0010	<0.0020	0.0014	-	-
"	11/1/2010	<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	0.00154	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	-	-
"	11/9/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	2/6/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	5/23/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	8/28/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
MW-9	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	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1	SW846-6010C
		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)		
MW-9	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	0.9717	0.0641	<0.0100	0.0867	0.0422	0.1289	1.1647	-	-
"	9/10/2009	1.838	<0.0200	<0.0100	0.0537	<0.0100	0.0537	1.8917	-	-
"	10/5/2009	0.985	<0.0020	<0.0010	0.0442	<0.0010	0.0442	1.0292	-	-
"	12/18/2009	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	3/4/2010	0.0192	<0.0020	<0.0010	0.0027	<0.0010	0.0027	0.0219	-	-
"	5/25/2010	0.0421	<0.0020	<0.0010	0.0063	<0.0010	0.0063	0.0484	-	-
"	8/30/2010	0.1259	<0.0020	<0.0010	0.0344	<0.0010	0.0344	0.1603	-	-
"	11/11/2010	0.0265	<0.0020	<0.0010	0.0097	<0.0010	0.0097	0.0362	-	-
"	3/22/2011	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	-	-
"	11/9/2011	0.00179	<0.0020	<0.0010	0.00349	<0.0010	0.00349	0.00528	-	-
"	12/14/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	1/5/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	2/6/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	3/1/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	4/18/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	5/23/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	6/19/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	7/30/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	8/28/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	9/11/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
MW-10	11/2/2009	<0.005	<0.005	<0.005	<0.010	<0.005	<0.010	<0.010	-	-
"	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	0.0350	<0.0020	<0.0010	0.0035	<0.0010	0.0035	0.0385	-	-
"	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	-	-

**TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER**

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1	SW846-6010C
		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	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	-	-
"	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	-	-
"	1/5/2012	0.00432	<0.0020	<0.0010	0.0126	<0.0010	0.0126	0.0169	-	-
"	2/6/2012	0.00233	<0.0020	<0.0010	0.00644	<0.0010	0.00644	0.00877	-	-
"	3/1/2012	0.00134	<0.0020	<0.0010	0.00423	<0.0010	0.00423	0.00557	-	-
"	4/18/2012	0.00338	<0.0020	<0.0010	0.0175	<0.0010	0.0175	0.0209	-	-
"	5/23/2012	0.00387	<0.0010	<0.0010	0.103	<0.0010	0.103	0.107	-	-
"	6/19/2012	<0.0010	<0.0010	<0.0010	0.0157	<0.0010	0.0157	0.0157	-	-
"	8/28/2012	<0.0010	<0.0020	<0.0010	0.0134	0.00138	0.0148	0.0148	-	-
"	9/11/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
Goft 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	-	-
"	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	-	-
"	12/14/2011	<0.0010	<0.0020	0.00111	<0.0020	<0.0010	<0.0020	0.00111	-	-
"	1/5/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	2/6/2012	<0.0010	<0.0020	0.00111	0.00201	<0.0010	0.00201	0.00201	-	-
"	3/1/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	4/18/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	5/23/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	7/30/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	8/28/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	9/11/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
Goft 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	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1	SW846-6010C
		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)		
Goff Dairy - Ctr. Pivot Well	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	-	-
"	1/5/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	2/6/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	3/1/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	4/18/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	5/23/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	6/19/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	7/30/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	8/28/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	9/11/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
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	-	-
"	3/1/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	4/18/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	5/23/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	6/19/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	7/30/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	9/11/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
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	-	-
"	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	-	-
"	3/1/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	4/18/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	5/23/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	6/19/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	7/30/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	9/11/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	7/30/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	7/30/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1 FLUORIDE (mg/L)	SW846-6010C CHROMIUM (mg/L)
		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)		
Goff Dairy - Ctr. Pivot End	9/11/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		
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	-	-
	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	-	-
	3/1/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	4/18/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	5/23/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	6/19/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	7/30/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	8/28/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	9/11/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
NMOCd CRITERIA		0.01	0.75	0.75	TOTAL XYLENES 0.62				1.6	0.05

Appendices

Appendix A

Laboratory Analytical Reports

Analytical Report 446647

for

PLAINS ALL AMERICAN EH&S

Project Manager: Ben Arguijo
Lovington Gathering WTI

03-AUG-12

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), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)

Xenco-Lakeland: Florida (E84098)

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: AZ00901): Arizona (AZM757)

Xenco Tucson (EPA Lab code: AZ000989): Arizona (AZ0758)

03-AUG-12

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

Reference: XENCO Report No: **446647**
Lovington Gathering WTI
Project Address: 2006-142

Ben Arguijo:

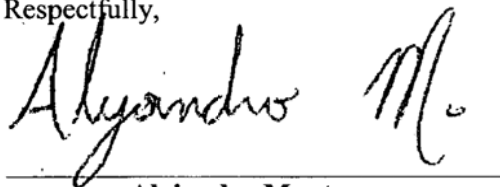
We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 446647. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory 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. 446647 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,



Alejandro Montoya

Odessa Laboratory Director

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

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America



Sample Cross Reference 446647



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Goff Dairy Well	W	07-30-12 16:10		446647-001
J.W. Well	W	07-30-12 16:15		446647-002
Center Pivot Well	W	07-30-12 16:35		446647-003
Center Pivot Well Beg.	W	07-30-12 16:40		446647-004
Center Pivot Well End.	W	07-30-12 16:50		446647-005
MW-9	W	07-30-12 17:50		446647-006



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

Project Name: Lovington Gathering WTI



Project ID:

Work Order Number: 446647

Report Date: 03-AUG-12

Date Received: 07/31/2012

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 446647

PLAINS ALL AMERICAN EH&S, Midland, TX



Project Id:

Contact: Ben Arguio

Project Location: 2006-142

Project Name: Lovington Gathering WTI

Date Received in Lab: Tue Jul-31-12 03:15 pm

Report Date: 03-AUG-12

Project Manager: Nicholas Straccione

Analysis Requested		Lab Id:	446647-001	Field Id:	Goff Dairy Well	Depth:		Matrix:	WATER	Sampled:	Jul-30-12 16:10	446647-002	J.W. Well	446647-003	Center Pivot Well	446647-004	Center Pivot Well Beg.	446647-005	Center Pivot Well End.	446647-006	MW-9	
BTEx by EPA 8021B		Extracted:	Aug-02-12 15:14	Analyzed:	Aug-02-12 17:54	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene			ND	0.00100		ND	0.00100		ND	0.00100		ND	0.00100		ND	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		ND	0.00200
Ethylbenzene			ND	0.00100		ND	0.00100		ND	0.00100		ND	0.00100		ND	0.00100		ND	0.00100		ND	0.00100
m,p-Xylenes			ND	0.00200		ND	0.00200		ND	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		ND	0.00100
Total Xylenes			ND	0.00100		ND	0.00100		ND	0.00100		ND	0.00100		ND	0.00100		ND	0.00100		ND	0.00100
Total BTEx			ND	0.00100		ND	0.00100		ND	0.00100		ND	0.00100		ND	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 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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Version: 1.7%

Alejandro Montoya

Alejandro Montoya
Odessa Laboratory Director

Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to 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 **LOD** Limit of Detection

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

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 446647,

Project ID:

Lab Batch #: 893646

Sample: 446647-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/02/12 17:54

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0287	0.0300	96	80-120	
4-Bromofluorobenzene	0.0247	0.0300	82	80-120	

Lab Batch #: 893646

Sample: 446647-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/02/12 18:09

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0260	0.0300	87	80-120	
4-Bromofluorobenzene	0.0240	0.0300	80	80-120	

Lab Batch #: 893646

Sample: 446647-003 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/02/12 18:24

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0262	0.0300	87	80-120	
4-Bromofluorobenzene	0.0245	0.0300	82	80-120	

Lab Batch #: 893646

Sample: 446647-004 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/02/12 18:39

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0267	0.0300	89	80-120	
4-Bromofluorobenzene	0.0241	0.0300	80	80-120	

Lab Batch #: 893646

Sample: 446647-005 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/02/12 18:54

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0283	0.0300	94	80-120	
4-Bromofluorobenzene	0.0250	0.0300	83	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 :** 446647,**Lab Batch #:** 893646**Sample:** 446647-006 / SMP**Project ID:****Batch:** 1 **Matrix:** Water**Units:** mg/L**Date Analyzed:** 08/02/12 19:09**SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0251	0.0300	84	80-120	

Lab Batch #: 893646**Sample:** 625461-1-BLK / BLK**Batch:** 1 **Matrix:** Water**Units:** mg/L**Date Analyzed:** 08/02/12 17:39**SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0263	0.0300	88	80-120	
4-Bromofluorobenzene	0.0241	0.0300	80	80-120	

Lab Batch #: 893646**Sample:** 625461-1-BKS / BKS**Batch:** 1 **Matrix:** Water**Units:** mg/L**Date Analyzed:** 08/02/12 16:55**SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0353	0.0300	118	80-120	
4-Bromofluorobenzene	0.0253	0.0300	84	80-120	

Lab Batch #: 893646**Sample:** 625461-1-BSD / BSD**Batch:** 1 **Matrix:** Water**Units:** mg/L**Date Analyzed:** 08/02/12 17:10**SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0339	0.0300	113	80-120	
4-Bromofluorobenzene	0.0240	0.0300	80	80-120	

Lab Batch #: 893646**Sample:** 446647-001 S / MS**Batch:** 1 **Matrix:** Water**Units:** mg/L**Date Analyzed:** 08/02/12 19:23**SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0333	0.0300	111	80-120	
4-Bromofluorobenzene	0.0275	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] = $100 * A / B$

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



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 446647,

Lab Batch #: 893646

Sample: 446647-001 SD / MSD

Project ID:

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/02/12 19:38

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0327	0.0300	109	80-120	
4-Bromofluorobenzene	0.0288	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.

BS / BSD Recoveries



Project Name: Lovington Gathering WTI

Work Order #: 446647

Analyst: KEB

Date Prepared: 08/02/2012

Project ID:
Date Analyzed: 08/02/2012

Lab Batch ID: 893646

Sample: 625461-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BTEX by EPA 8021B

BLANK / BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0999	100	0.100	0.0914	91	9	70-125	25	
Toluene	<0.00200	0.100	0.0880	88	0.100	0.0816	82	8	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0884	88	0.100	0.0816	82	8	71-129	25	
m,p-Xylenes	<0.00200	0.200	0.174	87	0.200	0.162	81	7	70-131	25	
o-Xylene	<0.00100	0.100	0.108	108	0.100	0.102	102	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

Project Name: Lovington Gathering WTI



Work Order #: 446647

Lab Batch ID: 893646

Date Analyzed: 08/02/2012

Reporting Units: mg/L

QC-Sample ID: 446647-001 S

Date Prepared: 08/02/2012

Batch #: 1 Matrix: Water
Analyst: KEB

Project ID:

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Benzene		<0.00100	0.100	0.0937	94	0.100	0.0939	94	0	70-125	25	
Toluene		<0.00200	0.100	0.0830	83	0.100	0.0819	82	1	70-125	25	
Ethylbenzene		<0.00100	0.100	0.0821	82	0.100	0.0809	81	1	71-129	25	
m,p-Xylenes		<0.00200	0.200	0.151	76	0.200	0.143	72	5	70-131	25	
o-Xylene		<0.00100	0.100	0.0990	99	0.100	0.0962	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, I = Interference, NA = Not Applicable, N = See Narrative, EQL = Estimated Quantitation Limit

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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

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

Project Name: Lovington Gathering WT

Project #: 2006-142

Project Loc: Lea County, NM

PO #: PAA-J. Henry

Report Format: ☒ Standard ☐ TRP ☐ NPDES

bjarguilo@baslnenv.com

ORDER #: 4900411

Page 12 of 13

Special Instructions:

Laboratory Comments:	
Sample Containers Intact?	Y
VOCs Free of Headspace?	Y
Labels on container(s)	Y
Discolored?	N
	N
	N

Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N

by Sampler/Client Rep.?
by Courier? UPS DHL Fedex Lone Star

Temperature Upon Receipt: 45 °C



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In



Client: PLAINS ALL AMERICAN EH&S

Date/ Time Received: 07/31/2012 03:15:00 PM

Work Order #: 446647

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	4.5
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles/ container?	Yes
#6 *Custody Seals Signed and dated for Containers/coolers	Yes
#7 *Chain of Custody present?	Yes
#8 Sample instructions complete on Chain of Custody?	Yes
#9 Any missing/extra samples?	No
#10 Chain of Custody signed when relinquished/ received?	Yes
#11 Chain of Custody agrees with sample label(s)?	Yes
#12 Container label(s) legible and intact?	Yes
#13 Sample matrix/ properties agree with Chain of Custody?	Yes
#14 Samples in proper container/ bottle?	Yes
#15 Samples properly preserved?	Yes
#16 Sample container(s) intact?	Yes
#17 Sufficient sample amount for indicated test(s)?	Yes
#18 All samples received within hold time?	Yes
#19 Subcontract of sample(s)?	Yes
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	Yes
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	Yes
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	Yes

* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:	PH Device/Lot#:
----------	-----------------

Checklist completed by: _____

Date: 07/31/2012 _____

Checklist reviewed by: _____

Date: 07/31/2012 _____

Analytical Report 448222
for
PLAINS ALL AMERICAN EH&S

Project Manager: Ben Arguijo

Lovington Gathering WTI

2006-142

05-SEP-12

Collected By: Client



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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), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

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Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

Xenco Tucson (EPA Lab code: AZ000989): Arizona (AZ0758)

05-SEP-12

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

Reference: XENCO Report No: **448222**
Lovington Gathering WTI
Project Address: Lea County, NM

Ben Arguijo:

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 448222. 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. The uncertainty of measurement associated with the results of analysis reported is available upon request. 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. 448222 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,



Nicholas Straccione
Project Manager

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PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Goff Dairy Well	W	08-28-12 14:45		448222-001
J.W. Well	W	08-28-12 15:15		448222-002
Center Pivot Well	W	08-28-12 15:00		448222-003
MW1	W	08-28-12 10:25		448222-004
MW3	W	08-28-12 11:35		448222-005
MW4	W	08-28-12 10:55		448222-006
MW5	W	08-28-12 09:55		448222-007
MW6	W	08-28-12 12:00		448222-008
MW7	W	08-28-12 13:00		448222-009
MW8	W	08-28-12 13:30		448222-010
MW9	W	08-28-12 14:00		448222-011
MW10	W	08-28-12 14:30		448222-012



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

Project Name: Lovington Gathering WTI



Project ID: 2006-142

Work Order Number: 448222

Report Date: 05-SEP-12

Date Received: 08/29/2012

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-895563 BTEX by EPA 8021B

SW8021BM

Batch 895563, 4-Bromofluorobenzene recovered below QC limits . Matrix interferences is suspected; data confirmed by re-analysis

Samples affected are: 448222-005.

1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data confirmed by re-analysis

Samples affected are: 448222-005,448222-012.

Certificate of Analysis Summary 448222

PLAINS ALL AMERICAN EH&S, Midland, TX



Project Id: 2006-142
 Contact: Ben Arguio
 Project Location: Lea County, NM

Project Name: Lovington Gathering WTI

Date Received in Lab: Wed Aug-29-12 11:35 am

Report Date: 05-SEP-12

Project Manager: Nicholas Straccione

Analysis Requested												
Lab Id:	448222-001	Field Id:	Goff Dairy Well	Depth:		Matrix:	WATER	Sampled:	Aug-28-12 14:45			
			J. W. Well				WATER		Aug-28-12 15:15			
			Center Pivot Well				WATER		Aug-28-12 15:00			
			MW1				WATER		Aug-28-12 10:25			
			MW3				WATER		Aug-28-12 11:35			
			MW4				WATER		Aug-28-12 10:55			
BTEX by EPA 8021B												
Extracted:	Aug-30-12 09:30		Aug-30-12 09:30		Aug-30-12 09:30		Aug-30-12 09:30		Aug-30-12 09:30		Aug-30-12 09:30	
Analyzed:	Aug-30-12 12:44		Aug-30-12 12:59		Aug-30-12 13:14		Aug-30-12 13:29		Aug-30-12 13:43		Aug-30-12 13:58	
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		ND 0.00100		ND 0.00100		0.00747 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		ND 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		0.00136 0.00100		ND 0.00100	
Total Xylenes	ND 0.00100		ND 0.00100		ND 0.00100		ND 0.00100		0.00136 0.00100		ND 0.00100	
Total BTEX	ND 0.00100		ND 0.00100		ND 0.00100		ND 0.00100		0.00883 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 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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Nicholas Straccione
 Project Manager

Certificate of Analysis Summary 448222

PLAINS ALL AMERICAN EH&S, Midland, TX



Project Id: 2006-142
Contact: Ben Arguijo
Project Location: Lea County, NM

Project Name: Lovington Gathering WTI

Date Received in Lab: Wed Aug-29-12 11:35 am

Report Date: 05-SEP-12

Project Manager: Nicholas Straccione

Analysis Requested	Lab Id:	448222-007	448222-008	448222-009	448222-010	448222-011	448222-012
	Field Id: Depth: Matrix: Sampled:	MW5 WATER Aug-28-12 09:55	MW6 WATER Aug-28-12 12:00	MW7 WATER Aug-28-12 13:00	MW8 WATER Aug-28-12 13:30	MW9 WATER Aug-28-12 14:00	MW10 WATER Aug-28-12 14:30
BTX by EPA 8021B	Extracted:	Aug-30-12 09:30	Aug-30-12 09:30	Aug-30-12 09:30	Aug-30-12 09:30	Aug-30-12 09:30	Aug-30-12 09:30
	Analyzed:	Aug-30-12 14:28	Aug-30-12 14:42	Aug-30-12 14:57	Aug-30-12 16:26	Aug-30-12 16:41	Aug-30-12 15:41
	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	ND 0.00100	ND 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	ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100
m_p-Xylenes		ND 0.00200	0.00260 0.00200	ND 0.00200	ND 0.00200	ND 0.00200	0.0134 0.00200
o-Xylene		ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100	0.00138 0.00100
Total Xylenes		ND 0.00100	0.00260 0.00100	ND 0.00100	ND 0.00100	ND 0.00100	0.0148 0.00100
Total BTX		ND 0.00100	0.00260 0.00100	ND 0.00100	ND 0.00100	ND 0.00100	0.0148 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 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.

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

Nicholas Straccione

Nicholas Straccione
Project 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.
- * 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 **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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

Certified and approved by numerous States and Agencies.

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5332 Blackberry Drive, San Antonio TX 78238
2505 North Falkenburg Rd, Tampa, FL 33619
12600 West I-20 East, Odessa, TX 79765
6017 Financial Drive, Norcross, GA 30071
3725 E. Atlanta Ave, Phoenix, AZ 85040

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
(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 448222,

Project ID: 2006-142

Lab Batch #: 895563

Sample: 448222-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/30/12 12:44

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0262	0.0300	87	80-120	
4-Bromofluorobenzene	0.0281	0.0300	94	80-120	

Lab Batch #: 895563

Sample: 448222-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/30/12 12:59

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0255	0.0300	85	80-120	
4-Bromofluorobenzene	0.0272	0.0300	91	80-120	

Lab Batch #: 895563

Sample: 448222-003 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/30/12 13:14

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0252	0.0300	84	80-120	
4-Bromofluorobenzene	0.0281	0.0300	94	80-120	

Lab Batch #: 895563

Sample: 448222-004 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/30/12 13:29

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0268	0.0300	89	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

Lab Batch #: 895563

Sample: 448222-005 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/30/12 13:43

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0156	0.0300	52	80-120	**
4-Bromofluorobenzene	0.0176	0.0300	59	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 : 448222,

Project ID: 2006-142

Lab Batch #: 895563

Sample: 448222-006 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/30/12 13:58

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0268	0.0300	89	80-120	
4-Bromofluorobenzene	0.0297	0.0300	99	80-120	

Lab Batch #: 895563

Sample: 448222-007 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/30/12 14:28

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0245	0.0300	82	80-120	
4-Bromofluorobenzene	0.0258	0.0300	86	80-120	

Lab Batch #: 895563

Sample: 448222-008 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/30/12 14:42

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0245	0.0300	82	80-120	
4-Bromofluorobenzene	0.0314	0.0300	105	80-120	

Lab Batch #: 895563

Sample: 448222-009 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/30/12 14:57

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0278	0.0300	93	80-120	
4-Bromofluorobenzene	0.0312	0.0300	104	80-120	

Lab Batch #: 895563

Sample: 448222-012 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/30/12 15:41

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0221	0.0300	74	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.

