

AP - 96

**QUARTERLY
MONITORING
REPORTS**

2013

Basin Environmental Service Technologies, LLC

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P. O. Box 301 Lovington, New Mexico 88260
Office: (575) 396-2378
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RECEIVED OGD

2013 NOV -4 P 2: 22

October 25, 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:

Basin Environmental Service Technologies, LLC, on behalf of Plains Pipeline, LP, is pleased to submit the attached Quarterly Monitoring Report, dated October 2013, for the Lovington Gathering WTI release site located in Section 6 of Township 17 South, Range 37 East, in Lea County, New Mexico. The Quarterly Monitoring Report summarizes the status of recent activities performed at the site during the third quarter of 2013 (3Q2013).

Review of laboratory analytical results from groundwater samples collected at the Lovington Gathering WTI site indicate BTEX constituent concentrations in monitor well MW-9 have been both less than the appropriate laboratory MDL and less than NMOCD regulatory standards for twenty-two (22) consecutive months (December 14, 2011 through September 19, 2013). BTEX constituent concentrations in monitor well MW-10 have been both less than the appropriate laboratory MDL and less than NMOCD regulatory standards for nine (9) consecutive months (November 27, 2012 through July 16, 2013). In addition, diminished well volume and recharge in monitor well MW-10 has hampered groundwater recovery efforts and precluded sample collection from the monitor well for two (2) consecutive quarters (2Q2013 and 3Q2013). Based on these facts, Plains hereby requests permission to **cease weekly recovery activities from monitor wells MW-9 and MW-10** and to **reduce the sampling frequency for these wells from *monthly* to *quarterly***. Plains also requests permission to **reduce the sampling frequency for the 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) **from *monthly* to *quarterly***. There have been no detections of BTEX constituents at any of the five (5) locations since monthly sampling was initiated in July 2011.

Review of laboratory analytical results indicate BTEX constituent concentrations in monitor wells MW-1, MW-4, MW-5, and MW-8 have been both less than the appropriate laboratory MDL and less than NMOCD regulatory standards for at least eight (8) consecutive quarters (i.e., November 9, 2011 through August 21, 2013, with monitor well MW-4 found to be dry in 3Q2013). Plains hereby requests permission to **reduce the sampling frequency for these wells from *quarterly* to *semi-annually***. Review of historical laboratory analytical data indicates the highest BTEX constituent detections at the site have typically occurred during the first and third calendar quarters. Therefore, Plains proposes to **sample the monitor wells in the first and third quarters of each calendar year**.

Page 2
Edward Hansen
October 25, 2013

More detailed information regarding the proposed changes is included in the enclosed Quarterly Monitoring Report.

Should you have any questions or comments, please do not hesitate to contact me at (575) 396-2378.

Respectfully,

A handwritten signature in black ink, appearing to read 'Ben J. Arguijo', with a long, sweeping horizontal flourish extending to the right.

Ben J. Arguijo
Project Manager
Basin Environmental Service Technologies, LLC

CC: Geoffrey R. Leking, NMOCD - Hobbs District Office

Enclosure

Basin Environmental Service Technologies, LLC

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QUARTERLY MONITORING REPORT July - September 2013

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 #: 2006-0142
NMOCD Reference #: 1RP-838

Prepared for:

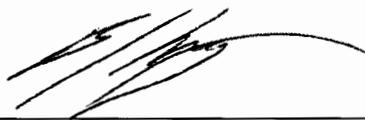


Plains Marketing, LP
333 Clay Street, Suite 1600
Houston, Texas 77002

Prepared By:

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

October 2013



Ben J. Arguijo
Project Manager

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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 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 in the third quarter (July - September) of 2013 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 release on the Lovington Gathering WTI pipeline. Failure of a section of the six-inch (6") steel gathering line during purging resulted in a release of sweet crude oil. The failure was attributed to internal corrosion. The release was immediately reported to the NMOCD Hobbs District Office. The "Release Notification and Corrective Action" (Form C-141) indicated approximately twelve barrels (12 bbls) of crude oil was released from the pipeline, and approximately eight barrels (8 bbls) were recovered, resulting in a net loss of four barrels (4 bbls) of crude oil. The release occurred in a pasture containing various oil and gas production facilities and resulted in a visibly stained surface area measuring approximately one thousand, five hundred square feet (1,500 ft²). The Form C-141 is provided as Appendix B.