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 448222,

Project ID: 2006-142

Lab Batch #: 895563

Sample: 448222-010 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/30/12 16:26

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0267	0.0300	89	80-120	
4-Bromofluorobenzene		0.0304	0.0300	101	80-120	

Lab Batch #: 895563

Sample: 448222-011 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/30/12 16:41

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0269	0.0300	90	80-120	
4-Bromofluorobenzene	0.0272	0.0300	91	80-120	

Lab Batch #: 895563

Sample: 626629-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/30/12 11:29

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0261	0.0300	87	80-120	
4-Bromofluorobenzene	0.0273	0.0300	91	80-120	

Lab Batch #: 895563

Sample: 626629-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/30/12 10:45

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0276	0.0300	92	80-120	
4-Bromofluorobenzene	0.0326	0.0300	109	80-120	

Lab Batch #: 895563

Sample: 626629-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/30/12 11:00

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0289	0.0300	96	80-120	
4-Bromofluorobenzene	0.0302	0.0300	101	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 : 448222,

Project ID: 2006-142

Lab Batch #: 895563

Sample: 448216-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/30/12 15:56

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0318	0.0300	106	80-120	
4-Bromofluorobenzene	0.0333	0.0300	111	80-120	

Lab Batch #: 895563

Sample: 448216-001 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/30/12 16:11

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0302	0.0300	101	80-120	
4-Bromofluorobenzene	0.0308	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 #: 448222

Analyst: KEB

Date Prepared: 08/30/2012

Project ID: 2006-142
Date Analyzed: 08/30/2012

Lab Batch ID: 895563

Sample: 626629-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BTEX by EPA 8021B

BLANK/BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0886	89	0.100	0.0860	86	3	70-125	25	
Toluene	<0.00200	0.100	0.101	101	0.100	0.0982	98	3	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0964	96	0.100	0.0929	93	4	71-129	25	
m,p-Xylenes	<0.00200	0.200	0.216	108	0.200	0.208	104	4	70-131	25	
o-Xylene	<0.00100	0.100	0.118	118	0.100	0.115	115	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 / MSD Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 448222

Project ID: 2006-142

Lab Batch ID: 895563

QC-Sample ID: 448216-001 S

Batch #: 1 Matrix: Water

Date Analyzed: 08/30/2012

Date Prepared: 08/30/2012

Analyst: KEB

Reporting Units: mg/L

BTEx by EPA 8021B		MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY									
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0903	90	0.100	0.0869	87	4	70-125	25	
Toluene	<0.00200	0.100	0.102	102	0.100	0.0990	99	3	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0973	97	0.100	0.0929	93	5	71-129	25	
m,p-Xylenes	<0.00200	0.200	0.218	109	0.200	0.207	104	5	70-131	25	
o-Xylene	<0.00100	0.100	0.118	118	0.100	0.112	112	5	71-133	25	

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

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

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

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

CHAIN OF CUSTODY/RECORD AND ANALYSIS REQUEST
12600 West I-20 East
Oklahoma Toyota 70765
Phone: 432-563-1800
Fax: 402-563-4742

PO #: PAA-J. Henry

(lab use only)		Analyze For:	
ORDER #:	448222	TOTAL:	
LAB # (lab use only)		TCLP:	
FIELD CODE		TOTAL:	
Beginning Depth		TOTAL:	
Ending Depth		TOTAL:	
Date Sampled		TOTAL:	
Time Sampled		TOTAL:	
Field Filtered		TOTAL:	
Total #. of Containers		TOTAL:	
Ice		TOTAL:	
HNO ₃		TOTAL:	
HCl		TOTAL:	
H ₂ SO ₄		TOTAL:	
NaOH		TOTAL:	
Na ₂ S ₂ O ₃		TOTAL:	
None		TOTAL:	
Other (Specify)		TOTAL:	
DW - Drinking Water SL - Sludge		TOTAL:	
CW - Groundwater S - Soil/Sol		TOTAL:	
NP - Non-Potable Specify Other		TOTAL:	
TPH: 418.1 8015M 8015B		TOTAL:	
TPH: TX 1005 TX:1006		TOTAL:	
Cations (Ca, Mg, Na, K)		TOTAL:	
Anions (Cl, SO ₄ , Alkalinity)		TOTAL:	
SAR / ESP / CEC		TOTAL:	
Metals: As Ag Ba Cd Cr Pb Hg Se		TOTAL:	
Volatiles		TOTAL:	
Semivolatiles		TOTAL:	
BTX 8021B/5030 or BTX 8260		TOTAL:	
RCI		TOTAL:	
N.O.R.M.		TOTAL:	
RUSH TAT (Pre-Schedule) 24, 48, 72 hrs		TOTAL:	
Standard TAT 4 DAY		TOTAL:	

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO ₃	HCl	H ₂ SO ₄	NaOH	Na ₂ S ₂ O ₃	None	Other (Specify)	DW - Drinking Water SL - Sludge	CW - Groundwater S - Soil/Sol	NP - Non-Potable Specify Other	TPH: 418.1 8015M 8015B	TPH: TX 1005 TX:1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO ₄ , Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTX 8021B/5030 or BTX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY	
01	Goff Dairy Well			8/28/2012	14:45		3 X	X	X	X																						
02	J.W. Well			8/28/2012	15:15		3 X	X	X	X																						
03	Center Pivot Well			8/28/2012	15:00		3 X	X	X	X																						
04	MW1			8/28/2012	10:25		3 X	X	X	X																						
05	MW3			8/28/2012	11:35		3 X	X	X	X																						
06	MW4			8/28/2012	10:55		3 X	X	X	X																						
07	MW5			8/28/2012	9:55		3 X	X	X	X																						
08	MW6			8/28/2012	12:00		3 X	X	X	X																						
09	MW7			8/28/2012	13:00		3 X	X	X	X																						
10	MW8			8/28/2012	13:30		3 X	X	X	X																						

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
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Relinquished by:	Date:	Time:	Received by:	Date:	Time:

Relinquished by

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Name: Lovington Gathering WTI

Project #: 2006-142

Project Loc: Lea County, NM

PO #: PAA-J. Henry.

Report Format: ☒ Standard ☐ TRIP ☐ NPDES

e-mail: bjarguijo@basinenv.com

ORDER #: 180275

Preservation & # of Containers

Analyze For:

TCLP:			
TOTAL:			

Standard TAT 4 DAY

Laboratory Comments

Labels on containers)
Custody seals on containers
Custody seals on cooler
Sample Hand Delivered

by Council of

Temperature Upon Receipt

1. *Phragmites australis* (Cav.) Trin. ex Steud.

**Prelogin/Nonconformance Report- Sample Log-In****Client:** Basin Environmental Service Technologi**Date/ Time Received:** 08/29/2012 11:35:00 AM**Work Order #:** 448222**Acceptable Temperature Range:** 0 - 6 degC**Air and Metal samples Acceptable Range:** Ambient**Temperature Measuring device used :****Sample Receipt Checklist****Comments**

#1 *Temperature of cooler(s)?	3.6
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles/ container?	Yes
#6 *Custody Seals Signed and dated for Containers/coolers	Yes
#7 *Chain of Custody present?	Yes
#8 Sample instructions complete on Chain of Custody?	Yes
#9 Any missing/extra samples?	No
#10 Chain of Custody signed when relinquished/ received?	Yes
#11 Chain of Custody agrees with sample label(s)?	Yes
#12 Container label(s) legible and intact?	Yes
#13 Sample matrix/ properties agree with Chain of Custody?	Yes
#14 Samples in proper container/ bottle?	Yes
#15 Samples properly preserved?	Yes
#16 Sample container(s) intact?	Yes
#17 Sufficient sample amount for indicated test(s)?	Yes
#18 All samples received within hold time?	Yes
#19 Subcontract of sample(s)?	Yes
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	Yes
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	Yes
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	Yes

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:	PH Device/Lot#:
----------	-----------------

Checklist completed by: _____

Date: _____

Checklist reviewed by: _____

Date: _____

Analytical Report 448936
for
PLAINS ALL AMERICAN EH&S

Project Manager: Ben Arguijo
Lovington Gathering WTI

18-SEP-12

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), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)

Xenco-Lakeland: Florida (E84098)

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: AZ00901): Arizona (AZM757)

Xenco Tucson (EPA Lab code: AZ000989): Arizona (AZ0758)



18-SEP-12

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

Reference: XENCO Report No: **448936**
Lovington Gathering WTI
Project Address: Lea County, NM

Ben Arguijo:

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 448936. 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. The uncertainty of measurement associated with the results of analysis reported is available upon request. 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. 448936 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,

Nicholas Straccione

Project Manager

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Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America

**PLAINS ALL AMERICAN EH&S, Midland, TX**

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-9	W	09-11-12 14:20		448936-001
MW-10	W	09-11-12 14:40		448936-002
JW WELL	W	09-11-12 15:45		448936-003
Goff Dairy- Ctr. Pivot Well	W	09-11-12 16:30		448936-004
Goff Dairy- Ctr. Pivot Beg	W	09-11-12 16:15		448936-005
Goff Dairy- Ctr. Pivot End	W	09-11-12 16:00		448936-006
Goff Dairy Well	W	09-11-12 15:30		448936-007



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

Project Name: Lovington Gathering WTI



Project ID:

Work Order Number: 448936

Report Date: 18-SEP-12

Date Received: 09/13/2012

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 448936

PLAINS ALL AMERICAN EH&S, Midland, TX



Project Id:
Contact: Ben Arguio
Project Location: Lea County, NM

Project Name: Lovington Gathering WTI

Date Received in Lab: Thu Sep-13-12 02:34 pm
Report Date: 18-SEP-12

Project Manager: Nicholas Straccione

<i>Analysis Requested</i>		<i>Lab Id:</i>	<i>Field Id:</i>	<i>Depth:</i>	<i>Matrix:</i>	<i>Sampled:</i>	<i>Extracted:</i>	<i>Analyzed:</i>	<i>Units/RL:</i>
BTEX by EPA 8021B		448936-001	MW-9		WATER	Sep-11-12 14:20	Sep-14-12 08:42	Sep-14-12 12:57	mg/L RL
		448936-002	MW-10		WATER	Sep-11-12 14:40	Sep-14-12 08:42	Sep-14-12 13:26	mg/L RL
		448936-003	JW WELL		WATER	Sep-11-12 15:45	Sep-14-12 08:42	Sep-14-12 13:41	mg/L RL
		448936-004	Goff Dairy- Ctr. Pivot Well		WATER	Sep-11-12 16:30	Sep-14-12 08:42	Sep-14-12 14:55	mg/L RL
		448936-005	Goff Dairy- Ctr. Pivot Beg		WATER	Sep-11-12 16:15	Sep-14-12 08:42	Sep-14-12 14:10	mg/L RL
		448936-006	Goff Dairy- Ctr. Pivot End		WATER	Sep-11-12 16:00	Sep-14-12 08:42	Sep-14-12 14:25	mg/L RL
Benzene		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100
Toluene		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
m,p-Xylenes		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
Total Xylenes		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100
Total BTEX		ND	0.00100	ND	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 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.

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



Nicholas Straccione
Project Manager


Project Id:

Contact: Ben Arguio

Project Location: Lea County, NM

Project Name: Lovington Gathering WTI

Date Received in Lab: Thu Sep-13-12 02:34 pm

Report Date: 18-SEP-12

Project Manager: Nicholas Straccione

<i>Analysis Requested</i>		<i>Lab Id:</i>	448936-007			
		<i>Field Id:</i>	Goff Dairy Well			
		<i>Depth:</i>				
		<i>Matrix:</i>	WATER			
		<i>Sampled:</i>	Sep-11-12 15:30			
BTEX by EPA 8021B		<i>Extracted:</i>	Sep-14-12 08:42			
		<i>Analyzed:</i>	Sep-14-12 14:40			
		<i>Units/RL:</i>	mg/L RL			
Benzene			ND 0.00100			
Toluene			ND 0.00200			
Ethylbenzene			ND 0.00100			
m,p-Xylenes			ND 0.00200			
o-Xylene			ND 0.00100			
Total Xylenes			ND 0.00100			
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 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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 Nicholas Straccione
 Project 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.

* 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 **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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4143 Greenbriar Dr. Stafford, TX 77477
 9701 Harry Hines Blvd., Dallas, TX 75220
 5332 Blackberry Drive, San Antonio TX 78238
 2505 North Falkenburg Rd. Tampa, FL 33619
 12600 West I-20 East, Odessa, TX 79765
 6017 Financial Drive, Norcross, GA 30071
 3725 E. Atlanta Ave, Phoenix, AZ 85040

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
(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 448936,

Project ID:

Lab Batch #: 896630

Sample: 448936-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/14/12 12:57

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0260	0.0300	87	80-120	
4-Bromofluorobenzene	0.0259	0.0300	86	80-120	

Lab Batch #: 896630

Sample: 448936-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/14/12 13:26

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0254	0.0300	85	80-120	
4-Bromofluorobenzene		0.0265	0.0300	88	80-120	

Lab Batch #: 896630

Sample: 448936-003 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/14/12 13:41

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0262	0.0300	87	80-120	
4-Bromofluorobenzene		0.0250	0.0300	83	80-120	

Lab Batch #: 896630

Sample: 448936-005 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/14/12 14:10

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0241	0.0300	80	80-120	
4-Bromofluorobenzene		0.0244	0.0300	81	80-120	

Lab Batch #: 896630

Sample: 448936-006 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/14/12 14:25

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0263	0.0300	88	80-120	
4-Bromofluorobenzene		0.0248	0.0300	83	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 : 448936,

Project ID:

Lab Batch #: 896630

Sample: 448936-007 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/14/12 14:40

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0240	0.0300	80	80-120	
4-Bromofluorobenzene	0.0252	0.0300	84	80-120	

Lab Batch #: 896630

Sample: 448936-004 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/14/12 14:55

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0272	0.0300	91	80-120	

Lab Batch #: 896630

Sample: 627220-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/14/12 13:11

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0255	0.0300	85	80-120	
4-Bromofluorobenzene	0.0260	0.0300	87	80-120	

Lab Batch #: 896630

Sample: 627220-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/14/12 11:56

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

Lab Batch #: 896630

Sample: 627220-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/14/12 12:10

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0287	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.

Form 2 - Surrogate Recoveries**Project Name: Lovington Gathering WTI****Work Orders : 448936,****Project ID:****Lab Batch #: 896630****Sample: 448939-001 S / MS****Batch: 1 Matrix: Water****Units: mg/L****Date Analyzed: 09/14/12 15:10****SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0309	0.0300	103	80-120	
4-Bromofluorobenzene	0.0337	0.0300	112	80-120	

Lab Batch #: 896630**Sample: 448939-001 SD / MSD****Batch: 1 Matrix: Water****Units: mg/L****Date Analyzed: 09/14/12 16:08****SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0338	0.0300	113	80-120	
4-Bromofluorobenzene	0.0360	0.0300	120	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 #: 448936

Analyst: KEB

Date Prepared: 09/14/2012

Project ID:

Date Analyzed: 09/14/2012

Lab Batch ID: 896630

Sample: 627220-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK/BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEx by EPA 8021B											
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.117	117	0.100	0.108	108	8	70-125	25	
Toluene	<0.00200	0.100	0.112	112	0.100	0.105	105	6	70-125	25	
Ethylbenzene	<0.00100	0.100	0.107	107	0.100	0.101	101	6	71-129	25	
m,p-Xylenes	<0.00200	0.200	0.236	118	0.200	0.223	112	6	70-131	25	
o-Xylene	<0.00100	0.100	0.114	114	0.100	0.107	107	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



Work Order #: 448936

Project ID:

Lab Batch ID: 896630

QC-Sample ID: 448939-001 S

Batch #: 1 Matrix: Water

Date Analyzed: 09/14/2012

Date Prepared: 09/14/2012

Analyst: KEB

Reporting Units: mg/L

BTEx by EPA 8021B		MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY									
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	0.00593	0.100	0.118	112	0.100	0.121	115	3	70-125	25	
Toluene	<0.00200	0.100	0.109	109	0.100	0.116	116	6	70-125	25	
Ethylbenzene	<0.00100	0.100	0.102	102	0.100	0.109	109	7	71-129	25	
m, p-Xylenes	<0.00200	0.200	0.221	111	0.200	0.237	119	7	70-131	25	
o-Xylene	<0.00100	0.100	0.105	105	0.100	0.115	115	9	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 Applicable
N = See Narrative, EQL = Estimated Quantitation Limit

**Prelogin/Nonconformance Report- Sample Log-In**

Client: PLAINS ALL AMERICAN EH&S

Date/ Time Received: 09/13/2012 02:34:54 PM

Work Order #: 448936

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist**Comments**

#1 *Temperature of cooler(s)?	3.6
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles/ container?	Yes
#6 *Custody Seals Signed and dated for Containers/coolers	Yes
#7 *Chain of Custody present?	Yes
#8 Sample instructions complete on Chain of Custody?	Yes
#9 Any missing/extra samples?	No
#10 Chain of Custody signed when relinquished/ received?	Yes
#11 Chain of Custody agrees with sample label(s)?	Yes
#12 Container label(s) legible and intact?	Yes
#13 Sample matrix/ properties agree with Chain of Custody?	Yes
#14 Samples in proper container/ bottle?	Yes
#15 Samples properly preserved?	Yes
#16 Sample container(s) intact?	Yes
#17 Sufficient sample amount for indicated test(s)?	Yes
#18 All samples received within hold time?	Yes
#19 Subcontract of sample(s)?	Yes
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	Yes
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	Yes
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	Yes

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:	PH Device/Lot#:
----------	-----------------

Checklist completed by: _____

Date: _____

Checklist reviewed by: _____

Date: _____

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

ORIGINAL COPY

Appendix B

Release Notification &

Corrective Action (Form C-141)

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

STATE OF NEW MEXICO
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Plains Pipeline	Contact Camille Reynolds	
Address 3112 W. US Hwy 82, Lovington, NM 88260	Telephone No. 505-441-0965	
Facility Name Lovington Gathering WTI	Facility Type 6" Steel Pipeline	
Surface Owner Robert Rice	Mineral Owner	Lease No.

LOCATION OF RELEASE

Unit Letter H	Section 6	Township 17S	Range 37E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea
------------------	--------------	-----------------	--------------	---------------	------------------	---------------	----------------	---------------

Latitude 32° 51' 56.0" Longitude 103° 17' 07.2"

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 12 barrels	Volume Recovered 8 barrels
Source of Release 6" Steel Pipeline	Date and Hour of Occurrence 4-21-2006 @ 13:00	Date and Hour of Discovery 4-21-2006 @ 13:15
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Pat Caperton	
By Whom? Camille Reynolds	Date and Hour 4-21-2006 @ 15:35	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken Internal corrosion while purging the line resulted in release of sweet crude oil. The line has been purged. The line is an idle 6-inch steel gathering line. The pressure on the line was approximately 50 psi and the gravity of the sweet crude oil was 34. The sweet crude has an H₂S content of <10 ppm. The line was approximately 1.5 feet bgs at the release point.

Describe Area Affected and Cleanup Action Taken.* The impacted soil was excavated and stockpiled on plastic. Aerial extent of surface impact was approximately 1,500 ft².

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

Signature: <u>Camille Reynolds</u>	OIL CONSERVATION DIVISION	
Printed Name: Camille Reynolds	Approved by District Supervisor:	
Title: Remediation Coordinator	Approval Date:	Expiration Date:
E-mail Address: cgreynolds@paalp.com	Conditions of Approval:	
Date: 4/26/2006 165	Phone: 505-441-	Attached ☐

AP-96

Basin Environmental Service Technologies, LLC

3100 Plains Highway
P. O. Box 301
Lovington, New Mexico 88260
bjarguijo@basinenv.com
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QUARTERLY MONITORING REPORT January - March 2012

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:

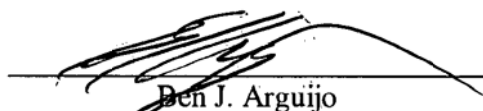


Plains Marketing, LP
333 Clay Street, Suite 1600
Houston, Texas 77002

Prepared By:

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

April 2012


Ben J. Arguijo
Project Manager



PLAINS
PIPELINE, L.P.

April 25, 2012

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 April 2012, 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 at this site during the first quarter of 2012.

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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Figure 3A – Groundwater Concentration Map – 1Q2012

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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 groundwater monitoring events conducted in the first quarter (January - March) of 2012 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 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 NMOCD regulatory standard of 100 mg/Kg for soil samples collected at ten (10) 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 February 6, 2012 (1Q2012), 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.

Per NMOCD request, monthly monitoring events were conducted at MW-9, 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 January 5, February 6, and March 1, 2012.

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

Locations of the groundwater monitoring wells and the inferred groundwater gradient, which was constructed from groundwater elevation measurements collected during the 1Q2012 sampling event, are depicted in Figure 2, "Inferred Groundwater Gradient Map – 1Q2012". The groundwater gradient map indicates a general gradient of approximately 0.0076 feet/foot to the southeast, as measured between monitor wells MW-1 and MW-10. The corrected groundwater elevation ranged between 3,715.98 and 3,723.11 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 - 1Q2012".

No PSH was detected in any of the on-site monitor wells during the 1Q2012 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 1Q2012 groundwater monitoring event is summarized below. Groundwater contaminant concentrations are depicted in Figure 3A, "Groundwater Concentration Map - 1Q2012".

- 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-9 to 0.0214 mg/L in the groundwater sample collected from monitor well MW-3. Benzene concentrations exceeded the New Mexico Water Quality Control Commission (NMWQCC) regulatory standard of 0.010 mg/L in the groundwater samples from monitor wells 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 monitor well MW-3, which exhibited a toluene concentration of 0.00306 mg/L. Toluene concentrations were less than the NMWQCC regulatory standard of 0.750 mg/L in all submitted groundwater samples.
- Ethylbenzene concentrations ranged from less than the laboratory MDL in the groundwater samples collected from monitor wells MW-1, MW-2, MW-4, MW-5, MW-7, MW-8, MW-9, and MW-10 to 0.00126 mg/L in the groundwater sample collected from monitor well MW-3. 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, MW-8 and MW-9 to 0.133 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 January 5, February 6, and March 1, 2012, monthly monitoring events is summarized below. Groundwater contaminant concentrations for the January and March monitoring events are depicted in Figures 3B and 3C, "Groundwater Concentration Map - January 2012" and "Groundwater Concentration Map - March 2012", respectively. Groundwater contaminant concentrations for the February sampling event are included in Figure 3A, "Groundwater Concentration Map - 1Q2012".

- **Monitor Well MW-9:**
 - 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.
- **Monitor Well MW-10:**
 - Benzene concentrations ranged from 0.00134 mg/L in March 2012 to 0.00432 mg/L in January 2012. Toluene and ethylbenzene concentrations were less than the appropriate laboratory MDL in all submitted groundwater samples. Total xylene concentrations ranged from 0.00423 mg/L in March 2012 to 0.0126 mg/L in January 2012. Benzene, toluene, ethylbenzene, and total xylene concentrations were less than NMWQCC regulatory standards in all submitted groundwater samples.
- **Goff Dairy Well:**
 - Benzene and toluene concentrations were less than the appropriate laboratory MDL in all submitted groundwater samples. Ethylbenzene concentrations ranged from less than the laboratory MDL in January 2012 and March 2012 to 0.00111 mg/L in February 2012. Total xylene concentrations ranged from less than the laboratory

MDL in January 2012 and March 2012 to 0.00201 mg/L in February 2012. 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.

5.0 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, MW-10, and the five (5) Goff Dairy locations will continue throughout the 2012 calendar year.

The *July - September 2011 Quarterly Monitoring Report*, dated July 2011, and correspondence from an NMOCD representative, dated August 1, 2011, recommended 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. Based on the reduction in plume concentrations, Plains recommends the bi-weekly recovery events from MW-9 and MW-10 be reduced to weekly.

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 2012 reporting period will be submitted to the NMOCD by April 1, 2013.

6.0 LIMITATIONS

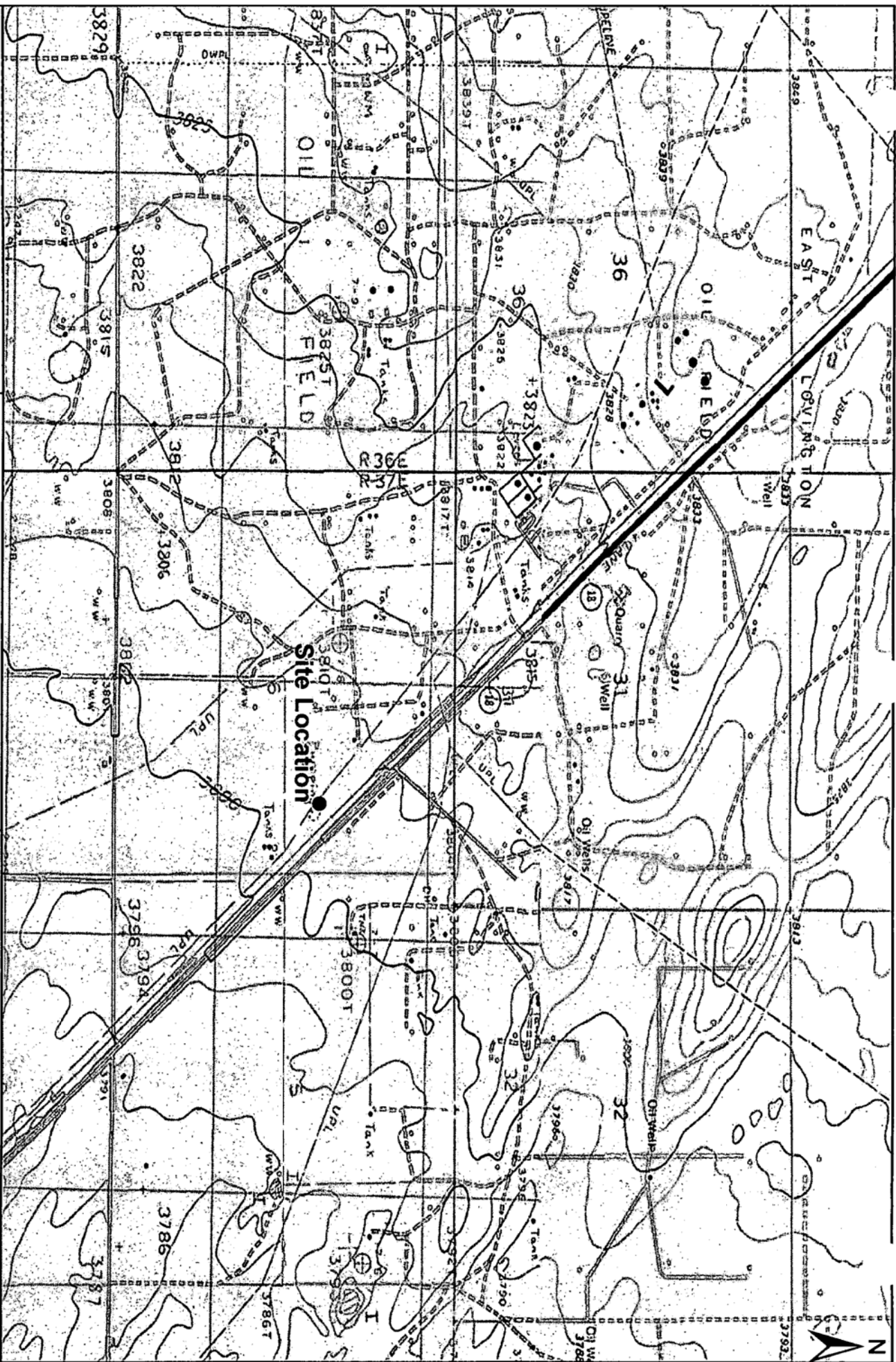
Basin Environmental Service Technologies, LLC, has prepared this *Quarterly Monitoring Report* to the best of its ability. No other warranty, expressed or implied, is made or intended. Basin has examined and relied upon documents referenced in the report and on oral statements made by certain individuals. 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.

7.0 DISTRIBUTION

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Figures



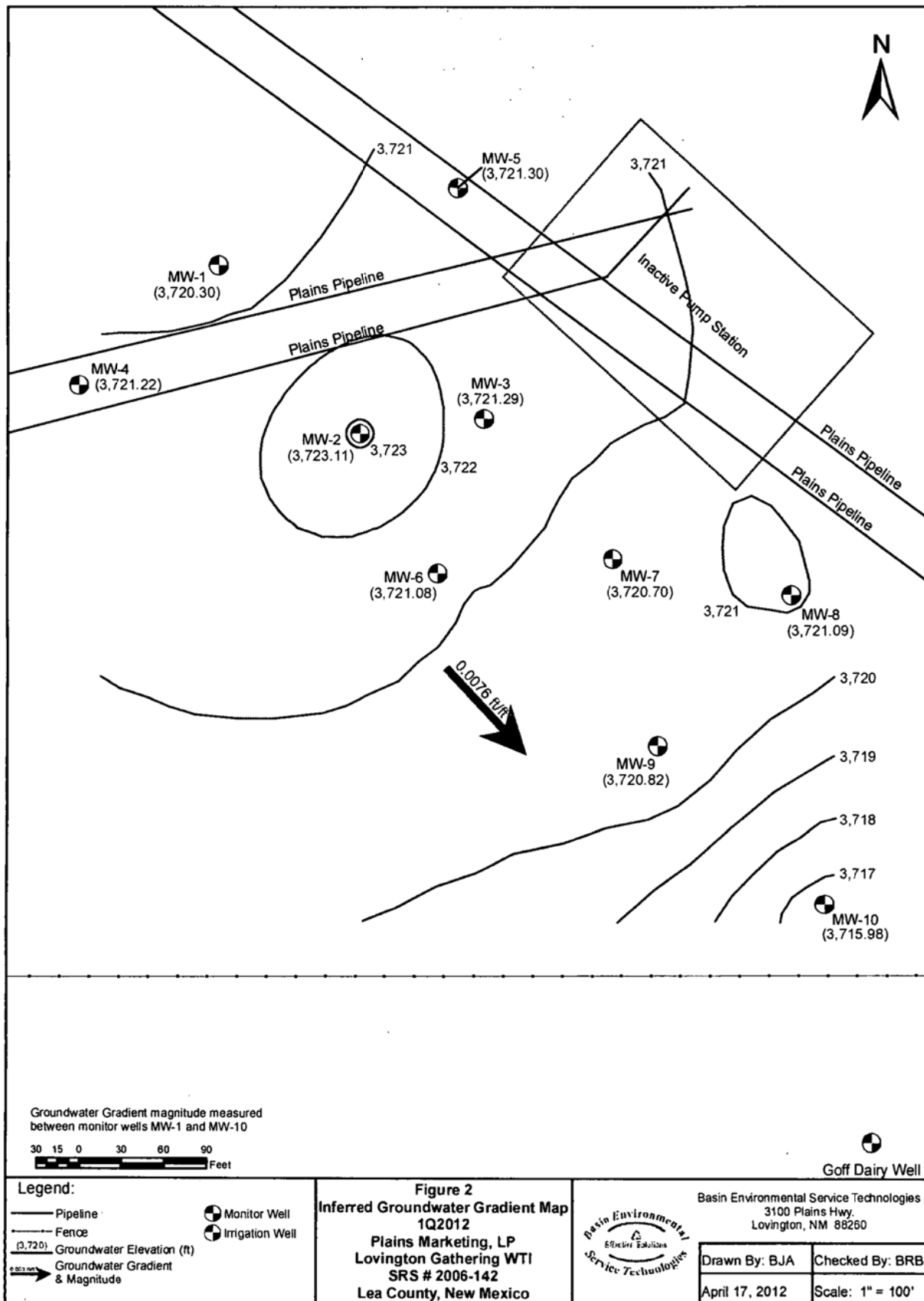
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Distance in Feet

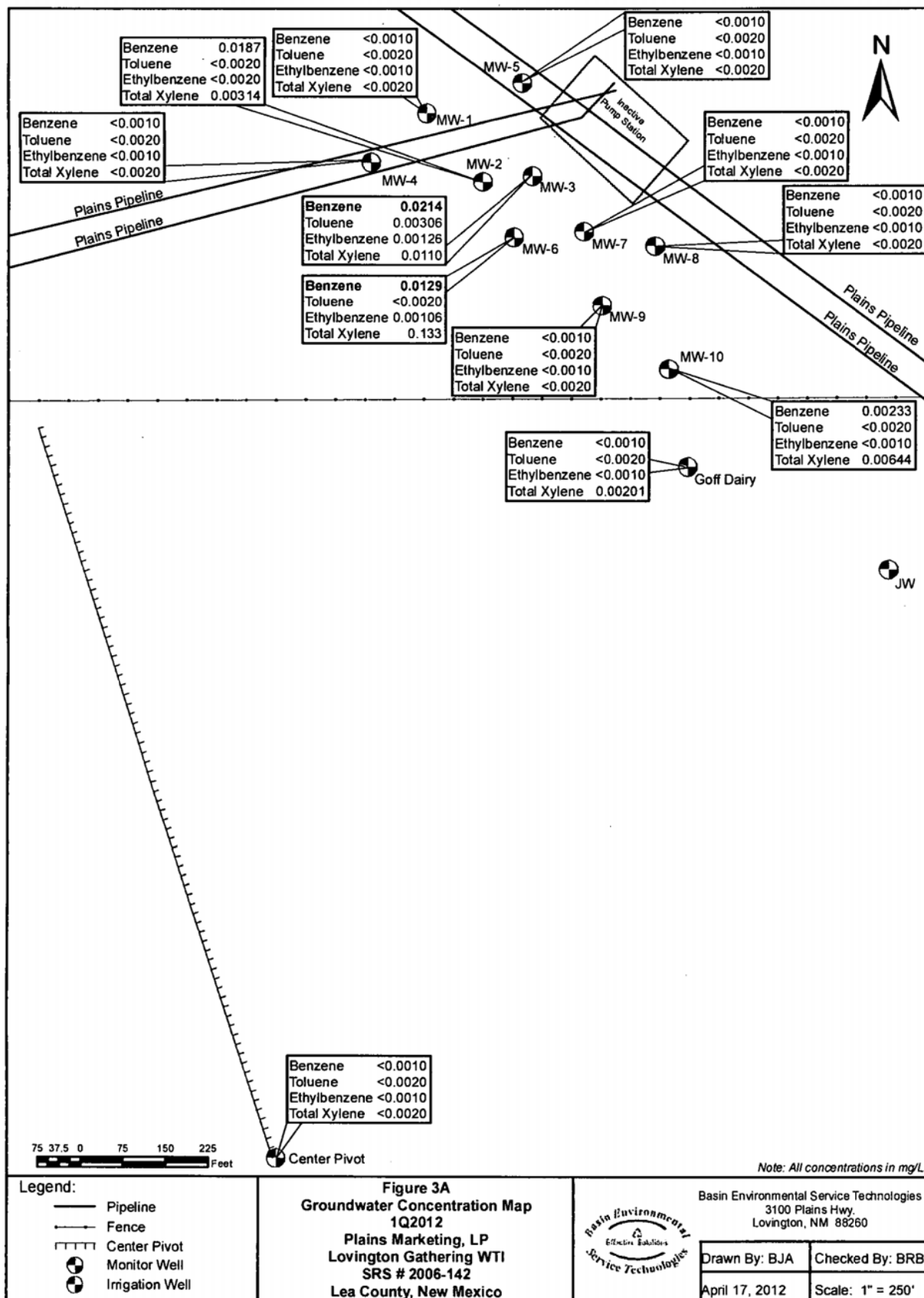
Figure 1
Site Location Map
Plains Marketing, LP
Lovington Gathering WTI
SRS # 2006-142
Lea County, New Mexico

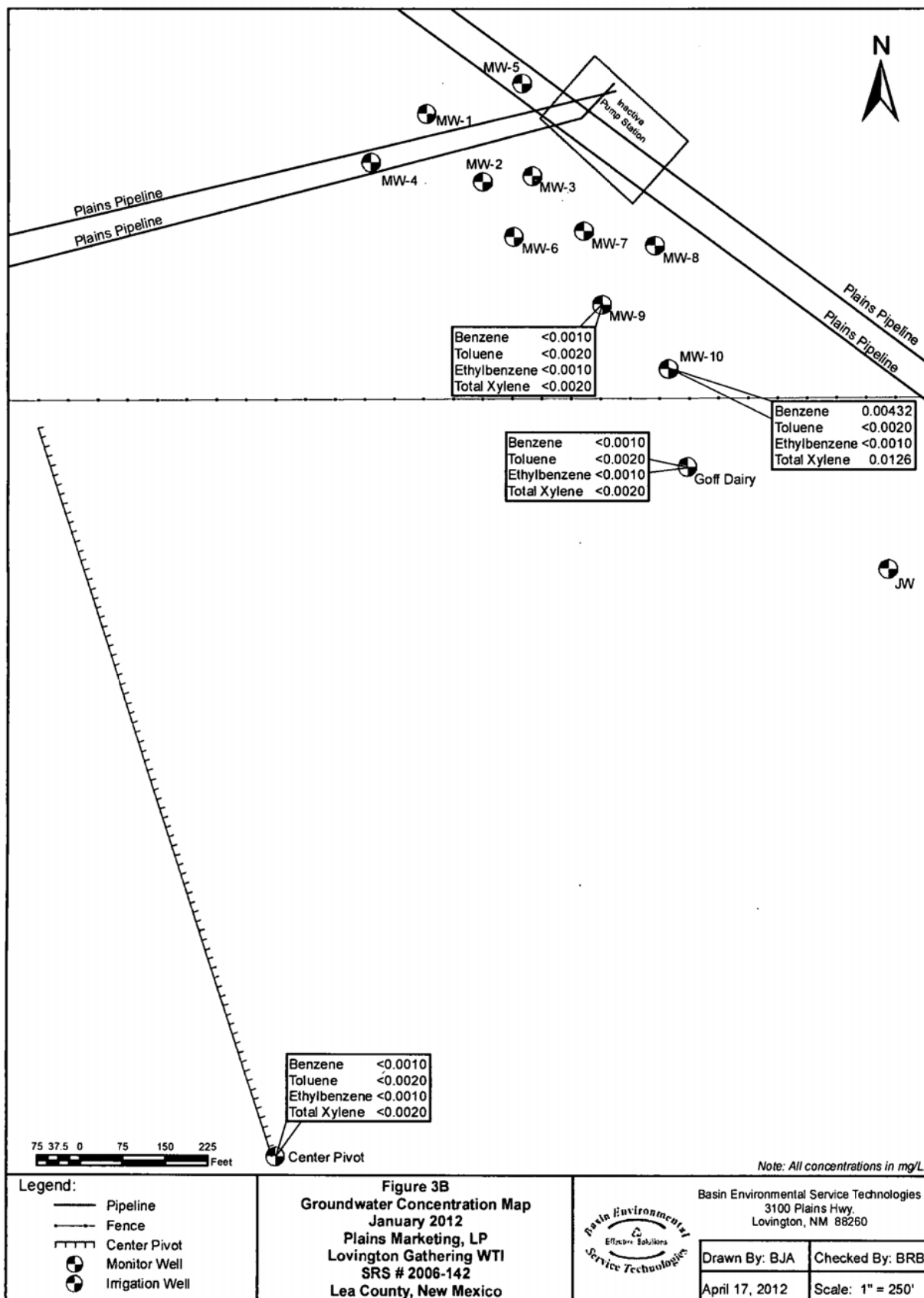
Basin Environmental
Effective Solutions
Service Technologies

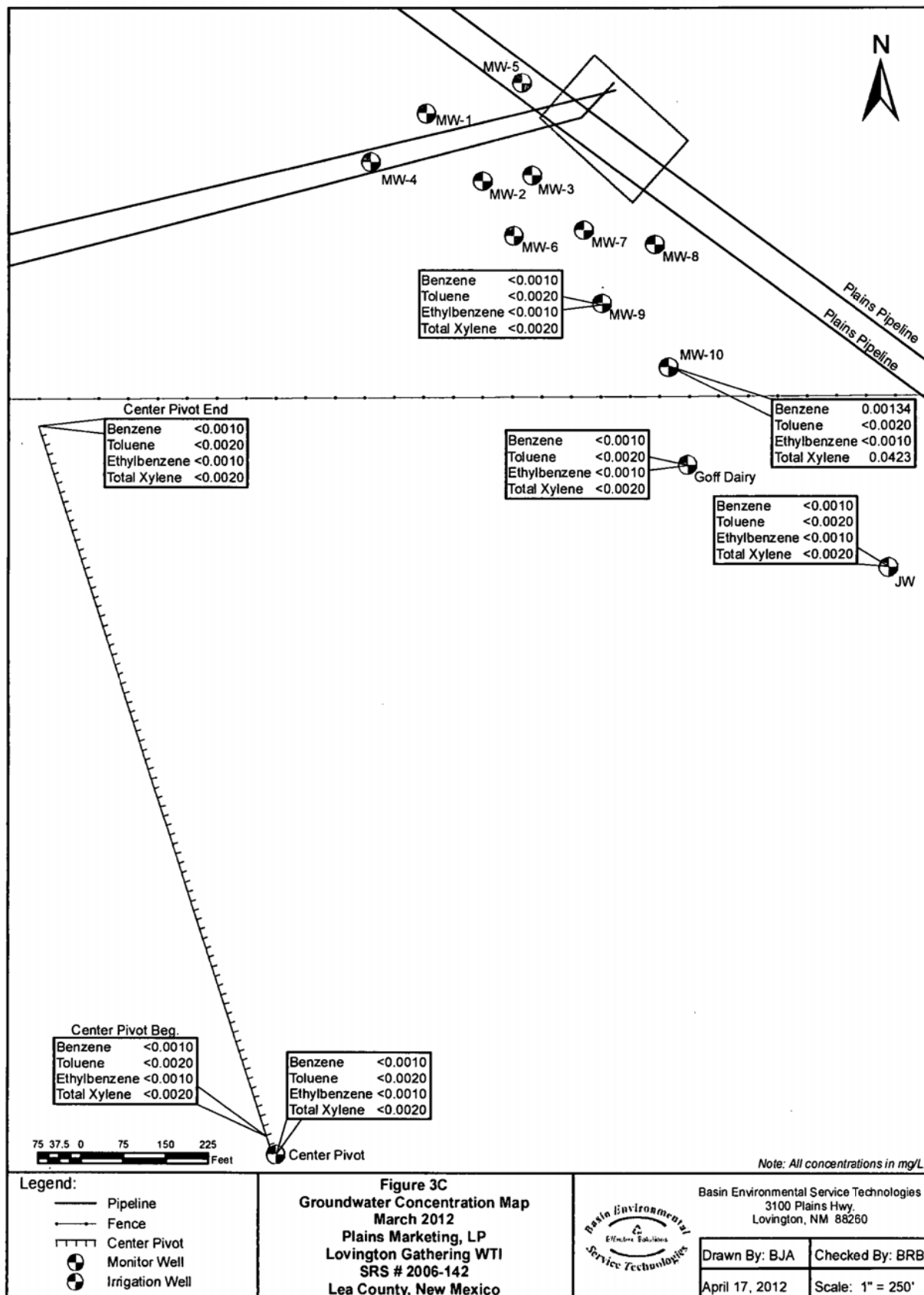
Basin Environmental Service Technologies, LLC
3100 Plains Hwy.
Lovington, NM 88260

Drawn By: BJA
Checked By: BRB
July 8, 2011
Scale: 1" = 200'









Tables

TABLE 1**GROUNDWATER ELEVATION DATA - 1Q2012**

**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	02/06/12	3,806.60	-	86.30	-	3,720.30
MW-2	02/06/12	3,807.31	-	84.20	-	3,723.11
MW-3	02/06/12	3,807.19	-	85.90	-	3,721.29
MW-4	02/06/12	3,807.67	-	86.45	-	3,721.22
MW-5	02/06/12	3,807.30	-	86.00	-	3,721.30
MW-6	02/06/12	3,807.08	-	86.00	-	3,721.08
MW-7	02/06/12	3,807.05	-	86.35	-	3,720.70
MW-8	02/06/12	3,806.89	-	85.80	-	3,721.09
MW-9	02/06/12	3,807.02	-	86.20	-	3,720.82
MW-10	02/06/12	3,806.08	-	90.10	-	3,715.98

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

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

METHODS: EPA SW 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-1	10/5/2006	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-	
"	12/28/2006	<0.0010	<0.0010	<0.0010	0.002	<0.0010	0.002	0.002	-	-	
"	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	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
"	9/17/2008	0.020	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.020	-	-	
"	12/2/2008	0.035	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.035	-	-	
"	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	-	-	
"	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	<0.0010	<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	-	-	
"	2/6/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
MW-2	10/5/2006	0.010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.010	-	-	
"	12/28/2006	0.161	<0.0010	<0.0010	0.024	<0.0010	0.024	0.185	-	-	
"	3/16/2007	0.154	<0.0010	<0.0010	0.015	<0.0010	0.015	0.169	-	-	
"	5/31/2007	0.005	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.005	-	-	
"	9/25/2007	0.050	<0.0010	<0.0010	0.003	<0.0010	0.003	0.053	-	-	
"	11/30/2007	0.928	<0.0010	<0.005	0.036	<0.005	0.036	0.964	-	-	
"	3/11/2008	0.095	<0.0020	<0.0010	0.0032	<0.0010	0.0032	0.098	-	-	

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1 FLUORIDE (mg/L)	SW846-6010C CHROMIUM (mg/L)
		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)		
MW-2	6/14/2008	0.003	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.003	-	-
"	9/17/2008	0.159	<0.0020	<0.0010	0.004	<0.0010	0.004	0.163	-	-
"	12/22/2008	0.050	0.002	<0.0010	0.007	0.001	0.008	0.060	-	-
"	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	-	-
"	2/6/2012	0.00187	<0.0020	<0.0010	0.00212	0.00102	0.00314	0.00501	-	-
MW-3	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	-	-
"	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	-	-
"	12/22/2008	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	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1 (mg/L)	SW846-6010C (mg/L)
		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)		
MW-3	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	-	-
"	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	-	-
"	2/6/2012	0.0214	0.00306	0.00126	0.00751	0.00345	0.0110	0.0367	-	-
MW-4	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	-	-
"	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	-	-
"	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	-	-
"	11/9/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	2/6/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

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

METHODS: EPA SW 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-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	-	-	
"	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	<0.0010	<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	-	-	
"	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	<0.0010	<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	-	-	
"	2/6/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
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	-	-	
"	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	-	-	