During initial response activities, the pipeline was repaired utilizing a pipeline clamp, and visibly stained soil was excavated and placed on plastic sheeting to mitigate any further hydrocarbon impact to the underlying soil. The excavated area was fenced in and is characterized by a Plains pipeline right-of-way adjacent to an idled Plains pump station.

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. A series of eleven (11) soil borings were advanced to depths ranging from 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 phase-separated hydrocarbons (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 TPH concentrations 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 samples collected from monitor well MW-7 indicated additional monitor wells would be 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 standards 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 Remediation 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.

On May 15, 2013, an Oxygen Release Compound (ORC®) filter sock was installed in monitor well MW-3 to facilitate enhanced aerobic biodegradation of the dissolved-phase plume.

3.2 Groundwater Monitoring

A quarterly groundwater monitoring event was conducted on August 21, 2013 (3Q2013), to assess the levels and extent of dissolved-phase constituents and 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 wells MW-2, MW-4, MW-6, and MW-10 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 wells during the quarterly monitoring event. The monitor wells were gauged in a subsequent site visit on September 19, 2013. However, groundwater conditions at the site had not improved, and no samples could be obtained from the monitor wells at that time.

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 16, August 21, and September 19, 2013.

Prior to the July and August 2013 monthly monitoring events, the Ctr. Pivot Well was valved off to facilitate agricultural activities in the Goff Dairy #9 Pivot, precluding sample collection from the well and the two (2) locations on the Goff Dairy Center Pivot (Goff Dairy - Ctr. Pivot Beginning and Goff Dairy - Ctr. Pivot End). The well has not been placed back into service as of the time of this report.

Locations of groundwater monitoring wells and the inferred groundwater gradient, which was constructed from groundwater elevation measurements collected during the 3Q2013 sampling event, are depicted in Figure 2A, "Inferred Groundwater Gradient Map – 3Q2013". Groundwater elevation data is provided as Table 1, "2013 Groundwater Elevation Data". The groundwater gradient map indicates a general gradient of approximately 0.007 feet/foot to the southeast, as

measured between monitor wells MW-1 and MW-9. The corrected groundwater elevation (measured in feet above mean sea level) ranged between 3,713.90 feet in monitor well MW-7 and 3,717.05 feet in monitor well MW-5. No groundwater elevation data was able to be obtained from monitor wells MW-2, MW-4, MW-6, and MW-10.

No PSH was detected in any of the on-site monitor wells during the 3Q2013 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 using 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 3Q2013 groundwater monitoring event is summarized below. Groundwater contaminant concentrations are depicted in Figure 3A, "Groundwater Concentration Map - 3Q2013".

- Benzene concentrations were both less than the laboratory MDL and 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 were both less than the laboratory MDL and 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, August, and September 2013 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 2013" and "Groundwater Concentration Map - September 2013", respectively. Groundwater contaminant concentrations for the August sampling event are included in Figure 3A, "Groundwater Concentration Map - 3Q2013".

- **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, 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 QA/QC PROCEDURES

5.1 Groundwater Sampling

Groundwater samples were submitted to Xenco Laboratories in Odessa, Texas, for analysis of BTEX constituent concentrations in accordance with EPA Method SW846-8021b. All samples were analyzed within seven (7) days of the collection date.

5.2 Decontamination of Equipment

Cleaning and decontamination of the sampling equipment was the responsibility of the environmental technician. Prior to use, and between each sample, the sampling equipment was cleaned with Liqui-Nox® detergent and rinsed with distilled water.