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

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

METHODS: EPA SW 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-6	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	-	-		
"	5/25/2010	0.0059	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0059	-	-		
"	8/30/2010	0.0053	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0053	-	-		
"	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	-	-		
"	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	-	-		
"	2/6/2012	0.0129	<0.0020	0.00106	0.133	<0.0010	0.133	0.147	-	-		
MW-7	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	-	-		
"	3/3/2009	0.0775	<0.0020	<0.0010	0.0327	<0.0010	0.0327	0.1102	-	-		
"	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	-	-		
"	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	-	-		

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

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

METHODS: EPA SW 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-7	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	-	-		
"	2/6/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-		
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	-	-		
"	12/2/2008	0.234	0.046	0.008	0.041	0.013	0.054	0.342	-	-		
"	3/3/2009	0.0284	<0.0020	<0.0010	0.0068	<0.0010	0.0068	0.0352	-	-		
"	6/18/2009	0.0045	<0.0020	0.0016	0.0032	<0.0010	0.0032	0.0093	-	-		
"	9/1/2009	0.0013	<0.0020	0.0011	0.0141	<0.0010	0.0141	0.0165	-	-		
"	12/18/2009	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-		
"	3/4/2010	<0.0010	<0.0020	0.0011	<0.0020	<0.0010	<0.0020	0.0011	-	-		
"	5/25/2010	0.0012	<0.0020	0.001	<0.0020	<0.0010	<0.0020	0.0022	-	-		
"	8/30/2010	<0.0010	<0.0020	0.0014	<0.0020	<0.0010	<0.0020	0.0014	-	-		
"	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	0.00154	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	-	-		
"	11/9/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-		
"	2/6/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-		
MW-9	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	-	-		

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1 (mg/L)	SW846-6010C (mg/L)
		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)		
MW-9	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	0.9717	0.0641	<0.0100	0.0867	0.0422	0.1289	1.1647	-	-
"	9/10/2009	1.838	<0.0200	<0.0100	0.0537	<0.0100	0.0537	1.8917	-	-
"	10/5/2009	0.985	<0.0020	<0.0010	0.0442	<0.0010	0.0442	1.0292	-	-
"	12/18/2009	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	3/4/2010	0.0192	<0.0020	<0.0010	0.0027	<0.0010	0.0027	0.0219	-	-
"	5/25/2010	0.0421	<0.0020	<0.0010	0.0063	<0.0010	0.0063	0.0484	-	-
"	8/30/2010	0.1259	<0.0020	<0.0010	0.0344	<0.0010	0.0344	0.1603	-	-
"	11/1/2010	0.0265	<0.0020	<0.0010	0.0097	<0.0010	0.0097	0.0362	-	-
"	3/22/2011	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	-	-
"	11/9/2011	0.00179	<0.0020	<0.0010	0.00349	<0.0010	0.00349	0.00528	-	-
"	12/14/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	1/5/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	2/6/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	3/1/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
MW-10	11/2/2009	<0.005	<0.005	<0.005	<0.010	<0.005	<0.010	<0.010	-	-
"	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	-	-
"	11/1/2010	0.0350	<0.0020	<0.0010	0.0035	<0.0010	0.0035	0.0385	-	-
"	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	-	-
"	11/9/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

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

SAMPLE LOCATION	SAMPLE DATE	BENZENE (mg/L)	METHODS: EPA SW 846-8021b						300.1	SW846-6010C
			TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P-XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENES (mg/L)	TOTAL BTEX (mg/L)		
MMV-10	12/14/2011	0.00846	0.00226	<0.0010	0.0261	<0.0010	0.0261	0.0368	-	-
"	1/5/2012	0.00432	<0.0020	<0.0010	0.0126	<0.0010	0.0126	0.0169	-	-
"	2/6/2012	0.00233	<0.0020	<0.0010	0.00644	<0.0010	0.00644	0.00877	-	-
"	3/1/2012	0.00134	<0.0020	<0.0010	0.00423	<0.0010	0.00423	0.00557	-	-
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	-	-
"	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	-	-
"	12/14/2011	<0.0010	<0.0020	0.00111	<0.0020	<0.0010	<0.0020	0.00111	-	-
"	1/5/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	2/6/2012	<0.0010	<0.0020	0.00111	0.00201	<0.0010	0.00201	0.00201	-	-
"	3/1/2012	<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	-	-
"	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	-	-
"	12/14/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	1/5/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	2/6/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	3/1/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
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	-	-
"	3/1/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1 FLUORIDE (mg/L)	SW846-6010C CHROMIUM (mg/L)
		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)		
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	-	-
"	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	-	-
"	3/1/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
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	-	-
"	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	-	-
"	3/1/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
NMOCDF CRITERIA		0.01	0.75	0.75	TOTAL XYLENES 0.62				1.6	0.05

Appendices

Appendix A

Laboratory Analytical Reports

Analytical Report 434583
for
PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

11-JAN-12

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 (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: AZ00901): Arizona (AZM757)

Xenco Tucson (EPA Lab code: AZ000989): Arizona (AZ0758)



11-JAN-12

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

Reference: XENCO Report No: **434583**
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 434583. 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. 434583 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 434583



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-9	W	01-05-12 08:30		434583-001
MW-10	W	01-05-12 09:20		434583-002
Goff Dairy - Ctr. Pivot Well	W	01-05-12 10:35		434583-003
Goff Dairy Well	W	01-05-12 10:40		434583-004



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

Project Name: Lovington Gathering WTI



Project ID: 2006-142

Work Order Number: 434583

Report Date: 11-JAN-12

Date Received: 01/05/2012

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analysis Summary 434583

PLAINS ALL AMERICA, H&S, Midland, TX



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

Project Name: Lovington Gathering WTI

Date Received in Lab: Thu Jan-05-12 03:10 pm
Report Date: 11-JAN-12
Project Manager: Brent Barron II

Analysis Requested	Lab Id:	434583-001	434583-002	434583-003	434583-004		
	Field Id: Depth: Matrix: Sampled:	MW-9 WATER Jan-05-12 08:30	MW-10 WATER Jan-05-12 09:20	Goff Dairy - Ctr. Pivot Well WATER Jan-05-12 10:35	Goff Dairy Well WATER Jan-05-12 10:40		
BTEX by EPA 8021	Extracted:	Jan-10-12 11:56	Jan-10-12 11:56	Jan-10-12 11:56	Jan-10-12 11:56		
	Analyzed:	Jan-10-12 14:47	Jan-10-12 15:10	Jan-10-12 15:32	Jan-10-12 15:55		
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL		
Benzene		ND 0.00100	0.00432 0.00100	ND 0.00100	ND 0.00100		
Toluene		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		
m,p-Xylenes		ND 0.00200	0.0126 0.00200	ND 0.00200	ND 0.00200		
o-Xylene		ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100		
Xylenes, Total		ND 0.00100	0.0126 0.00100	ND 0.00100	ND 0.00100		
Total BTEX		ND 0.00100	0.0169 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 expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Brent Barron 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.

* 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 **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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(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

ark Orders : 434583,

Project ID: 2006-142

Lab Batch #: 878779

Sample: 434583-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 01/10/12 14:47

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0270	0.0300	90	80-120	
4-Bromofluorobenzene	0.0253	0.0300	84	80-120	

Lab Batch #: 878779

Sample: 434583-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 01/10/12 15:10

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0248	0.0300	83	80-120	
4-Bromofluorobenzene	0.0256	0.0300	85	80-120	

Lab Batch #: 878779

Sample: 434583-003 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 01/10/12 15:32

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Difluorobenzene	0.0259	0.0300	86	80-120	
4-Bromofluorobenzene	0.0302	0.0300	101	80-120	

Lab Batch #: 878779

Sample: 434583-004 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 01/10/12 15:55

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0242	0.0300	81	80-120	
4-Bromofluorobenzene	0.0272	0.0300	91	80-120	

Lab Batch #: 878779

Sample: 616387-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 01/10/12 14:24

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0266	0.0300	89	80-120	
4-Bromofluorobenzene	0.0261	0.0300	87	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] = $100 \cdot A / B$

results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

rk Orders : 434583,

Project ID: 2006-142

Lab Batch #: 878779

Sample: 616387-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 01/10/12 12:53

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0288	0.0300	96	80-120	
4-Bromofluorobenzene	0.0292	0.0300	97	80-120	

Lab Batch #: 878779

Sample: 616387-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 01/10/12 13:16

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0272	0.0300	91	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

Lab Batch #: 878779

Sample: 434583-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 01/10/12 18:35

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0302	0.0300	101	80-120	
4-Bromofluorobenzene	0.0317	0.0300	106	80-120	

Lab Batch #: 878779

Sample: 434583-001 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 01/10/12 18:57

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0265	0.0300	88	80-120	
4-Bromofluorobenzene	0.0275	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] = $100 * A / B$

results are based on MDL and validated for QC purposes.



BS / BSL Recoveries



Project Name: Lovington Gathering WTI

Work Order #: 434583

Analyst: ASA

Lab Batch ID: 878779

Sample: 616387-1-BKS

Date Prepared: 01/10/2012

Batch #: 1

Project ID: 2006-142

Date Analyzed: 01/10/2012

Matrix: Water

Units: mg/L

BTEX by EPA 8021

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	0.108	108	0.100	0.112	112	4	70-125	25	
Toluene	<0.00200	0.100	0.107	107	0.100	0.112	112	5	70-125	25	
Ethylbenzene	<0.00100	0.100	0.113	113	0.100	0.119	119	5	71-129	25	
m,p-Xylenes	<0.00200	0.200	0.219	110	0.200	0.232	116	6	70-131	25	
o-Xylene	<0.00100	0.100	0.109	109	0.100	0.116	116	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



Form 3 - MS^D Recoveries



Project Name: Lovington Gathering WTI

Work Order #: 434583

Project ID: 2006-142

Lab Batch ID: 878779

QC- Sample ID: 434583-001 S

Date Analyzed: 01/10/2012

Date Prepared: 01/10/2012

Batch #: 1 Matrix: Water
Analyst: ASA

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
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	<0.00100	0.100	0.0989	99	0.100	0.0948	95	4	70-125	25	
Toluene	<0.00200	0.100	0.100	100	0.100	0.0960	96	4	70-125	25	
Ethylbenzene	<0.00100	0.100	0.102	102	0.100	0.103	103	1	71-129	25	
m,p-Xylenes	<0.00200	0.200	0.204	102	0.200	0.199	100	2	70-131	25	
o-Xylene	<0.00100	0.100	0.103	103	0.100	0.0993	99	4	71-133	25	

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

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

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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

[illegible]

**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-InClient: PlainDate/Time: 1/5/12 3:10Lab ID #: 434583Initials: AH**Sample Receipt Checklist**

1. Samples on ice?	Blue	<u>Water</u>	No	
2. Shipping container in good condition?	<u>Yes</u>	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	<u>Yes</u>	No	N/A	
4. Chain of Custody present?	<u>Yes</u>	No		
5. Sample instructions complete on chain of custody?	<u>Yes</u>	No		
6. Any missing / extra samples?	Yes	<u>No</u>		
7. Chain of custody signed when relinquished / received?	<u>Yes</u>	No		
8. Chain of custody agrees with sample label(s)?	<u>Yes</u>	No		
9. Container labels legible and intact?	<u>Yes</u>	No		
10. Sample matrix / properties agree with chain of custody?	<u>Yes</u>	No		
1. Samples in proper container / bottle?	<u>Yes</u>	No		
2. Samples properly preserved?	<u>Yes</u>	No	N/A	
13. Sample container intact?	<u>Yes</u>	No		
14. Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No		
15. All samples received within sufficient hold time?	<u>Yes</u>	No		
16. Subcontract of sample(s)?	Yes	No	<u>N/A</u>	
17. VOC sample have zero head space?	<u>Yes</u>	No	N/A	
18. Cooler 1 No.	Cooler 2 No.	Cooler 3 No.	Cooler 4 No.	Cooler 5 No.
lbs <u>3</u> °C	lbs °C	lbs °C	lbs °C	lbs °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 436507
for
PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

16-FEB-12

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: AZ00901): Arizona (AZM757)

Xenco Tucson (EPA Lab code: AZ000989): Arizona (AZ0758)



16-FEB-12

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

Reference: XENCO Report No: **436507**
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 436507. 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. 436507 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 436507



PLAINS ALL AMERICAN EH&S, Midland, TX
Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-1	W	02-06-12 09:10		436507-001
MW-2	W	02-06-12 10:00		436507-002
MW-3	W	02-06-12 10:05		436507-003
MW-4	W	02-06-12 09:35		436507-004
MW-5	W	02-06-12 09:15		436507-005
MW-6	W	02-06-12 10:35		436507-006
MW-7	W	02-06-12 11:30		436507-007
MW-8	W	02-06-12 11:30		436507-008
MW-9	W	02-06-12 11:50		436507-009
MW-10	W	02-06-12 12:00		436507-010



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

Project Name: Lovington Gathering WTI



Project ID: 2006-142

Work Order Number: 436507

Report Date: 16-FEB-12

Date Received: 02/07/2012

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analysis Summary 436507

PLAINS ALL AMERICA H&S, Midland, TX



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

Project Name: Lovington Gathering WTI

Date Received in Lab: Tue Feb-07-12 03:26 pm

Report Date: 16-FEB-12

Project Manager: Brent Barron II

Analysis Requested	Lab Id:	436507-001	436507-002	436507-003	436507-004	436507-005	436507-006
	Field Id:	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
BTEX by EPA 8021	Sampled:	Feb-06-12 09:10	Feb-06-12 10:00	Feb-06-12 10:05	Feb-06-12 09:35	Feb-06-12 09:15	Feb-06-12 10:35
	Extracted:	Feb-08-12 16:00	Feb-08-12 16:00	Feb-08-12 16:00	Feb-08-12 16:00	Feb-08-12 16:00	Feb-08-12 16:00
	Analyzed:	Feb-09-12 14:09	Feb-09-12 14:32	Feb-09-12 14:55	Feb-09-12 15:18	Feb-09-12 15:41	Feb-09-12 16:08
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Benzene	BRL	0.00100	0.00187	0.0214	0.00100	BRL	0.0129
Toluene	BRL	0.00200	BRL	0.00306	0.00200	BRL	BRL
Ethylbenzene	BRL	0.00100	BRL	0.00126	0.00100	BRL	0.00106
m,p-Xylenes	BRL	0.00200	0.00212	0.00200	BRL	0.00200	0.133
o-Xylene	BRL	0.00100	0.00102	0.00345	BRL	0.00100	BRL
Xylenes, Total	BRL	0.00100	0.00314	0.0110	BRL	0.00100	0.133
Total BTEX	BRL	0.00100	0.00501	0.0367	BRL	BRL	0.147

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

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Brent Barron II

Odessa Laboratory Manager



Certificate of Analysis Summary 436507
PLAINS ALL AMERICA H&S, Midland, TX



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

Project Name: Lovington Gathering WTI

Date Received in Lab: Tue Feb-07-12 03:26 pm

Report Date: 16-FEB-12

Project Manager: Brent Barron II

Analysis Requested	Lab Id:	436507-007	436507-008	436507-009	436507-010		
	Field Id: Depth: Matrix: Sampled:	MW-7 WATER Feb-06-12 11:30	MW-8 WATER Feb-06-12 11:30	MW-9 WATER Feb-06-12 11:50	MW-10 WATER Feb-06-12 12:00		
BTEX by EPA 8021	Extracted: Analyzed: Units/RL:	Feb-08-12 16:00 Feb-09-12 16:31 mg/L RL	Feb-13-12 13:00 Feb-14-12 08:18 mg/L RL	Feb-13-12 13:00 Feb-14-12 08:40 mg/L RL	Feb-13-12 13:00 Feb-14-12 09:03 mg/L RL		
	Benzene	BRL 0.00100	BRL 0.00100	BRL 0.00100	0.00233 0.00100		
	Toluene	BRL 0.00200	BRL 0.00200	BRL 0.00200	BRL 0.00200		
	Ethylbenzene	BRL 0.00100	BRL 0.00100	BRL 0.00100	BRL 0.00100		
	m,p-Xylenes	BRL 0.00200	BRL 0.00200	BRL 0.00200	0.00644 0.00200		
	o-Xylene	BRL 0.00100	BRL 0.00100	BRL 0.00100	BRL 0.00100		
	Xylenes, Total	BRL 0.00100	BRL 0.00100	BRL 0.00100	0.00644 0.00100		
	Total BTEX	BRL 0.00100	BRL 0.00100	BRL 0.00100	0.00877 0.00100		

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

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Brent Barron 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.
- * 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 **LOQ** Limit of Quantitation
- DL** Method Detection Limit
- NC** Non-Calculable
- + NELAC certification not offered for this compound.
- * (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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 5332 Blackberry Drive, San Antonio TX 78238
 2505 North Falkenburg Rd, Tampa, FL 33619
 12600 West I-20 East, Odessa, TX 79765
 6017 Financial Drive, Norcross, GA 30071
 3725 E. Atlanta Ave, Phoenix, AZ 85040

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
(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

rk Orders : 436507,

Project ID: 2006-142

Lab Batch #: 881126

Sample: 436507-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/09/12 14:09

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0272	0.0300	91	80-120	
4-Bromofluorobenzene	0.0313	0.0300	104	80-120	

Lab Batch #: 881126

Sample: 436507-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/09/12 14:32

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0265	0.0300	88	80-120	
4-Bromofluorobenzene	0.0318	0.0300	106	80-120	

Lab Batch #: 881126

Sample: 436507-003 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/09/12 14:55

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0266	0.0300	89	80-120	
4-Bromofluorobenzene	0.0303	0.0300	101	80-120	

Lab Batch #: 881126

Sample: 436507-004 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/09/12 15:18

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0272	0.0300	91	80-120	
4-Bromofluorobenzene	0.0320	0.0300	107	80-120	

Lab Batch #: 881126

Sample: 436507-005 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/09/12 15:41

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0273	0.0300	91	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] = $100 \times A / B$

results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

rk Orders : 436507,

Project ID: 2006-142

Lab Batch #: 881126

Sample: 436507-006 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/09/12 16:08

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0266	0.0300	89	80-120	
4-Bromofluorobenzene	0.0300	0.0300	100	80-120	

Lab Batch #: 881126

Sample: 436507-007 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/09/12 16:31

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0283	0.0300	94	80-120	
4-Bromofluorobenzene	0.0307	0.0300	102	80-120	

Lab Batch #: 881446

Sample: 436507-008 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/14/12 08:18

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0286	0.0300	95	80-120	
4-Bromofluorobenzene	0.0329	0.0300	110	80-120	

Lab Batch #: 881446

Sample: 436507-009 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/14/12 08:40

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0281	0.0300	94	80-120	
4-Bromofluorobenzene	0.0318	0.0300	106	80-120	

Lab Batch #: 881446

Sample: 436507-010 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/14/12 09:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0270	0.0300	90	80-120	
4-Bromofluorobenzene	0.0311	0.0300	104	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] = $100 \cdot A / B$

results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

rk Orders : 436507,

Project ID: 2006-142

Lab Batch #: 881126

Sample: 617727-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/09/12 07:09

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0271	0.0300	90	80-120	
4-Bromofluorobenzene	0.0316	0.0300	105	80-120	

Lab Batch #: 881446

Sample: 617887-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/14/12 06:45

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0282	0.0300	94	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

Lab Batch #: 881126

Sample: 617727-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/09/12 05:40

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0292	0.0300	97	80-120	
4-Bromofluorobenzene	0.0331	0.0300	110	80-120	

Lab Batch #: 881446

Sample: 617887-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/14/12 05:15

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0298	0.0300	99	80-120	
4-Bromofluorobenzene	0.0326	0.0300	109	80-120	

Lab Batch #: 881126

Sample: 617727-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/09/12 06:02

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0292	0.0300	97	80-120	
4-Bromofluorobenzene	0.0335	0.0300	112	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] = $100 * A / B$

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



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

rk Orders : 436507,

Project ID: 2006-142

Lab Batch #: 881446

Sample: 617887-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/14/12 05:38

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0298	0.0300	99	80-120	
4-Bromofluorobenzene	0.0324	0.0300	108	80-120	

Lab Batch #: 881126

Sample: 436417-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/09/12 11:17

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0289	0.0300	96	80-120	
4-Bromofluorobenzene	0.0335	0.0300	112	80-120	

Lab Batch #: 881446

Sample: 436706-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/14/12 12:28

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0360	0.0300	120	80-120	

Lab Batch #: 881126

Sample: 436417-001 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/09/12 11:40

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0293	0.0300	98	80-120	
4-Bromofluorobenzene	0.0350	0.0300	117	80-120	

Lab Batch #: 881446

Sample: 436706-001 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/14/12 12:51

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0349	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] = $100 * A / B$

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



BS / BSI Recoveries



Project Name: Lovington Gathering WTI

Work Order #: 436507

Analyst: ASA

Lab Batch ID: 881126

Sample: 61787-1-BKS

Units: mg/L

Date Prepared: 02/08/2012

Batch #: 1

Project ID: 2006-142

Date Analyzed: 02/09/2012

Matrix: Water

Units: mg/L											
BLANK/BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
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	0.0926	93	0.100	0.0941	94	2	70-125	25	
Toluene	<0.00200	0.100	0.0915	92	0.100	0.0928	93	1	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0903	90	0.100	0.0917	92	2	71-129	25	
m,p-Xylenes	<0.00200	0.200	0.184	92	0.200	0.187	94	2	70-131	25	
o-Xylene	<0.00100	0.100	0.0936	94	0.100	0.0948	95	1	71-133	25	

Analyst: ASA

Lab Batch ID: 881446

Sample: 61787-1-BKS

Units: mg/L

Date Prepared: 02/13/2012

Batch #: 1

Date Analyzed: 02/14/2012

Matrix: Water

Units: mg/L													
BLANK/BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY													
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
Analytes													
Benzene			<0.00100	0.100	0.0912	91	0.100	0.0879	88	4	70-125	25	
Toluene			<0.00200	0.100	0.0899	90	0.100	0.0868	87	4	70-125	25	
Ethylbenzene			<0.00100	0.100	0.0888	89	0.100	0.0857	86	4	71-129	25	
m,p-Xylenes			<0.00200	0.200	0.182	91	0.200	0.176	88	3	70-131	25	
o-Xylene			<0.00100	0.100	0.0921	92	0.100	0.0893	89	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 - M^c MSD Recoveries

Project Name: Lovington Gathering WTI



Work Order #: 436507

Lab Batch ID: 881126

Date Analyzed: 02/09/2012

Reporting Units: mg/L

Project ID: 2006-142

QC-Sample ID: 436417-001 S

Date Prepared: 02/08/2012

Batch #: 1 Matrix: Water
Analyst: ASA

Reporting Units: mg/L		MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY									
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	<0.00100	0.100	0.0892	89	0.100	0.0941	94	5	70-125	25	
Toluene	<0.00200	0.100	0.0870	87	0.100	0.0922	92	6	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0864	86	0.100	0.0918	92	6	71-129	25	
m,p-Xylenes	<0.00200	0.200	0.175	88	0.200	0.184	92	5	70-131	25	
o-Xylene	<0.00100	0.100	0.0862	86	0.100	0.0921	92	7	71-133	25	

Lab Batch ID: 881446

Date Analyzed: 02/14/2012

Reporting Units: mg/L

QC-Sample ID: 436706-001 S

Date Prepared: 02/13/2012

Batch #: 1 Matrix: Water
Analyst: ASA

Reporting Units: mg/L		MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY									
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	<0.00100	0.100	0.0853	85	0.100	0.0972	97	13	70-125	25	
Toluene	<0.00200	0.100	0.0850	85	0.100	0.0953	95	11	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0837	84	0.100	0.0928	93	10	71-129	25	
m,p-Xylenes	<0.00200	0.200	0.166	83	0.200	0.178	89	7	70-131	25	
o-Xylene	<0.00100	0.100	0.0885	89	0.100	0.0960	96	8	71-133	25	

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

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

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable

Xe o 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. Arguilo

Project Name: Lovington Gathering WTI

Company Name: Basin Environmental Service Technologies, LLC

Project #: 2006-142

Company Address: P. O. Box 301

Project Loc: Lea County, NM

City/State/Zip: Lovington, NM 88260

PO #: PAA-J. Henry

Telephone No: (575) 396-2378

Fax No: (575) 396-1429

Report Format:

☒ Standard ☐ TRRP ☐ NPDES

Sampler Signature: *Michael Henry*

e-mail: bjarquilo@basinenv.com

(lab use only)

ORDER #: 436507

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO ₃	HCl	H ₂ SO ₄	NaOH	Na ₂ S ₂ O ₃	None	Other (Specify)	DW = Drinking Water SL = Sludge GW = Groundwater S= Soil/Solid NP = Non-Potable Specify Other	TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO ₄ , Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg S	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY	
-001	MW-1			2/6/2012	09:10		3	X	X	X						GW													X	X
-002	MW-2			2/6/2012	10:00	20	3	X	X	X						GW													X	X
-003	MW-3			2/6/2012	10:05		3	X	X	X						GW													X	X
-004	MW-4			2/6/2012	09:35		3	X	X	X						GW													X	X
-005	MW-5			2/6/2012	09:15		3	X	X	X						GW													X	X
-006	MW-6			2/6/2012	10:35		3	X	X	X						GW													X	X
-007	MW-7			2/6/2012	11:30		3	X	X	X						GW													X	X
-008	MW-8			2/6/2012	11:30		3	X	X	X						GW													X	X
-009	MW-9			2/6/2012	11:50		3	X	X	X						GW													X	X
-010	MW-10			2/6/2012	12:00		3	X	X	X						GW													X	X

Special Instructions:

Relinquished by: *Michael Henry*

Date: 2/7/12

Time: 12:40

Received by:

Date: 2/7/12

Time: 12:40

Relinquished by:

Date:

Time:

Received by:

Date:

Time:

Relinquished by:

Date:

Time:

Received by:

Date:

Time:

Laboratory Comments:
Sample Containers Intact? ☒
VOCs Free of Headspace? ☒
Labels on container(s) ☒
Custody seals on container(s) ☒
Custody seals on cooler(s) ☒
Sample Being Delivered ☒
By Sampler/Client Rep.? ☒
by Courier? ☒
UPS ☒ DHL ☒ FedEx ☒ Lone Star ☒
Temperature Upon Receipt: 3 °C



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: Basin Env. / Plains
Date/Time: 2.7.12 12:40
Lab ID #: 436507
Initials: BB / RE

Sample Receipt Checklist

1. Samples on ice?	Blue	<u>Water</u>	No	
2. Shipping container in good condition?	<u>Yes</u>	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	<u>Yes</u>	No	N/A	
4. Chain of Custody present?	<u>Yes</u>	No		
5. Sample instructions complete on chain of custody?	<u>Yes</u>	No		
6. Any missing / extra samples?	Yes	<u>No</u>		
7. Chain of custody signed when relinquished / received?	<u>Yes</u>	No		
8. Chain of custody agrees with sample label(s)?	<u>Yes</u>	No		
9. Container labels legible and intact?	<u>Yes</u>	No		
10. Sample matrix / properties agree with chain of custody?	<u>Yes</u>	No		
11. Samples in proper container / bottle?	<u>Yes</u>	No		
12. Samples properly preserved?	<u>Yes</u>	No	N/A	
13. Sample container intact?	<u>Yes</u>	No		
14. Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No		
15. All samples received within sufficient hold time?	<u>Yes</u>	No		
16. Subcontract of sample(s)?	Yes	No	<u>N/A</u>	
17. VOC sample have zero head space?	<u>Yes</u>	No	N/A	
18. Cooler 1 No.	Cooler 2 No.	Cooler 3 No.	Cooler 4 No.	Cooler 5 No.
lbs <u>3.0</u> °C	lbs °C	lbs °C	lbs °C	lbs °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 436506
for
PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

16-FEB-12

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: AZ00901): Arizona (AZM757)

Xenco Tucson (EPA Lab code: AZ000989): Arizona (AZ0758)



16-FEB-12

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

Reference: XENCO Report No: **436506**
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 436506. 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. 436506 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 436506



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Goff Dairy Well	W	02-06-12 14:10		436506-001
Goff Dairy - Ctr Pivot Well	W	02-06-12 13:20		436506-002



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

Project Name: Lovington Gathering WTI



Project ID: 2006-142

Work Order Number: 436506

Report Date: 16-FEB-12

Date Received: 02/07/2012

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analysis Summary 436506

PLAINS ALL AMERICA, H&S, Midland, TX



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

Project Name: Lovington Gathering WTI

Date Received in Lab: Tue Feb-07-12 03:26 pm
Report Date: 16-FEB-12
Project Manager: Brent Barron II

Analysis Requested	Lab Id:	Field Id:	Depth:	Matrix:	Sampled:	436506-001	436506-002		
	Field Id:	Depth:	Matrix:	Sampled:	Extracted:	Analysed:	Units/RL:		
BTEx by EPA 8021									
Benzene									
Toluene									
Ethylbenzene									
m,p-Xylenes									
o-Xylene									
Xylenes, Total									
Total BTEx									

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.

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.
- 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 **LOQ** Limit of Quantitation
- DL** Method Detection Limit
- NC** Non-Calculable
- + NELAC certification not offered for this compound.
- * (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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4143 Greenbriar Dr, Stafford, TX 77477
 9701 Harry Hines Blvd , Dallas, TX 75220
 5332 Blackberry Drive, San Antonio TX 78238
 2505 North Falkenburg Rd, Tampa, FL 33619
 12600 West I-20 East, Odessa, TX 79765
 6017 Financial Drive, Norcross, GA 30071
 3725 E. Atlanta Ave, Phoenix, AZ 85040

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
(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

rk Orders : 436506,

Project ID: 2006-142

Lab Batch #: 881126

Sample: 436506-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/09/12 13:46

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0273	0.0300	91	80-120	
4-Bromofluorobenzene	0.0330	0.0300	110	80-120	

Lab Batch #: 881446

Sample: 436506-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/14/12 07:52

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0274	0.0300	91	80-120	
4-Bromofluorobenzene	0.0314	0.0300	105	80-120	

Lab Batch #: 881126

Sample: 617727-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/09/12 07:09

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0271	0.0300	90	80-120	
4-Bromofluorobenzene	0.0316	0.0300	105	80-120	

Lab Batch #: 881446

Sample: 617887-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/14/12 06:45

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0282	0.0300	94	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

Lab Batch #: 881126

Sample: 617727-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/09/12 05:40

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0292	0.0300	97	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] = $100 \times A / B$

Results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

rk Orders : 436506,

Project ID: 2006-142

Lab Batch #: 881446

Sample: 617887-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/14/12 05:15

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0298	0.0300	99	80-120	
4-Bromofluorobenzene	0.0326	0.0300	109	80-120	

Lab Batch #: 881126

Sample: 617727-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/09/12 06:02

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0292	0.0300	97	80-120	
4-Bromofluorobenzene	0.0335	0.0300	112	80-120	

Lab Batch #: 881446

Sample: 617887-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/14/12 05:38

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Difluorobenzene	0.0298	0.0300	99	80-120	
4-Bromofluorobenzene	0.0324	0.0300	108	80-120	

Lab Batch #: 881126

Sample: 436417-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/09/12 11:17

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0289	0.0300	96	80-120	
4-Bromofluorobenzene	0.0335	0.0300	112	80-120	

Lab Batch #: 881446

Sample: 436706-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/14/12 12:28

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0360	0.0300	120	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] = $100 \cdot A / B$

Results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

rk Orders : 436506,
Lab Batch #: 881126

Sample: 436417-001 SD / MSD

Project ID: 2006-142
Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/09/12 11:40

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0293	0.0300	98	80-120	
4-Bromofluorobenzene	0.0350	0.0300	117	80-120	

Lab Batch #: 881446

Sample: 436706-001 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/14/12 12:51

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0349	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] = $100 * A / B$

^11 results are based on MDL and validated for QC purposes.



BS / BS_i Recoveries



Project Name: Lovington Gathering WTI

Work Order #: 436506

Analyst: ASA

Date Prepared: 02/08/2012

Project ID: 2006-142

Date Analyzed: 02/09/2012

Lab Batch ID: 881126

Batch #: 1

Matrix: Water

Units: mg/L

BLANK/BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	BTEX by EPA 8021										Flag
	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	
Benzene	<0.00100	0.100	0.0926	93	0.100	0.0941	94	2	70-125	25	
Toluene	<0.00200	0.100	0.0915	92	0.100	0.0928	93	1	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0903	90	0.100	0.0917	92	2	71-129	25	
m,p-Xylenes	<0.00200	0.200	0.184	92	0.200	0.187	94	2	70-131	25	
o-Xylene	<0.00100	0.100	0.0936	94	0.100	0.0948	95	1	71-133	25	

Analyst: ASA

Lab Batch ID: 881446

Sample: 617887-1-BKS

Date Prepared: 02/13/2012

Date Analyzed: 02/14/2012

Matrix: Water

Units: mg/L

BLANK/BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	BTEX by EPA 8021										Flag
	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	
Benzene	<0.00100	0.100	0.0912	91	0.100	0.0879	88	4	70-125	25	
Toluene	<0.00200	0.100	0.0899	90	0.100	0.0868	87	4	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0888	89	0.100	0.0857	86	4	71-129	25	
m,p-Xylenes	<0.00200	0.200	0.182	91	0.200	0.176	88	3	70-131	25	
o-Xylene	<0.00100	0.100	0.0921	92	0.100	0.0893	89	3	71-133	25	

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



Form 3 - MSD Recoveries

Project Name: Lovington Gathering WTI



Work Order #: 436506

Lab Batch ID: 881126

Date Analyzed: 02/09/2012

Reporting Units: mg/L

Project ID: 2006-142

QC Sample ID: 436417-001 S

Date Prepared: 02/08/2012

Batch #: 1
Analyst: ASA
Matrix: Water

Reporting Units: mg/L		MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY									
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	<0.00100	0.100	0.0892	89	0.100	0.0941	94	5	70-125	25	
Toluene	<0.00200	0.100	0.0870	87	0.100	0.0922	92	6	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0864	86	0.100	0.0918	92	6	71-129	25	
m,p-Xylenes	<0.00200	0.200	0.175	88	0.200	0.184	92	5	70-131	25	
o-Xylene	<0.00100	0.100	0.0862	86	0.100	0.0921	92	7	71-133	25	

Lab Batch ID: 881446

Date Analyzed: 02/14/2012

QC Sample ID: 436706-001 S

Date Prepared: 02/13/2012

Batch #: 1
Analyst: ASA
Matrix: Water

Reporting Units: mg/L		MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
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		<0.00100	0.100	0.0853	85	0.100	0.0972	97	13	70-125	25	
Toluene		<0.00200	0.100	0.0850	85	0.100	0.0953	95	11	70-125	25	
Ethylbenzene		<0.00100	0.100	0.0837	84	0.100	0.0928	93	10	71-129	25	
m,p-Xylenes		<0.00200	0.200	0.166	83	0.200	0.178	89	7	70-131	25	
o-Xylene		<0.00100	0.100	0.0885	89	0.100	0.0960	96	8	71-133	25	

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

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

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



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: Basin Env. / Plains
Date/Time: 2.7.12 12:40
Lab ID #: 436506
Initials: BB / RE

Sample Receipt Checklist

1. Samples on ice?	Blue	<u>Water</u>	No	
2. Shipping container in good condition?	<u>Yes</u>	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	<u>Yes</u>	No	N/A	
4. Chain of Custody present?	<u>Yes</u>	No		
5. Sample instructions complete on chain of custody?	<u>Yes</u>	No		
6. Any missing / extra samples?	Yes	<u>No</u>		
7. Chain of custody signed when relinquished / received?	<u>Yes</u>	No		
8. Chain of custody agrees with sample label(s)?	<u>Yes</u>	No		
9. Container labels legible and intact?	<u>Yes</u>	No		
10. Sample matrix / properties agree with chain of custody?	<u>Yes</u>	No		
11. Samples in proper container / bottle?	<u>Yes</u>	No		
12. Samples properly preserved?	<u>Yes</u>	No	N/A	
13. Sample container intact?	<u>Yes</u>	No		
14. Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No		
15. All samples received within sufficient hold time?	<u>Yes</u>	No		
16. Subcontract of sample(s)?	Yes	No	<u>N/A</u>	
17. VOC sample have zero head space?	<u>Yes</u>	No	N/A	
18. Cooler 1 No.	Cooler 2 No.	Cooler 3 No.	Cooler 4 No.	Cooler 5 No.
lbs <u>3.0</u> °C	lbs °C	lbs °C	lbs °C	lbs °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 437983
for
PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

07-MAR-12

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)

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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)



07-MAR-12

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

Reference: XENCO Report No: **437983**
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 437983. 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. 437983 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 437983



PLAINS ALL AMERICAN EH&S, Midland, TX
Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-9	W	03-01-12 08:30		437983-001
MW-10	W	03-01-12 08:45		437983-002
Goff Dairy Well	W	03-01-12 07:45		437983-003
Goff Dairy - Ctr. Pivot Well	W	03-01-12 07:55		437983-004
Goff Dairy - Ctr. Pivot Beg.	W	03-01-12 08:00		437983-005
Goff Dairy - Ctr. Pivot End	W	03-01-12 08:15		437983-006
JW Well	W	03-01-12 07:30		437983-007



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

Project Name: Lovington Gathering WTI



Project ID: 2006-142

Work Order Number: 437983

Report Date: 07-MAR-12

Date Received: 03/01/2012

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analysis Summary 437983

PLAINS ALL AMERICA H&S, Midland, TX



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

Project Name: Lovington Gathering WTI

Date Received in Lab: Thu Mar-01-12 01:15 pm

Report Date: 07-MAR-12

Project Manager: Brent Barron II

Analysis Requested		Lab Id:	437983-001	437983-002	437983-003	437983-004	437983-005	437983-006
		Field Id:	MW-9	MW-10	Goff Dairy Well	Goff Dairy - Ctr. Pivot Well	Goff Dairy - Ctr. Pivot Beg.	Goff Dairy - Ctr. Pivot End
		Depth:						
		Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
		Sampled:	Mar-01-12 08:30	Mar-01-12 08:45	Mar-01-12 07:45	Mar-01-12 07:55	Mar-01-12 08:00	Mar-01-12 08:15
BTEX by EPA 8021		Extracted:	Mar-02-12 10:04	Mar-02-12 10:04	Mar-02-12 10:04	Mar-02-12 10:04	Mar-02-12 10:04	Mar-02-12 10:04
		Analyzed:	Mar-02-12 16:56	Mar-02-12 19:14	Mar-02-12 19:37	Mar-02-12 20:00	Mar-02-12 20:23	Mar-02-12 20:46
		Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Benzene			ND 0.00100	0.00134 0.00100	ND 0.00100	ND 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	ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100
m_p-Xylenes			ND 0.00200	0.00423 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			ND 0.00100	0.00423 0.00100	ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100
Total BTEX			ND 0.00100	0.00557 0.00100	ND 0.00100	ND 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 interpretation and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Brent Barron II

Odessa Laboratory Manager



Certificate of Analysis Summary 437983
PLAINS ALL AMERICA ,H&S, Midland, TX



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

Project Name: Lovington Gathering WTI

Date Received in Lab: Thu Mar-01-12 01:15 pm
Report Date: 07-MAR-12
Project Manager: Brent Barron II

Analysis Requested	Lab Id:	437983-007				
	Field Id:	JW Well				
	Depth:					
	Matrix:	WATER				
	Sampled:	Mar-01-12 07:30				
BTEX by EPA 8021	Extracted:	Mar-02-12 10:04				
	Analyzed:	Mar-02-12 21:09				
	Units/RL:	mg/L RL				
Benzene		ND 0.00100				
Toluene		ND 0.00200				
Ethylbenzene		ND 0.00100				
m,p-Xylenes		ND 0.00200				
o-Xylene		ND 0.00100				
Xylenes, Total		ND 0.00100				
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 interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Brent Barron 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.
- * 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 **LOQ** Limit of Quantitation
- DL** Method Detection Limit
- NC** Non-Calculable
- + NELAC certification not offered for this compound.
- * (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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(813) 620-2000	(813) 620-2033
(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

rk Orders : 437983,

Project ID: 2006-142

Lab Batch #: 882799

Sample: 437983-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/02/12 16:56

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0276	0.0300	92	80-120	
4-Bromofluorobenzene	0.0305	0.0300	102	80-120	

Lab Batch #: 882799

Sample: 437983-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/02/12 19:14

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0263	0.0300	88	80-120	
4-Bromofluorobenzene	0.0295	0.0300	98	80-120	

Lab Batch #: 882799

Sample: 437983-003 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/02/12 19:37

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Difluorobenzene	0.0275	0.0300	92	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

Lab Batch #: 882799

Sample: 437983-004 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/02/12 20:00

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0278	0.0300	93	80-120	
4-Bromofluorobenzene	0.0317	0.0300	106	80-120	

Lab Batch #: 882799

Sample: 437983-005 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/02/12 20:23

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0276	0.0300	92	80-120	
4-Bromofluorobenzene	0.0309	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] = $100 * A / B$

* " results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

rk Orders : 437983,

Project ID: 2006-142

Lab Batch #: 882799

Sample: 437983-006 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/02/12 20:46

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0274	0.0300	91	80-120	
4-Bromofluorobenzene	0.0311	0.0300	104	80-120	

Lab Batch #: 882799

Sample: 437983-007 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/02/12 21:09

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0273	0.0300	91	80-120	
4-Bromofluorobenzene	0.0298	0.0300	99	80-120	

Lab Batch #: 882799

Sample: 618710-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/02/12 13:08

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Difluorobenzene	0.0274	0.0300	91	80-120	
4-Bromofluorobenzene	0.0304	0.0300	101	80-120	

Lab Batch #: 882799

Sample: 618710-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/02/12 11:36

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0268	0.0300	89	80-120	
4-Bromofluorobenzene	0.0322	0.0300	107	80-120	

Lab Batch #: 882799

Sample: 618710-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/02/12 11:59

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0271	0.0300	90	80-120	
4-Bromofluorobenzene	0.0334	0.0300	111	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] = $100 * A / B$

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



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

rk Orders : 437983,

Project ID: 2006-142

Lab Batch #: 882799

Sample: 437966-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/02/12 17:42

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0272	0.0300	91	80-120	
4-Bromofluorobenzene	0.0334	0.0300	111	80-120	

Lab Batch #: 882799

Sample: 437966-001 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/02/12 18:05

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0274	0.0300	91	80-120	
4-Bromofluorobenzene	0.0334	0.0300	111	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] = $100 * A / B$

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



BS / BS recoveries



Project Name: Lovington Gathering WTI

Work Order #: 437983

Analyst: ASA

Lab Batch ID: 882799

Sample: 618710-1-BKS

Date Prepared: 03/02/2012

Batch #: 1

Project ID: 2006-142

Date Analyzed: 03/02/2012

Matrix: Water

Units: mg/L

BTEX by EPA 8021

Analytes	BLANK/BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank %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	0.0935	94	0.100	0.0889	89	5	70-125	25	
Toluene	<0.00200	0.100	0.0966	97	0.100	0.0920	92	5	70-125	25	
Ethylbenzene	<0.00100	0.100	0.102	102	0.100	0.0951	95	7	71-129	25	
m,p-Xylenes	<0.00200	0.200	0.213	107	0.200	0.205	103	4	70-131	25	
o-Xylene	<0.00100	0.100	0.101	101	0.100	0.0971	97	4	71-133	25	

Relative Percent Difference RPD = $200 \cdot |(C-F)/(C+F)|$

Blank Spike Recovery [D] = $100 \cdot (C)/(B)$

Blank Spike Duplicate Recovery [G] = $100 \cdot (F)/(E)$

All results are based on MDL and Validated for QC Purposes



Form 3 - MSD Recoveries

Project Name: Lovington Gathering WTI



Work Order #: 437983

Lab Batch ID: 882799

Date Analyzed: 03/02/2012

Reporting Units: mg/L

QC-Sample ID: 437966-001 S

Date Prepared: 03/02/2012

Batch #: 1
Analyst: ASA

Matrix: Water

Project ID: 2006-142

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

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	<0.00100	0.100	0.0950	95	0.100	0.0972	97	2	70-125	25	
Toluene	<0.00200	0.100	0.0976	98	0.100	0.0993	99	2	70-125	25	
Ethylbenzene	<0.00100	0.100	0.100	100	0.100	0.100	100	0	71-129	25	
m,p-Xylenes	<0.00200	0.200	0.208	104	0.200	0.207	104	0	70-131	25	
o-Xylene	<0.00100	0.100	0.101	101	0.100	0.102	102	1	71-133	25	

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

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

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



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: 3/1/12 13:15
Lab ID #: 437983
Initials: AH

Sample Receipt Checklist

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

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

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 St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

x Initial Report ☐ Final Report

Name of Company Plains Pipeline	Contact Camille Reynolds	
Address 3112 W. US Hwy 82, Lovington, NM 88260	Telephone No. 505-441-0965	
Facility Name Lovington Gathering WTI	Facility Type 6" Steel Pipeline	
Surface Owner Robert Rice	Mineral Owner	Lease No.

LOCATION OF RELEASE

Unit Letter H	Section 6	Township 17S	Range 37E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea
------------------	--------------	-----------------	--------------	---------------	------------------	---------------	----------------	---------------

Latitude 32° 51' 56.0" Longitude 103° 17' 07.2"

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 12 barrels	Volume Recovered 8 barrels
Source of Release 6" Steel Pipeline	Date and Hour of Occurrence 4-21-2006 @ 13:00	Date and Hour of Discovery 4-21-2006 @ 13:15
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Pat Caperton	
By Whom? Camille Reynolds	Date and Hour 4-21-2006 @ 15:35	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken Internal corrosion while purging the line resulted in release of sweet crude oil. The line has been purged. The line is an idle 6-inch steel gathering line. The pressure on the line was approximately 50 psi and the gravity of the sweet crude oil was 34. The sweet crude has an H₂S content of <10 ppm. The line was approximately 1.5 feet bgs at the release point.

Describe Area Affected and Cleanup Action Taken.* The impacted soil was excavated and stockpiled on plastic. Aerial extent of surface impact was approximately 1,500 ft².

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

Signature <i>Camille Reynolds</i>	OIL CONSERVATION DIVISION	
Printed Name: Camille Reynolds	Approved by District Supervisor:	
Title: Remediation Coordinator	Approval Date:	Expiration Date:
E-mail Address: cjreynolds@paalp.com	Conditions of Approval:	
L 1/26/2006 Phone: 505-441-	Attached ☐	

AP-96

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



RECEIVED

**QUARTERLY MONITORING REPORT
April - June 2012**

JUL 30 2012

LOVINGTON GATHERING WTI
Unit Letter "H" (SE/NE), Section 6, Township 17 South, Range 37 East, NM 87505
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

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

Prepared for:



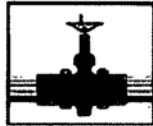
Plains Marketing, LP
333 Clay Street, Suite 1600
Houston, Texas 77002

Prepared By:

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

July 2012

Ben J. Arguijo
Project Manager



PLAINS
PIPELINE, L.P.

RECEIVED OCD
2012 JUL 30 P 1:03

July 16, 2012

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 2012, 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 at this site during the second quarter of 2012.

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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FIGURES

Figure 1 – Site Location Map

Figure 2A – Inferred Groundwater Gradient Map – 2Q2012

Figure 2B – Inferred Groundwater Gradient Map – 1Q2012

Figure 3A – Groundwater Concentration Map – 2Q2012

Figure 3B – Groundwater Concentration Map – April 2012

Figure 3C – Groundwater Concentration Map – June 2012

TABLES

Table 1 – 2012 Groundwater Elevation Data

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)

1.0 INTRODUCTION

Basin Environmental Service Technologies, LLC (Basin Environmental), 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 groundwater monitoring events conducted in the second quarter (April - June) of 2012 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 Environmental, on behalf of Plains, responded to a pipeline release to repair the pipeline and excavate 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 barrels (12 bbls) of crude oil was released from the pipeline, and eight barrels (8 bbls) were recovered, resulting in a net loss of four barrels (4 bbls) 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 measuring approximately one thousand, five hundred square feet (1,500 ft²). Excavation activities conducted during the initial response and subsequent remediation of the site covered an area approximately thirty feet (30') in length by twenty-seven feet (27') in width, and ranged from approximately five feet (5') to six feet (6') in depth. Excavated soil was placed on a six (6) mil polyurethane 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 feet (30') to seventy-five feet (75') below ground surface (bgs). Based on laboratory analytical results from soil samples collected during advancement of the soil borings, three (3) groundwater monitor wells (MW-1 through MW-3) were installed to evaluate the status of the groundwater.

Based on laboratory analytical results from the initial groundwater sampling event (October 5, 2006), four (4) additional monitor wells (MW-4 through MW-7) were installed in November 2006.

During 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 selected soil samples did not indicate benzene, toluene, ethylbenzene, and total xylene (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 feet (55') and seventy-five feet (75') 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 both less than the appropriate laboratory MDL and less than the NMOCD regulatory standard of 10 mg/Kg and 50 mg/Kg for benzene and BTEX, respectively. Laboratory analytical results indicated TPH concentrations were both less than the laboratory MDL and less than the NMOCD regulatory standard of 100 mg/Kg for soil samples collected at ten feet (10') and twenty-five feet (25') bgs. Soil samples collected at fifty feet (50') and seventy-five feet (75') 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 soil samples collected during the installation of monitor well MW-9 indicated benzene, BTEX, and TPH concentrations were both less than the appropriate laboratory MDL and less than NMOCD regulatory standards in the five (5) 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) 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 Environmental 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.

Monitor well MW-10 lies inside the cone of influence of a large-capacity irrigation well (Goff Dairy Well) on property adjacent to the release site (Goff Dairy #9 Pivot). Diminished well volume and recharge in monitor well MW-10 attributable to increased usage of the Goff Dairy Well precluded groundwater recovery during the last week of the second quarter of 2012 (June 25 through June 29). It is anticipated that groundwater recovery from monitor well MW-10 will

not be possible until crop harvesting (and an associated reduction in water consumption) occurs in the pivot. Based on historical data, harvesting typically occurs during the month of September.

3.2 Groundwater Monitoring

A quarterly groundwater monitoring event was conducted on May 23, 2012 (2Q2012), 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.

Per NMOCD request, monthly monitoring events were conducted at monitor wells MW-9 and MW-10, as well as 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 April 18, May 23, and June 19, 2012.

Diminished well volume and recharge in monitor well MW-2 attributable to increased usage of the Goff Dairy Well precluded sample collection from the monitor well during the quarterly monitoring event. A cross-connection hazard with a chemical storage tank on the Goff Dairy Well precluded sample collection from the irrigation well during the June 2012 monthly monitoring event.

Locations of groundwater monitoring wells and the inferred groundwater gradient, which was constructed from groundwater elevation measurements collected during the 2Q2012 sampling event, are depicted in Figure 2A, "Inferred Groundwater Gradient Map – 2Q2012". The groundwater gradient map indicates a general gradient of approximately 0.0074 feet/foot to the southeast, as measured between monitor wells MW-1 and MW-10. The corrected groundwater elevation ranged between 3,714.53 and 3,720.70 feet above mean sea level in monitor wells MW-10 and MW-5, respectively. Groundwater elevation data is provided as Table 1, "2012 Groundwater Elevation Data".

Due to increased usage of the Goff Dairy and Goff Dairy - Ctr. Pivot irrigation wells, groundwater elevations fluctuated dramatically during 2Q2012 as compared to groundwater elevation data recorded during the 1Q2012 monitoring event conducted on February 6, 2012. Changes in elevation between 1Q2012 and 2Q2012 ranged from approximately 1.45 feet in monitor well MW-10 to approximately 3.58 feet in monitor well MW-6. An inferred groundwater gradient map from 1Q2012 has been included for comparison as Figure 2B, "Inferred Groundwater Gradient Map – 1Q2012".

No PSH was detected in any of the on-site monitor wells during the 2Q2012 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 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 2Q2012 groundwater monitoring event is summarized below. Groundwater contaminant concentrations are depicted in Figure 3A, "Groundwater Concentration Map - 2Q2012".

- 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-9 to 0.00929 mg/L in the groundwater sample collected from monitor well MW-3. 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 less than the laboratory MDL in all submitted groundwater samples, with the exception of the groundwater sample from monitor well MW-3, which exhibited a toluene concentration of 0.00201 mg/L. Toluene concentrations were 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-9 to 0.157 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 April 18, May 23, and June 19, 2012, monthly monitoring events is summarized below. Groundwater contaminant concentrations for the April and June monitoring events are depicted in Figures 3B and 3C, "Groundwater Concentration Map - April 2012" and "Groundwater Concentration Map - June 2012", respectively. Groundwater contaminant concentrations for the May sampling event are included in Figure 3A, "Groundwater Concentration Map - 2Q2012".

- **Monitor Well MW-9:**
 - 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.
- **Monitor Well MW-10:**
 - Benzene concentrations ranged from less than the laboratory MDL in June 2012 to 0.00387 mg/L in May 2012. Toluene and ethylbenzene concentrations were less than the appropriate laboratory MDL in all submitted groundwater samples. Total xylene concentrations ranged from 0.0157 mg/L in June 2012 to 0.103 mg/L in May 2012. Benzene, toluene, ethylbenzene, and total xylene concentrations were less than NMWQCC regulatory standards in all submitted groundwater samples.
- **Goff Dairy 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 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.

5.0 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 four (4) locations on the Goff Dairy #9 Pivot (Goff Dairy - Ctr. Pivot Well, Goff Dairy - Ctr. Pivot Beginning, Goff Dairy - Ctr. Pivot End, and JW Well) will continue throughout the 2012 calendar year. Monthly monitoring of the Goff Dairy Well will recommence when the existing cross-connection hazard has been eliminated.

The *July - September 2011 Quarterly Monitoring Report*, dated July 2011, and correspondence from an NMOCD representative, dated August 1, 2011, recommended 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. Based on the reduction in plume concentrations, Plains recommends the bi-weekly recovery events from MW-9 and MW-10 be reduced to weekly.

It is anticipated that groundwater recovery from monitor well MW-10 will not be possible until crop harvesting (and an associated reduction in water consumption) occurs in the Goff Dairy #9 pivot. Based on historical data, harvesting typically occurs during the month of September. Basin Environmental will conduct bi-weekly gauging events of the monitor well throughout the third quarter of 2012 (July - September), and groundwater recovery efforts will recommence as warranted.

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 2012 reporting period will be submitted to the NMOCD by April 1, 2013.

6.0 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 Environmental has examined and relied upon documents referenced in the report and on oral statements made by certain individuals. Basin Environmental has not conducted an independent examination of the facts contained in referenced materials and statements. Basin Environmental has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Basin Environmental has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin Environmental 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.

7.0 DISTRIBUTION

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Figures

Tables

TABLE 1

2012 GROUNDWATER ELEVATION DATA

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	02/06/12	3,806.60	-	86.30	-	3,720.30
	05/23/12	3,806.60	-	87.88	-	3,718.72
MW-2	02/06/12	3,807.31	-	84.20	-	3,723.11
	05/23/12	3,807.31	-	Dry	-	Dry
MW-3	02/06/12	3,807.19	-	85.90	-	3,721.29
	05/23/12	3,807.19	-	88.20	-	3,718.99
MW-4	02/06/12	3,807.67	-	86.45	-	3,721.22
	05/23/12	3,807.67	-	88.15	-	3,719.52
MW-5	02/06/12	3,807.30	-	86.00	-	3,721.30
	05/23/12	3,808.30	-	87.60	-	3,720.70
MW-6	02/06/12	3,807.08	-	86.00	-	3,721.08
	05/23/12	3,807.08	-	89.58	-	3,717.50
MW-7	02/06/12	3,807.05	-	86.35	-	3,720.70
	05/23/12	3,807.05	-	89.25	-	3,717.80
MW-8	02/06/12	3,806.89	-	85.80	-	3,721.09
	05/23/12	3,806.89	-	88.78	-	3,718.11
MW-9	02/06/12	3,807.02	-	86.20	-	3,720.82
	05/23/12	3,807.02	-	88.82	-	3,718.20
MW-10	02/06/12	3,806.08	-	90.10	-	3,715.98
	05/23/12	3,806.08	-	91.55	-	3,714.53

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1 FLUORIDE (mg/L)	SW846-6010C CHROMIUM (mg/L)
		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)		
MW-1	10/5/2006	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
"	12/28/2006	<0.0010	<0.0010	<0.0010	0.002	<0.0010	0.002	<0.0010	-	-
"	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	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	9/17/2008	0.020	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.020	-	-
"	12/2/2008	0.035	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.035	-	-
"	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	-	-
"	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	<0.0010	<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	-	-
"	2/6/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	5/23/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
MW-2	10/5/2006	0.010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.010	-	-
"	12/28/2006	0.161	<0.0010	<0.0010	0.024	<0.0010	0.024	0.185	-	-
"	3/16/2007	0.154	<0.0010	<0.0010	0.015	<0.0010	0.015	0.169	-	-
"	5/31/2007	0.005	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.005	-	-
"	9/25/2007	0.050	<0.0010	<0.0010	0.003	<0.0010	0.003	0.053	-	-
"	11/30/2007	0.928	<0.0010	<0.005	0.036	<0.005	0.036	0.964	-	-
"	3/11/2008	0.095	<0.0020	<0.0010	0.0032	<0.0010	0.0032	0.098	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1 FLUORIDE (mg/L)	SW846-6010C CHROMIUM (mg/L)
		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)		
MMW-2	6/14/2008	0.003	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.003	-	-
"	9/17/2008	0.159	<0.0020	<0.0010	0.004	<0.0010	0.004	0.163	-	-
"	12/2/2008	0.050	0.002	<0.0010	0.007	0.001	0.008	0.060	-	-
"	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	-	-
"	2/6/2012	0.00167	<0.0020	<0.0010	0.00212	0.00102	0.00314	0.00501	-	-
MMW-3	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	-	-
"	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	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1 (mg/L)	SW846-6010C (mg/L)
		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)		
MW-3	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	-	-
"	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	-	-
"	2/6/2012	0.0214	0.00306	0.00126	0.00751	0.00345	0.0110	0.0367	-	-
"	5/23/2012	0.00929	0.00201	<0.0010	0.00564	0.00261	0.00845	0.0198	-	-
MW-4	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	-	-
"	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	-	-
"	3/1/2008	<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	-	-
"	3/22/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	4.76	<0.0050
"	5/27/2011	0.00119	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.00119	-	-
"	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	-	-
"	2/6/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	5/23/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1 FLUORIDE (mg/L)	SW846-6010C CHROMIUM (mg/L)
		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)		
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	-	-
"	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	-	-
"	3/1/2008	<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	<0.0010	<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	-	-
"	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	<0.0010	<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	-	-
"	2/6/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	5/23/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
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	-	-
"	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	-	-
"	3/1/2008	<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	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1 FLUORIDE (mg/L)	SW846-6010C CHROMIUM (mg/L)
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL- BENZENE (mg/L)	M.P- XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENES (mg/L)	TOTAL BTX (mg/L)		
MMW-6	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	-	-
"	5/25/2010	0.0059	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0059	-	-
"	8/30/2010	0.0053	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0053	-	-
"	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	-	-
"	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	-	-
"	2/6/2012	0.0129	<0.0020	0.00106	0.133	<0.0010	0.133	0.147	-	-
"	5/23/2012	0.00768	<0.0010	<0.0010	0.157	<0.0010	0.157	0.165	-	-
MMW-7	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	-	-
"	3/1/2008	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	-	-
"	3/3/2009	0.0775	<0.0020	<0.0010	0.0327	<0.0010	0.0327	0.1102	-	-
"	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	-	-
"	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	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1 FLUORIDE (mg/L)	SW846-6010C CHROMIUM (mg/L)
		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)		
MW-7	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	-	-
"	2/6/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	5/23/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
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	-	-
"	12/2/2008	0.234	0.046	0.008	0.041	0.013	0.054	0.342	-	-
"	3/3/2009	0.0284	<0.0020	<0.0010	0.0068	<0.0010	0.0068	0.0352	-	-
"	6/18/2009	0.0045	<0.0020	0.0016	0.0032	<0.0010	0.0032	0.0093	-	-
"	9/1/2009	0.0013	<0.0020	0.0011	0.0141	<0.0010	0.0141	0.0165	-	-
"	12/18/2009	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	3/4/2010	<0.0010	<0.0020	0.0011	<0.0020	<0.0010	<0.0020	0.0011	-	-
"	5/25/2010	0.0012	<0.0020	0.001	<0.0020	<0.0010	<0.0020	0.0022	-	-
"	8/30/2010	<0.0010	<0.0020	0.0014	<0.0020	<0.0010	<0.0020	0.0014	-	-
"	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	0.00154	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	-	-
"	11/9/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	2/6/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	5/23/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
MW-9	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	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

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

SAMPLE LOCATION		SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1 (mg/L)	SW846-6010C (mg/L)
			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)		
MW-9	12/2/2008	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	<0.0020	-	-
"	3/3/2009	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	<0.0020	-	-
"	6/18/2009	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	<0.0020	-	-
"	9/1/2009	0.9717	0.0641	<0.0100	0.0867	0.0422	0.1289	1.1647	-	-	-
"	9/10/2009	1.838	<0.0200	<0.0100	0.0537	<0.0100	0.0537	1.8917	-	-	-
"	10/5/2009	0.985	<0.0020	<0.0010	0.0442	<0.0010	0.0442	1.0292	-	-	-
"	12/18/2009	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
"	3/4/2010	0.0192	<0.0020	<0.0010	0.0027	<0.0010	0.0027	0.0219	-	-	-
"	5/25/2010	0.0421	<0.0020	<0.0010	0.0063	<0.0010	0.0063	0.0484	-	-	-
"	8/30/2010	0.1259	<0.0020	<0.0010	0.0344	<0.0010	0.0344	0.1603	-	-	-
"	11/11/2010	0.0265	<0.0020	<0.0010	0.0097	<0.0010	0.0097	0.0362	-	-	-
"	3/22/2011	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	-	-	-
"	11/9/2011	0.00179	<0.0020	<0.0010	0.00349	<0.0010	0.00349	0.00528	-	-	-
"	12/14/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
"	1/5/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
"	2/6/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
"	3/1/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
"	4/18/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
"	5/23/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
"	6/19/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	-
MW-10	11/2/2009	<0.005	<0.005	<0.005	<0.010	<0.005	<0.010	<0.010	-	-	-
"	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	0.0350	<0.0020	<0.0010	0.0035	<0.0010	0.0035	0.0385	-	-	-
"	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	-	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

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

SAMPLE LOCATION		SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1 FLUORIDE (mg/L)	SW846-6010C CHROMIUM (mg/L)
			BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL- BENZENE (mg/L)	M.P. XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENES (mg/L)	TOTAL BTX (mg/L)		
MW-10		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	-	-
"		1/5/2012	0.00432	<0.0020	<0.0010	0.0126	<0.0010	0.0126	0.0169	-	-
"		2/6/2012	0.00233	<0.0020	<0.0010	0.00644	<0.0010	0.00644	0.00877	-	-
"		3/1/2012	0.00134	<0.0020	<0.0010	0.00423	<0.0010	0.00423	0.00557	-	-
"		4/18/2012	0.00338	<0.0020	<0.0010	0.0175	<0.0010	0.0175	0.0209	-	-
"		5/23/2012	0.00387	<0.0010	<0.0010	0.103	<0.0010	0.103	0.107	-	-
"		6/19/2012	<0.0010	<0.0010	<0.0010	0.0157	<0.0010	0.0157	0.0157	-	-
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	-	-
"		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	-	-
"		12/14/2011	<0.0010	<0.0020	0.00111	<0.0020	<0.0010	<0.0020	0.00111	-	-
"		1/5/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"		2/6/2012	<0.0010	<0.0020	0.00111	0.00201	<0.0010	0.00201	0.00201	-	-
"		3/1/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"		4/18/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"		5/23/2012	<0.0010	<0.0010	<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	-	-
"		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	-	-
"		12/14/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"		1/5/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"		2/6/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"		3/1/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"		4/18/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"		5/23/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"		6/19/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1 FLUORIDE (mg/L)	SW846-6010C CHROMIUM (mg/L)
		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)		
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	-	-
"	3/1/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	4/18/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	5/23/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	6/19/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
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	-	-
"	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	-	-
"	3/1/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	4/18/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	5/23/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	6/19/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
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	-	-
"	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	-	-
"	3/1/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	4/18/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	5/23/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	6/19/2012	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
NMOC CRITERIA		0.01	0.75	0.75	TOTAL XYLENES 0.62				1.6	0.05

Appendices

Appendix A

Laboratory Analytical Reports

Analytical Report 440981
for
PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

26-APR-12

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-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)

Xenco-Lakeland: Florida (E84098)

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: AZ00901): Arizona (AZM757)

Xenco Tucson (EPA Lab code: AZ000989): Arizona (AZ0758)



26-APR-12

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

Reference: XENCO Report No: **440981**
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 440981. 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. 440981 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,

Nicholas Straccione
Project Manager

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Sample Cross Reference 440981



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-9	W	04-18-12 13:50		440981-001
MW-10	W	04-18-12 14:05		440981-002
Goff Dairy Well	W	04-18-12 14:40		440981-003
Goff Dairy Ctr. Pivot Well	W	04-18-12 15:00		440981-004
Goff Dairy Ctr. Pivot Beg.	W	04-18-12 15:10		440981-005
Goff Dairy Ctr. Pivot End	W	04-18-12 15:20		440981-006
JW Well	W	04-18-12 15:35		440981-007



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

Project Name: Lovington Gathering WTI



Project ID: 2006-142

Work Order Number: 440981

Report Date: 26-APR-12

Date Received: 04/19/2012

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analysis Summary 440981

PLAINS ALL AMERICAN EH&S, Midland, TX



Project Id: 2006-142

Contact: Jason Henry

Project Location: Lea County, NM

Project Name: Lovington Gathering WTI

Date Received in Lab: Thu Apr-19-12 09:15 am

Report Date: 26-APR-12

Project Manager: Nicholas Straccione

Analysis Requested	Lab Id:	440981-001	440981-002	440981-003	440981-004	440981-005	440981-006
	Field Id: Depth: Matrix: Sampled:	MW-9 WATER Apr-18-12 13:50	MW-10 WATER Apr-18-12 14:05	Goff Dairy Well WATER Apr-18-12 14:40	Goff Dairy Cr. Pivot Well WATER Apr-18-12 15:00	Goff Dairy Cr. Pivot Beg. WATER Apr-18-12 15:10	Goff Dairy Cr. Pivot End WATER Apr-18-12 15:20
BTEx by EPA 8021	Extracted:	Apr-25-12 08:16	Apr-25-12 08:16	Apr-25-12 08:16	Apr-25-12 08:16	Apr-25-12 08:16	Apr-25-12 08:16
	Analyzed:	Apr-25-12 18:18	Apr-25-12 18:40	Apr-25-12 19:02	Apr-25-12 19:25	Apr-25-12 19:47	Apr-25-12 20:10
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Benzene		ND 0.00100	0.00338 0.00100	ND 0.00100	ND 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	ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100
m,p-Xylenes		ND 0.00200	0.0175 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		ND 0.00100	0.0175 0.00100	ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100
Total BTEx		ND 0.00100	0.0209 0.00100	ND 0.00100	ND 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 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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Nicholas Straccione
Project Manager



Certificate of Analysis Summary 440981

PLAINS ALL AMERICAN EH&S, Midland, TX



Project Id: 2006-142

Contact: Jason Henry

Project Location: Lea County, NM

Project Name: Lovington Gathering WTI

Date Received in Lab: Thu Apr-19-12 09:15 am

Report Date: 26-APR-12

Project Manager: Nicholas Straccione

Analysis Requested		Lab Id:	Field Id:	Depth:	Matrix:	Sampled:	Extracted:	Analyzed:	Units/RL:
BTEx by EPA 8021		440981-007	JW Well		WATER	Apr-18-12 15:35	Apr-25-12 08:16	Apr-25-12 20:32	mg/L RL
Benzene									ND 0.00100
Toluene									ND 0.00200
Ethylbenzene									ND 0.00100
m_p-Xylenes									ND 0.00200
o-Xylene									ND 0.00100
Xylenes, Total									ND 0.00100
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 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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Nicholas Straccione
Project 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.

* 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 **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 440981,

Project ID: 2006-142

Lab Batch #: 886574

Sample: 440981-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04/25/12 18:18

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0266	0.0300	89	80-120	
4-Bromofluorobenzene	0.0248	0.0300	83	80-120	

Lab Batch #: 886574

Sample: 440981-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04/25/12 18:40

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0253	0.0300	84	80-120	
4-Bromofluorobenzene	0.0247	0.0300	82	80-120	

Lab Batch #: 886574

Sample: 440981-003 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04/25/12 19:02

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0265	0.0300	88	80-120	
4-Bromofluorobenzene	0.0243	0.0300	81	80-120	

Lab Batch #: 886574

Sample: 440981-004 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04/25/12 19:25

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0259	0.0300	86	80-120	
4-Bromofluorobenzene	0.0247	0.0300	82	80-120	

Lab Batch #: 886574

Sample: 440981-005 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04/25/12 19:47

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0263	0.0300	88	80-120	
4-Bromofluorobenzene	0.0248	0.0300	83	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] = $100 \cdot A / B$

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



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 440981,

Project ID: 2006-142

Lab Batch #: 886574

Sample: 440981-006 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04/25/12 20:10

SURROGATE RECOVERY STUDY

BTEX 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	0.0248	0.0300	83	80-120	

Lab Batch #: 886574

Sample: 440981-007 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04/25/12 20:32

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0262	0.0300	87	80-120	
4-Bromofluorobenzene	0.0240	0.0300	80	80-120	

Lab Batch #: 886574

Sample: 621032-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04/25/12 10:42

SURROGATE RECOVERY STUDY

BTEX 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	0.0253	0.0300	84	80-120	

Lab Batch #: 886574

Sample: 621032-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04/25/12 09:13

SURROGATE RECOVERY STUDY

BTEX 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	0.0286	0.0300	95	80-120	

Lab Batch #: 886574

Sample: 621032-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04/25/12 09:35

SURROGATE RECOVERY STUDY

BTEX 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	0.0280	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.



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 440981,

Project ID: 2006-142

Lab Batch #: 886574

Sample: 441138-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04/25/12 16:26

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0298	0.0300	99	80-120	

Lab Batch #: 886574

Sample: 441138-001 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04/25/12 16:49

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0285	0.0300	95	80-120	
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] = $100 * A / B$

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



BS / BSD Recoveries



Project Name: Lovington Gathering WTI

Work Order #: 440981

Analyst: SMG

Lab Batch ID: 886574

Sample: 621032-1-BKS

Date Prepared: 04/25/2012

Batch #: 1

Project ID: 2006-142

Date Analyzed: 04/25/2012

Matrix: Water

Units: mg/L

BLANK/BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

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	0.0880	88	0.100	0.0853	85	3	70-125	25									
Toluene	<0.00200	0.100	0.0883	88	0.100	0.0859	86	3	70-125	25									
Ethylbenzene	<0.00100	0.100	0.0870	87	0.100	0.0841	84	3	71-129	25									
m,p-Xylenes	<0.00200	0.200	0.178	89	0.200	0.172	86	3	70-131	25									
o-Xylene	<0.00100	0.100	0.0911	91	0.100	0.0882	88	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 / MSD Recoveries



Project Name: Lovington Gathering WTI

Work Order #: 440981

Project ID: 2006-142

Lab Batch ID: 886574

QC-Sample ID: 441138-001 S

Batch #: 1 Matrix: Water

Date Analyzed: 04/25/2012

Date Prepared: 04/25/2012

Analyst: SMG

Reporting Units: mg/L

BTEx by EPA 8021		MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY									
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	<0.00100	0.100	0.0900	90	0.100	0.0810	81	11	70-125	25	
Toluene	<0.00200	0.100	0.0896	90	0.100	0.0812	81	10	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0860	86	0.100	0.0790	79	8	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.172	86	0.200	0.158	79	8	70-131	25	
o-Xylene	<0.00100	0.100	0.0891	89	0.100	0.0815	82	9	71-133	25	

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

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

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

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. Argulio

Company Name: Basin Environmental Service Technologies, LLC

Company Address: P. O. Box 301

City/State/Zip: Lovington, NM 88260

Telephone No: (575) 396-2378

Sampler Signature: 

e-mail: bjarulio@basinenvironment.com

Fax No: (575) 396-1429

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

Project Name: Lovington Gathering WTI

Project #: 2006-142

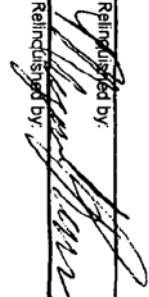
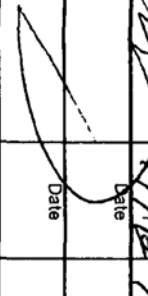
Project Loc: Lea County, NM

PO #: PAA-J. Henry

ORDER #: 440981

LAB # (lab use only)		FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO ₃	HCl	H ₂ SO ₄	NaOH	Na ₂ S ₂ O ₃	None	Other (Specify)	DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO ₄ , Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg S	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY	
01		MW-9			4/18/2012	13:50		3	X		X						GW									X					X
02		MW-10			4/18/2012	14:05		3	X	X	X						GW									X					X
03		Goff Dairy Well			4/18/2012	1440		3	X	X	X						GW									X					X
04		Goff Dairy - Ctr. Pivot Well			4/18/2012	1500		3	X	X	X						GW									X					X
05		Goff Dairy - Ctr. Pivot Beg.			4/18/2012	1510		3	X	X	X						GW									X					X
06		Goff Dairy - Ctr. Pivot End			4/18/2012	1520		3	X	X	X						GW									X					X
07		JW Well			4/18/2012	1535		3	X	X	X						GW									X					X
															</																

Special Instructions:

Relinquished by: 	Date: 4/18/12	Time: 2:15	Received by:	Date:	Time:
Relinquished by: 	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by ELDT: 	Date: 4-18-12	Time: 07:15

Laboratory Comments:

Sample Containers Intact? ☒ Y

VOCs Free of Headspace? ☒ Y

Labels on container(s) ☒ Y

Custody seals on container(s) ☒ Y

Custody seals on cooler(s) ☒ Y

Sample Hand Delivered by Sampler/Client Rep.? ☒ Y

by Courier? ☐ UPS ☐ DHL ☐ FedEx ☐ Lone Star

Temperature Upon Receipt: 4.5 °C

**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: Basin / Plains
Date/Time: 4-19-12 09:15
Lab ID #: 440981
Initials: WR / AE

Sample Receipt Checklist

1. Samples on ice?	Blue	<u>Water</u>	No	
2. Shipping container in good condition?	<u>Yes</u>	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	<u>Yes</u>	No	N/A	
4. Chain of Custody present?	<u>Yes</u>	No		
5. Sample instructions complete on chain of custody?	<u>Yes</u>	No		
6. Any missing / extra samples?	Yes	<u>No</u>		
7. Chain of custody signed when relinquished / received?	<u>Yes</u>	No		
8. Chain of custody agrees with sample label(s)?	<u>Yes</u>	No		
9. Container labels legible and intact?	<u>Yes</u>	No		
10. Sample matrix / properties agree with chain of custody?	<u>Yes</u>	No		
11. Samples in proper container / bottle?	<u>Yes</u>	No		
12. Samples properly preserved?	<u>Yes</u>	No	N/A	
13. Sample container intact?	<u>Yes</u>	No		
14. Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No		
15. All samples received within sufficient hold time?	<u>Yes</u>	No		
16. Subcontract of sample(s)?	Yes	No	<u>N/A</u>	
17. VOC sample have zero head space?	<u>Yes</u>	No	N/A	
18. Cooler 1 No.	Cooler 2 No.	Cooler 3 No.	Cooler 4 No.	Cooler 5 No.
lbs <u>4.5</u> °C	lbs °C	lbs °C	lbs °C	lbs °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 442936
for
PLAINS ALL AMERICAN EH&S

Project Manager: Ben Arguijjo

Lovington Gathering WTI

2006-142

04-JUN-12

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), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)

Xenco-Lakeland: Florida (E84098)

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: AZ00901): Arizona (AZM757)

Xenco Tucson (EPA Lab code: AZ000989): Arizona (AZ0758)



04-JUN-12

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

Reference: XENCO Report No: **442936**
Lovington Gathering WTI
Project Address: Lea County, NM

Ben Arguijjo:

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 442936. 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. 442936 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,

Nicholas Straccione
Project Manager

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Sample Cross Reference 442936



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-1	W	05-23-12 14:35		442936-001
MW-3	W	05-23-12 13:50		442936-002
MW-4	W	05-23-12 14:15		442936-003
MW-5	W	05-23-12 15:05		442936-004
MW-6	W	05-23-12 13:30		442936-005
MW-7	W	05-23-12 13:05		442936-006
MW-8	W	05-23-12 12:25		442936-007
MW-9	W	05-23-12 16:00		442936-008
MW-10	W	05-23-12 11:55		442936-009
Goff Dairy Well	W	05-23-12 10:00		442936-010
J.W. Well	W	05-23-12 10:10		442936-011
Center Pivot Well	W	05-23-12 10:35		442936-012
Center Pivot Well Beg.	W	05-23-12 10:25		442936-013
Center Pivot Well End.	W	05-23-12 10:15		442936-014



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

Project Name: Lovington Gathering WTI



Project ID: 2006-142

Work Order Number: 442936

Report Date: 04-JUN-12

Date Received: 05/25/2012

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analysis Summary 442936

PLAINS ALL AMERICAN EH&S, Midland, TX



Project Id: 2006-142

Contact: Ben Arguillo

Project Location: Lea County, NM

Project Name: Lovington Gathering WTI

Date Received in Lab: Fri May-25-12 09:20 am

Report Date: 04-JUN-12

Project Manager: Nicholas Straccione

Analysis Requested		Lab Id:	Field Id:	Depth:	Matrix:	Sampled:	442936-001	442936-002	442936-003	442936-004	442936-005	442936-006
BTEX by SW 8260B SUB: TX104704215		Extracted:	May-30-12 14:00	May-30-12 14:23	WATER	May-23-12 14:35	442936-001	442936-002	442936-003	442936-004	442936-005	442936-006
Units/RL:		mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L
Benzene		ND	0.00100	0.00929	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND
Toluene		ND	0.00100	0.00201	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND
Ethylbenzene		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND
m,p-Xylenes		ND	0.00200	0.00584	0.00200	ND	0.00200	ND	0.00200	ND	0.00200	ND
o-Xylene		ND	0.00100	0.00261	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND
Total Xylenes		ND	0.00100	0.00845	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND
Total BTEX		ND	0.00100	0.0198	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND

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

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Nicholas Straccione
Project Manager



Certificate of Analysis Summary 442936

PLAINS ALL AMERICAN EH&S, Midland, TX



Project Id: 2006-142

Contact: Ben Argujio

Project Location: Lea County, NM

Project Name: Lovington Gathering WTI

Date Received in Lab: Fri May-25-12 09:20 am

Report Date: 04-JUN-12

Project Manager: Nicholas Straccione

Analysis Requested		Lab Id:	442936-007	442936-008	442936-009	442936-010	442936-011	442936-012
		Field Id:	MW-8	MW-9	MW-10	Goff Dairy Well	J.W. Well	Center Pivot Well
		Depth:						
		Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
		Sampled:	May-23-12 12:25	May-23-12 16:00	May-23-12 11:55	May-23-12 10:00	May-23-12 10:10	May-23-12 10:35
BTEx by SW 8260B SUB: TX104704215		Extracted:	May-30-12 14:09	May-30-12 14:10	May-30-12 14:11	May-30-12 14:12	May-30-12 14:13	May-31-12 15:02
		Analyzed:	May-30-12 17:57	May-30-12 18:21	May-30-12 18:44	May-30-12 19:08	May-30-12 19:32	May-31-12 18:11
		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	0.00387 0.00100	ND 0.00100	ND 0.00100	ND 0.00100
Toluene			ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100
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	ND 0.00200	0.103 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
Total Xylenes			ND 0.00100	ND 0.00100	0.103 0.00100	ND 0.00100	ND 0.00100	ND 0.00100
Total BTEx			ND 0.00100	ND 0.00100	0.107 0.00100	ND 0.00100	ND 0.00100	ND 0.00100

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Nicholas Straccione
Project Manager



Certificate of Analysis Summary 442936

PLAINS ALL AMERICAN EH&S, Midland, TX



Project Id: 2006-142

Contact: Ben Arguillo

Project Location: Lea County, NM

Project Name: Lovington Gathering WTI

Date Received in Lab: Fri May-25-12 09:20 am

Report Date: 04-JUN-12

Project Manager: Nicholas Straccione

Analysis Requested		Lab Id:	Field Id:	Depth:	Matrix:	Sampled:	Extracted:	Analyzed:	Units/RL:
BTEx by SW 8260B SUB: TX104704215		442936-013	Center Pivot Well Beg.		WATER	May-23-12 10:25	May-30-12 14:15	May-30-12 20:20	mg/L RL
Benzene		ND	0.00100						
Toluene		ND	0.00100						
Ethylbenzene		ND	0.00100						
m,p-Xylenes		ND	0.00200						
o-Xylene		ND	0.00100						
Total Xylenes		ND	0.00100						
Total BTEx		ND	0.00100						

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Nicholas Straccione
Project 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.

* 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 **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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 5332 Blackberry Drive, San Antonio TX 78238
 2505 North Falkenburg Rd, Tampa, FL 33619
 12600 West I-20 East, Odessa, TX 79765
 6017 Financial Drive, Norcross, GA 30071
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(214) 902 0300	(214) 351-9139
(210) 509-3334	(210) 509-3335
(813) 620-2000	(813) 620-2033
(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 442936,

Project ID: 2006-142

Lab Batch #: 889018

Sample: 442936-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/30/12 14:23

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0512	0.0500	102	74-124	
Dibromofluoromethane	0.0493	0.0500	99	75-131	
1,2-Dichloroethane-D4	0.0525	0.0500	105	63-144	
Toluene-D8	0.0532	0.0500	106	80-117	

Lab Batch #: 889018

Sample: 442936-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/30/12 15:58

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0521	0.0500	104	74-124	
Dibromofluoromethane	0.0527	0.0500	105	75-131	
1,2-Dichloroethane-D4	0.0543	0.0500	109	63-144	
Toluene-D8	0.0528	0.0500	106	80-117	

Lab Batch #: 889018

Sample: 442936-003 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/30/12 16:22

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0528	0.0500	106	74-124	
Dibromofluoromethane	0.0521	0.0500	104	75-131	
1,2-Dichloroethane-D4	0.0551	0.0500	110	63-144	
Toluene-D8	0.0526	0.0500	105	80-117	

Lab Batch #: 889018

Sample: 442936-004 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/30/12 16:46

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0517	0.0500	103	74-124	
Dibromofluoromethane	0.0536	0.0500	107	75-131	
1,2-Dichloroethane-D4	0.0569	0.0500	114	63-144	
Toluene-D8	0.0533	0.0500	107	80-117	

* 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

Work Orders : 442936,

Project ID: 2006-142

Lab Batch #: 889018

Sample: 442936-005 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/30/12 17:10

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0515	0.0500	103	74-124	
Dibromofluoromethane	0.0489	0.0500	98	75-131	
1,2-Dichloroethane-D4	0.0516	0.0500	103	63-144	
Toluene-D8	0.0523	0.0500	105	80-117	

Lab Batch #: 889018

Sample: 442936-006 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/30/12 17:34

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0481	0.0500	96	74-124	
Dibromofluoromethane	0.0572	0.0500	114	75-131	
1,2-Dichloroethane-D4	0.0590	0.0500	118	63-144	
Toluene-D8	0.0505	0.0500	101	80-117	

Lab Batch #: 889018

Sample: 442936-007 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/30/12 17:57

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0511	0.0500	102	74-124	
Dibromofluoromethane	0.0543	0.0500	109	75-131	
1,2-Dichloroethane-D4	0.0549	0.0500	110	63-144	
Toluene-D8	0.0534	0.0500	107	80-117	

Lab Batch #: 889018

Sample: 442936-008 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/30/12 18:21

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0498	0.0500	100	74-124	
Dibromofluoromethane	0.0547	0.0500	109	75-131	
1,2-Dichloroethane-D4	0.0541	0.0500	108	63-144	
Toluene-D8	0.0508	0.0500	102	80-117	

* 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

Work Orders : 442936,

Project ID: 2006-142

Lab Batch #: 889018

Sample: 442936-009 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/30/12 18:44

SURROGATE RECOVERY STUDY

BTEX by SW 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Bromofluorobenzene	0.0487	0.0500	97	74-124	
Dibromofluoromethane	0.0519	0.0500	104	75-131	
1,2-Dichloroethane-D4	0.0558	0.0500	112	63-144	
Toluene-D8	0.0523	0.0500	105	80-117	

Lab Batch #: 889018

Sample: 442936-010 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/30/12 19:08

SURROGATE RECOVERY STUDY

BTEX by SW 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Bromofluorobenzene	0.0495	0.0500	99	74-124	
Dibromofluoromethane	0.0551	0.0500	110	75-131	
1,2-Dichloroethane-D4	0.0570	0.0500	114	63-144	
Toluene-D8	0.0540	0.0500	108	80-117	

Lab Batch #: 889018

Sample: 442936-011 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/30/12 19:32

SURROGATE RECOVERY STUDY

BTEX by SW 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Bromofluorobenzene	0.0519	0.0500	104	74-124	
Dibromofluoromethane	0.0536	0.0500	107	75-131	
1,2-Dichloroethane-D4	0.0579	0.0500	116	63-144	
Toluene-D8	0.0537	0.0500	107	80-117	

Lab Batch #: 889018

Sample: 442936-013 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/30/12 20:20

SURROGATE RECOVERY STUDY

BTEX by SW 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Bromofluorobenzene	0.0484	0.0500	97	74-124	
Dibromofluoromethane	0.0536	0.0500	107	75-131	
1,2-Dichloroethane-D4	0.0545	0.0500	109	63-144	
Toluene-D8	0.0498	0.0500	100	80-117	

* 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

Work Orders : 442936,

Project ID: 2006-142

Lab Batch #: 889018

Sample: 442936-014 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/30/12 20:44

SURROGATE RECOVERY STUDY

BTEX by SW 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Bromofluorobenzene	0.0523	0.0500	105	74-124	
Dibromofluoromethane	0.0525	0.0500	105	75-131	
1,2-Dichloroethane-D4	0.0555	0.0500	111	63-144	
Toluene-D8	0.0527	0.0500	105	80-117	

Lab Batch #: 889136

Sample: 442936-012 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/31/12 18:11

SURROGATE RECOVERY STUDY

BTEX by SW 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Bromofluorobenzene	0.0480	0.0500	96	74-124	
Dibromofluoromethane	0.0486	0.0500	97	75-131	
1,2-Dichloroethane-D4	0.0558	0.0500	112	63-144	
Toluene-D8	0.0492	0.0500	98	80-117	

Lab Batch #: 889018

Sample: 622529-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/30/12 13:28

SURROGATE RECOVERY STUDY

BTEX by SW 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Bromofluorobenzene	0.0502	0.0500	100	74-124	
Dibromofluoromethane	0.0461	0.0500	92	75-131	
1,2-Dichloroethane-D4	0.0460	0.0500	92	63-144	
Toluene-D8	0.0504	0.0500	101	80-117	

Lab Batch #: 889136

Sample: 622606-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/31/12 15:13

SURROGATE RECOVERY STUDY

BTEX by SW 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Bromofluorobenzene	0.0487	0.0500	97	74-124	
Dibromofluoromethane	0.0492	0.0500	98	75-131	
1,2-Dichloroethane-D4	0.0526	0.0500	105	63-144	
Toluene-D8	0.0484	0.0500	97	80-117	

* 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

Work Orders : 442936,

Project ID: 2006-142

Lab Batch #: 889018

Sample: 622529-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/30/12 11:56

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0491	0.0500	98	74-124	
Dibromofluoromethane	0.0504	0.0500	101	75-131	
1,2-Dichloroethane-D4	0.0479	0.0500	96	63-144	
Toluene-D8	0.0511	0.0500	102	80-117	

Lab Batch #: 889136

Sample: 622606-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/31/12 14:21

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0463	0.0500	93	74-124	
Dibromofluoromethane	0.0465	0.0500	93	75-131	
1,2-Dichloroethane-D4	0.0493	0.0500	99	63-144	
Toluene-D8	0.0491	0.0500	98	80-117	

Lab Batch #: 889018

Sample: 442936-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/30/12 14:47

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0493	0.0500	99	74-124	
Dibromofluoromethane	0.0525	0.0500	105	75-131	
1,2-Dichloroethane-D4	0.0527	0.0500	105	63-144	
Toluene-D8	0.0518	0.0500	104	80-117	

Lab Batch #: 889136

Sample: 442936-012 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/31/12 18:36

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0454	0.0500	91	74-124	
Dibromofluoromethane	0.0500	0.0500	100	75-131	
1,2-Dichloroethane-D4	0.0563	0.0500	113	63-144	
Toluene-D8	0.0511	0.0500	102	80-117	

* 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

Work Orders : 442936,

Project ID: 2006-142

Lab Batch #: 889018

Sample: 442936-001 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/30/12 15:10

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0512	0.0500	102	74-124	
Dibromofluoromethane	0.0495	0.0500	99	75-131	
1,2-Dichloroethane-D4	0.0509	0.0500	102	63-144	
Toluene-D8	0.0521	0.0500	104	80-117	

Lab Batch #: 889136

Sample: 442936-012 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/31/12 19:01

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0431	0.0500	86	74-124	
Dibromofluoromethane	0.0482	0.0500	96	75-131	
1,2-Dichloroethane-D4	0.0519	0.0500	104	63-144	
Toluene-D8	0.0493	0.0500	99	80-117	

* 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.



Blank Spike Recovery



Project Name: Lovington Gathering WTI

Work Order #: 442936

Project ID:

2006-142

Lab Batch #: 889018

Sample: 622529-1-BKS

Matrix: Water

Date Analyzed: 05/30/2012

Date Prepared: 05/30/2012

Analyst: BEC

Reporting Units: mg/L

Batch #: 1

BLANK /BLANK SPIKE RECOVERY STUDY

BTEX by SW 8260B Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Benzene	<0.00100	0.100	0.0994	99	66-142	
Toluene	<0.00100	0.100	0.110	110	59-139	
Ethylbenzene	<0.00100	0.100	0.114	114	75-125	
m,p-Xylenes	<0.00200	0.200	0.209	105	75-125	
o-Xylene	<0.00100	0.100	0.115	115	75-125	

Lab Batch #: 889136

Sample: 622606-1-BKS

Matrix: Water

Date Analyzed: 05/31/2012

Date Prepared: 05/31/2012

Analyst: BEC

Reporting Units: mg/L

Batch #: 1

BLANK /BLANK SPIKE RECOVERY STUDY

BTEX by SW 8260B Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Benzene	<0.00100	0.100	0.0890	89	66-142	
Toluene	<0.00100	0.100	0.0998	100	59-139	
Ethylbenzene	<0.00100	0.100	0.100	100	75-125	
m,p-Xylenes	<0.00200	0.200	0.204	102	75-125	
o-Xylene	<0.00100	0.100	0.111	111	75-125	

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

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

BRL - Below Reporting Limit



Form 3 - MS / MSD Recoveries



Project Name: Lovington Gathering WTI

Work Order #: 442936

Project ID: 2006-142

Lab Batch ID: 889018

QC-Sample ID: 442936-001 S

Batch #: 1 Matrix: Water

Date Analyzed: 05/30/2012

Date Prepared: 05/30/2012

Analyst: BEC

Reporting Units: mg/L

Reporting Units: mg/L											
MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
BTEx by SW 8260B											
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	<0.00100	0.100	0.108	108	0.100	0.101	101	7	66-142	20	
Toluene	<0.00100	0.100	0.127	127	0.100	0.119	119	7	59-139	20	
Ethylbenzene	<0.00100	0.100	0.120	120	0.100	0.116	116	3	75-125	20	
m,p-Xylenes	<0.00200	0.200	0.227	114	0.200	0.214	107	6	75-125	20	
o-Xylene	<0.00100	0.100	0.119	119	0.100	0.115	115	3	75-125	20	

Lab Batch ID: 889136

Date Analyzed: 05/31/2012

QC-Sample ID: 442936-012 S

Batch #: 1 Matrix: Water

Reporting Units: mg/L

Date Prepared: 05/31/2012

Analyst: BEC

Reporting Units: mg/L											
MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
BTEx by SW 8260B											
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	<0.00100	0.100	0.0914	91	0.100	0.0863	86	6	66-142	20	
Toluene	<0.00100	0.100	0.100	100	0.100	0.0988	99	1	59-139	20	
Ethylbenzene	<0.00100	0.100	0.0935	94	0.100	0.0911	91	3	75-125	20	
m,p-Xylenes	<0.00200	0.200	0.193	97	0.200	0.187	94	3	75-125	20	
o-Xylene	<0.00100	0.100	0.106	106	0.100	0.105	105	1	75-125	20	

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

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

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

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. Arguilo

Company Name: Basin Environmental Service Technologies, LLC

Company Address: P. O. Box 301

City/State/Zip: Lovington, NM 88260

Telephone No: (575) 396-2378

Sampler Signature: [Signature]

Fax No: (575) 396-1429

e-mail: blarguilo@basinenv.com

Project Name: Lovington Gathering WTI

Project #: 2006-142

Project Loc: Lee County, NM

PO #: PAA-J. Henry

Report Format: ☒ Standard

☐ TRRP

☐ NPDES

(lab use only)

ORDER #: 442936

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO ₃	HCl	H ₂ SO ₄	NaOH	Na ₂ S ₂ O ₃	None	Other (Specify)	DW = Drinking Water SL = Sludge GW = Groundwater S = Soil/Solid NP = Non-Potable Specify Other	TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO ₄ , Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY	
001	MMW-1			5/23/2012	1435		3	X		X						GW														X
002	MMW-3			5/23/2012	1350		3	X		X						GW														X
003	MMW-4			5/23/2012	1415		3	X		X						GW														X
004	MMW-5			5/23/2012	1505		3	X		X						GW														X
005	MMW-6			5/23/2012	1330		3	X		X						GW														X
006	MMW-7			5/23/2012	1305		3	X		X						GW														X
007	MMW-8			5/23/2012	1225		3	X		X						GW														X
008	MMW-9			5/23/2012	1600		3	X		X						GW														X
009	MMW-10			5/23/2012	1155		3	X		X						GW														X

Special Instructions:

Relinquished by: [Signature]

Date

Time

Received by:

Date

Time

Relinquished by: [Signature]

Date

Time

Received by:

Date

Time

Relinquished by:

Date

Time

Received by ELOT:

Date

Time

Laboratory Comments:

Sample Containers intact?

VOCs Free of Headspace?

Labels on container(s)?

Custody seals on container(s)?

Sample Hand Delivered by Sampler/Client Rep.?

by Courier? UPS DHL FedEx

Temperature Upon Receipt: 60°C/145°C

**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-InClient: Basin EnvironmentalDate/Time: 5/25/12 9:20 A.MLab ID #: 442936Initials: [Signature]**Sample Receipt Checklist**

1. Samples on ice?	Blue	<u>Water</u>	No	
2. Shipping container in good condition?	<u>Yes</u>	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	<u>Yes</u>	No	N/A	
4. Chain of Custody present?	<u>Yes</u>	No		
5. Sample instructions complete on chain of custody?	<u>Yes</u>	No		
6. Any missing / extra samples?	<u>Yes</u>	<u>No</u>		
7. Chain of custody signed when relinquished / received?	<u>Yes</u>	No		
8. Chain of custody agrees with sample label(s)?	<u>Yes</u>	No		
9. Container labels legible and intact?	<u>Yes</u>	No		
10. Sample matrix / properties agree with chain of custody?	<u>Yes</u>	No		
11. Samples in proper container / bottle?	<u>Yes</u>	No		
12. Samples properly preserved?	<u>Yes</u>	No	N/A	
13. Sample container intact?	<u>Yes</u>	No		
14. Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No		
15. All samples received within sufficient hold time?	<u>Yes</u>	<u>No</u>		
16. Subcontract of sample(s)?	<u>Yes</u>	<u>No</u>	N/A	
17. VOC sample have zero head space?	<u>Yes</u>	No	N/A	
18. Cooler 1 No.	Cooler 2 No.	Cooler 3 No.	Cooler 4 No.	Cooler 5 No.
lbs <u>4.5</u> °C	lbs °C	lbs °C	lbs °C	lbs °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 444346
for
PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

27-JUN-12

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), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)

Xenco-Lakeland: Florida (E84098)

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: AZ00901): Arizona (AZM757)

Xenco Tucson (EPA Lab code: AZ000989): Arizona (AZ0758)



27-JUN-12

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

Reference: XENCO Report No: **444346**
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 444346. 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. 444346 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,

Nicholas Straccione

Project Manager

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

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Sample Cross Reference 444346



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-9	W	06-19-12 15:00		444346-001
MW-10	W	06-19-12 15:30		444346-002
JW Well	W	06-19-12 16:40		444346-003
Goff Dairy Ctr. Pivot Well	W	06-19-12 16:30		444346-004
Goff Dairy Ctr. Pivot Beg	W	06-19-12 16:25		444346-005
Goff Dairy Ctr. Pivot End	W	06-19-12 17:00		444346-006



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

Project Name: Lovington Gathering WTI



Project ID: 2006-142

Work Order Number: 444346

Report Date: 27-JUN-12

Date Received: 06/20/2012

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Hits Summary

444346



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id: MW-10	Matrix: Water	% Moisture:
Lab Sample Id: 444346-002	Date Collected: Jun-19-12 15:30	
	Date Received: Jun-20-12 14:00	

Analytical Method: BTEX by SW 8260B	Prep Method: SW5030B
Seq Number: 890824	Date Prep: Jun-24-12 17:12

Parameter	Cas Number	Result	Units	Analysis Date	Flag	Dil
m,p-Xylenes	179601-23-1	0.0157	mg/L	06/24/12 19:48		1
Total Xylenes	1330-20-7	0.0157	mg/L	06/24/12 19:48		1
Total BTEX		0.0157	mg/L	06/24/12 19:48		1



Certificate of Analysis Summary 444346

PLAINS ALL AMERICAN EHS, Midland, TX



Project Id: 2006-142

Contact: Jason Henry

Project Location: Lea County, NM

Project Name: Lovington Gathering WT1

Date Received in Lab: Wed Jun-20-12 02:00 pm

Report Date: 27-JUN-12

Project Manager: Nicholas Straccione

Analysis Requested	Lab Id:	444346-001	444346-002	444346-003	444346-004	444346-005	444346-006
	Field Id:	MW-9	MW-10	JW Well	Goff Dairy Cr. Pivot Well	Goff Dairy Cr. Pivot Beg	Goff Dairy Cr. Pivot End
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
	Sampled:	Jun-19-12 15:00	Jun-19-12 15:30	Jun-19-12 16:40	Jun-19-12 16:30	Jun-19-12 16:25	Jun-19-12 17:00
BTEx by SW 8260B SUB: TX104704215	Extracted:	Jun-24-12 17:10	Jun-24-12 17:12	Jun-24-12 17:14	Jun-24-12 17:16	Jun-24-12 17:18	Jun-24-12 17:20
	Analyzed:	Jun-24-12 19:23	Jun-24-12 19:48	Jun-24-12 20:12	Jun-24-12 20:36	Jun-24-12 21:00	Jun-24-12 21:23
	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	ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100
Toluene		ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100
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	0.0157 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
Total Xylenes		ND 0.00100	0.0157 0.00100	ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100
Total BTEx		ND 0.00100	0.0157 0.00100	ND 0.00100	ND 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 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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Nicholas Straccione
Project 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.
- * 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 **LOQ** Limit of Quantitation
- DL** Method Detection Limit
- NC** Non-Calculable
- + NELAC certification not offered for this compound.
- * (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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4143 Greenbriar Dr, Stafford, TX 77477
9701 Harry Hines Blvd, Dallas, TX 75220
5332 Blackberry Drive, San Antonio TX 78238
2505 North Falkenburg Rd, Tampa, FL 33619
12600 West I-20 East, Odessa, TX 79765
6017 Financial Drive, Norcross, GA 30071
3725 E. Atlanta Ave, Phoenix, AZ 85040

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
(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 444346,

Project ID: 2006-142

Lab Batch #: 890824

Sample: 444346-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 06/24/12 19:23

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0509	0.0500	102	74-124	
Dibromofluoromethane	0.0502	0.0500	100	75-131	
1,2-Dichloroethane-D4	0.0485	0.0500	97	63-144	
Toluene-D8	0.0455	0.0500	91	80-117	

Lab Batch #: 890824

Sample: 444346-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 06/24/12 19:48

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0523	0.0500	105	74-124	
Dibromofluoromethane	0.0555	0.0500	111	75-131	
1,2-Dichloroethane-D4	0.0494	0.0500	99	63-144	
Toluene-D8	0.0458	0.0500	92	80-117	

Lab Batch #: 890824

Sample: 444346-003 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 06/24/12 20:12

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0488	0.0500	98	74-124	
Dibromofluoromethane	0.0546	0.0500	109	75-131	
1,2-Dichloroethane-D4	0.0515	0.0500	103	63-144	
Toluene-D8	0.0437	0.0500	87	80-117	

Lab Batch #: 890824

Sample: 444346-004 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 06/24/12 20:36

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0512	0.0500	102	74-124	
Dibromofluoromethane	0.0534	0.0500	107	75-131	
1,2-Dichloroethane-D4	0.0494	0.0500	99	63-144	
Toluene-D8	0.0455	0.0500	91	80-117	

* 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

Work Orders : 444346,

Project ID: 2006-142

Lab Batch #: 890824

Sample: 444346-005 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 06/24/12 21:00

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0523	0.0500	105	74-124	
Dibromofluoromethane	0.0553	0.0500	111	75-131	
1,2-Dichloroethane-D4	0.0488	0.0500	98	63-144	
Toluene-D8	0.0484	0.0500	97	80-117	

Lab Batch #: 890824

Sample: 444346-006 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 06/24/12 21:23

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0491	0.0500	98	74-124	
Dibromofluoromethane	0.0564	0.0500	113	75-131	
1,2-Dichloroethane-D4	0.0529	0.0500	106	63-144	
Toluene-D8	0.0483	0.0500	97	80-117	

Lab Batch #: 890824

Sample: 623654-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 06/24/12 15:39

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0520	0.0500	104	74-124	
Dibromofluoromethane	0.0538	0.0500	108	75-131	
1,2-Dichloroethane-D4	0.0463	0.0500	93	63-144	
Toluene-D8	0.0485	0.0500	97	80-117	

Lab Batch #: 890824

Sample: 623654-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 06/24/12 14:37

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0510	0.0500	102	74-124	
Dibromofluoromethane	0.0462	0.0500	92	75-131	
1,2-Dichloroethane-D4	0.0398	0.0500	80	63-144	
Toluene-D8	0.0470	0.0500	94	80-117	

* 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

Work Orders : 444346,

Project ID: 2006-142

Lab Batch #: 890824

Sample: 444297-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 06/24/12 17:48

SURROGATE RECOVERY STUDY

BTEX by SW 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Bromofluorobenzene	0.0512	0.0500	102	74-124	
Dibromofluoromethane	0.0534	0.0500	107	75-131	
1,2-Dichloroethane-D4	0.0454	0.0500	91	63-144	
Toluene-D8	0.0488	0.0500	98	80-117	

Lab Batch #: 890824

Sample: 444297-001 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 06/24/12 18:12

SURROGATE RECOVERY STUDY

BTEX by SW 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Bromofluorobenzene	0.0507	0.0500	101	74-124	
Dibromofluoromethane	0.0533	0.0500	107	75-131	
1,2-Dichloroethane-D4	0.0481	0.0500	96	63-144	
Toluene-D8	0.0486	0.0500	97	80-117	

* 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.



Blank Spike Recovery



Project Name: Lovington Gathering WTI

Work Order #: 444346

Project ID:

2006-142

Lab Batch #: 890824

Sample: 623654-1-BKS

Matrix: Water

Date Analyzed: 06/24/2012

Date Prepared: 06/24/2012

Analyst: ROL

Reporting Units: mg/L

Batch #: 1

BLANK / BLANK SPIKE RECOVERY STUDY

BTEX by SW 8260B		Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Analytes							
Benzene		<0.00100	0.100	0.101	101	66-142	
Toluene		<0.00100	0.100	0.0848	85	59-139	
Ethylbenzene		<0.00100	0.100	0.0962	96	75-125	
m,p-Xylenes		<0.00200	0.200	0.218	109	75-125	
o-Xylene		<0.00100	0.100	0.0929	93	75-125	

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

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

BRL - Below Reporting Limit



Form 3 - MS / MSD Recoveries



Project Name: Lovington Gathering WTI

Work Order #: 444346

Project ID: 2006-142

Lab Batch ID: 890824

QC-Sample ID: 444297-001 S

Batch #: 1 Matrix: Water

Date Analyzed: 06/24/2012

Date Prepared: 06/24/2012

Analyst: ROL

Reporting Units: mg/L

Reporting Units: mg/L		MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
BTEx by SW 8260B 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		<0.00100	0.100	0.109	109	0.100	0.116	116	6	66-142	20	
Toluene		<0.00100	0.100	0.0982	98	0.100	0.0993	99	1	59-139	20	
Ethylbenzene		<0.00100	0.100	0.0961	96	0.100	0.101	101	5	75-125	20	
m,p- Xylenes		<0.00200	0.200	0.223	112	0.200	0.225	113	1	75-125	20	
o-Xylene		<0.00100	0.100	0.0982	98	0.100	0.106	106	8	75-125	20	

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 Applicable
N = See Narrative, EQL = Estimated Quantitation 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. Arguilo

Project Name: Lovington Gathering WTI

Company Name: Basin Environmental Service Technologies, LLC

Project #: 2006-142

Company Address: P. O. Box 301

Project Loc: Lea County, NM

City/State/Zip: Lovington, NM 88260

PO #: PAA-J. Henry

Telephone No: (575) 396-2378

Fax No: (575) 396-1429

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

Sampler Signature: [Signature]

e-mail: bjarguilo@basinenv.com

Order #: 444346

(lab use only)

ORDER #

LAB # (lab use only)

FIELD CODE

Beginning Depth

Ending Depth

Date Sampled

Time Sampled

Field Filtered

Total #. of Containers

Ice

HNO₃

HCl

H₂SO₄

NaOH

Na₂S₂O₃

None

Other (Specify)

DW - Drinking Water SL - Sludge

GW - Groundwater S - Soil/Sol

NP - Non-Potable Specify Other

TPH: 418.1 8015M 8015B

TPH: TX 1005 TX 1006

Cations (Ca, Mg, Na, K)

Anions (Cl, SO₄, Alkalinity)

SAR / ESP / CEC

Metals: As Ag Ba Cd Cr Pb Hg Se

Volatiles

Semivolatiles

BTEX 8021B/5030 or BTEX 8260

RCI

N.O.R.M.

RUSH TAT (Pre-Schedule) 24, 48, 72 hrs

Standard TAT 4 DAY

Preservation & # of Containers

Matrix

ANALYZE FOR

TOTAL

TCAP

ANALYZE FOR

ANALYZE FOR

ANALYZE FOR

ANALYZE FOR

ANALYZE FOR

Special Instructions:

Relinquished by:

Date

Time

Received by:

Date

Time

Relinquished by:

Date

Time

Received by:

Date

Time

Relinquished by:

Date

Time

Received by:

Date

Time

Laboratory Comments:
Sample Containers intact? N
VOCs Free of Headspace? N
Labels on container(s) N
Custody seals on container(s) N
Custody seals on cooler(s) N
Sample Hand Delivered N
by Courier? N UPS N DHL N FedEx N Lone Star N
Temperature Upon Receipt: 80/65°C



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: Basin / Plains
Date/Time: 6.20.12 14:00
Lab ID #: 444346
Initials: AE

Sample Receipt Checklist

1. Samples on ice?	Blue	Water	No	
2. Shipping container in good condition?	<u>Yes</u>	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	<u>Yes</u>	No	N/A	
4. Chain of Custody present?	<u>Yes</u>	No		
5. Sample instructions complete on chain of custody?	<u>Yes</u>	No		
6. Any missing / extra samples?	Yes	<u>No</u>		
7. Chain of custody signed when relinquished / received?	<u>Yes</u>	No		
8. Chain of custody agrees with sample label(s)?	<u>Yes</u>	No		
9. Container labels legible and intact?	<u>Yes</u>	No		
10. Sample matrix / properties agree with chain of custody?	<u>Yes</u>	No		
11. Samples in proper container / bottle?	<u>Yes</u>	No		
12. Samples properly preserved?	<u>Yes</u>	No	N/A	
13. Sample container intact?	<u>Yes</u>	No		
14. Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No		
15. All samples received within sufficient hold time?	<u>Yes</u>	No		
16. Subcontract of sample(s)?	<u>Yes</u>	No	N/A	
17. VOC sample have zero head space?	<u>Yes</u>	No	N/A	
18. Cooler 1 No.	Cooler 2 No.	Cooler 3 No.	Cooler 4 No.	Cooler 5 No.
lbs 6.5 °C	lbs °C	lbs °C	lbs °C	lbs °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

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

District I
625 N. French Dr., Hobbs, NM 88240
District II
301 W. Grand Avenue, Artesia, NM 88210
District III
000 Rio Brazos Road, Aztec, NM 87410
District IV
220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-141
Revised October 10, 2003

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

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

Release Notification and Corrective Action

OPERATOR

x Initial Report ☐ Final Report

Name of Company Plains Pipeline	Contact Camille Reynolds	
Address 3112 W. US Hwy 82, Lovington, NM 88260	Telephone No. 505-441-0965	
Facility Name Lovington Gathering WTI	Facility Type 6" Steel Pipeline	
Surface Owner Robert Rice	Mineral Owner	Lease No.

LOCATION OF RELEASE

Unit Letter H	Section 6	Township 17S	Range 37E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea
------------------	--------------	-----------------	--------------	---------------	------------------	---------------	----------------	---------------

Latitude 32° 51' 56.0" Longitude 103° 17' 07.2"

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 12 barrels	Volume Recovered 8 barrels
Source of Release 6" Steel Pipeline	Date and Hour of Occurrence 4-21-2006 @ 13:00	Date and Hour of Discovery 4-21-2006 @ 13:15
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Pat Caperton	
By Whom? Camille Reynolds	Date and Hour 4-21-2006 @ 15:35	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken Internal corrosion while purging the line resulted in release of sweet crude oil. The line has been purged. The line is an idle 6-inch steel gathering line. The pressure on the line was approximately 50 psi and the gravity of the sweet crude oil was 34. The sweet crude has an H₂S content of <10 ppm. The line was approximately 1.5 feet bgs at the release point.

Describe Area Affected and Cleanup Action Taken.* The impacted soil was excavated and stockpiled on plastic. Aerial extent of surface impact was approximately 1,500 ft².

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

Signature: <i>Camille Reynolds</i>	OIL CONSERVATION DIVISION	
Printed Name: Camille Reynolds	Approved by District Supervisor:	
Title: Remediation Coordinator	Approval Date:	Expiration Date:
E-mail Address: cjreynolds@paalp.com	Conditions of Approval:	
Date: 4/26/2006 Phone: 505-441-	Attached ☐	