5.3 Laboratory Protocol

The laboratory was responsible for proper QA/QC procedures after signing the chain-of-custody form(s). These procedures were either transmitted with the laboratory analytical reports or are on file at the laboratory.

6.0 ANTICIPATED ACTIONS

Review of laboratory analytical results indicate BTEX constituent concentrations in monitor well MW-9 have been both less than the appropriate laboratory MDL and less than NMOCD regulatory standards for twenty-two (22) consecutive months (December 14, 2011 through September 19, 2013). BTEX constituent concentrations in monitor well MW-10 have been both less than the appropriate laboratory MDL and less than NMOCD regulatory standards for nine (9) consecutive months (November 27, 2012 through July 16, 2013). In addition, diminished well volume and recharge in monitor well MW-10 has hampered groundwater recovery efforts and precluded sample collection from the monitor well for two (2) consecutive quarters (2Q2013 and 3Q2013). Based on these facts, Plains hereby requests permission to cease weekly recovery activities from monitor wells MW-9 and MW-10 and to reduce the sampling frequency for these wells from monthly to quarterly. Plains also requests permission to reduce the sampling frequency for the 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) from monthly to quarterly. There have been no detections of BTEX constituents at any of the five (5) locations since monthly sampling was initiated in July 2011.

Review of laboratory analytical results indicate BTEX constituent concentrations in monitor wells MW-1, MW-4, MW-5, and MW-8 have been both less than the appropriate laboratory MDL and less than NMOCD regulatory standards for at least eight (8) consecutive quarters (November 9, 2011 through August 21, 2013, with monitor well MW-4 found to be dry in 3Q2013). Plains hereby requests permission to reduce the sampling frequency for these wells from quarterly to semi-annually. Review of historical laboratory analytical data indicates the highest BTEX constituent detections at the site have typically occurred during the first and third calendar quarters. Therefore, Plains proposes to sample the monitor wells in the first and third quarters of each calendar year.

Monitor well MW-2 has been found to be dry during six (6) of the last eight (8) quarterly monitoring events. Quarterly gauging of the monitor well will continue throughout the 2013 calendar year, and samples will be collected if and when the well exhibits sufficient recharge.

The table on the following page summarizes the proposed sampling schedule changes detailed above.

Location	Current Schedule	Proposed Schedule
MW-1	1/Qtr	2/Yr (1Q,3Q)
MW-2	1/Qtr	No Change
MW-3	1/Qtr	No Change
MW-4	1/Qtr	2/Yr (1Q,3Q)
MW-5	1/Qtr	2/Yr (1Q,3Q)
MW-6	1/Qtr	No Change
MW-7	1/Qtr	No Change
MW-8	1/Qtr	2/Yr (1Q,3Q)
MW-9	1/Mo	1/Qtr
MW-10	1/Mo	1/Qtr
Goff Dairy Well	1/Mo	1/Qtr
JW Well	1/Mo	1/Qtr
Goff Dairy - Ctr. Pivot Well	1/Mo	1/Qtr
Goff Dairy - Ctr. Pivot Beg.	1/Mo	1/Qtr
Goff Dairy - Ctr. Pivot End	1/Mo	1/Qtr

Until the above-referenced changes are approved by the NMOCD, the following schedules will remain in effect: quarterly sampling of monitor wells MW-1 through MW-8; monthly sampling of monitor wells MW-9, MW-10, and the five (5) locations on/adjacent to the Goff Dairy #9 Pivot; and weekly groundwater recovery from monitor wells MW-9 and MW-10.

The ORC filter sock installed in monitor well MW-3 to facilitate enhanced aerobic biodegradation of the dissolved-phase plume will be inspected and replaced (if necessary) 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 2013 reporting period will be submitted to the NMOCD by April 1, 2014.

7.0 LIMITATIONS

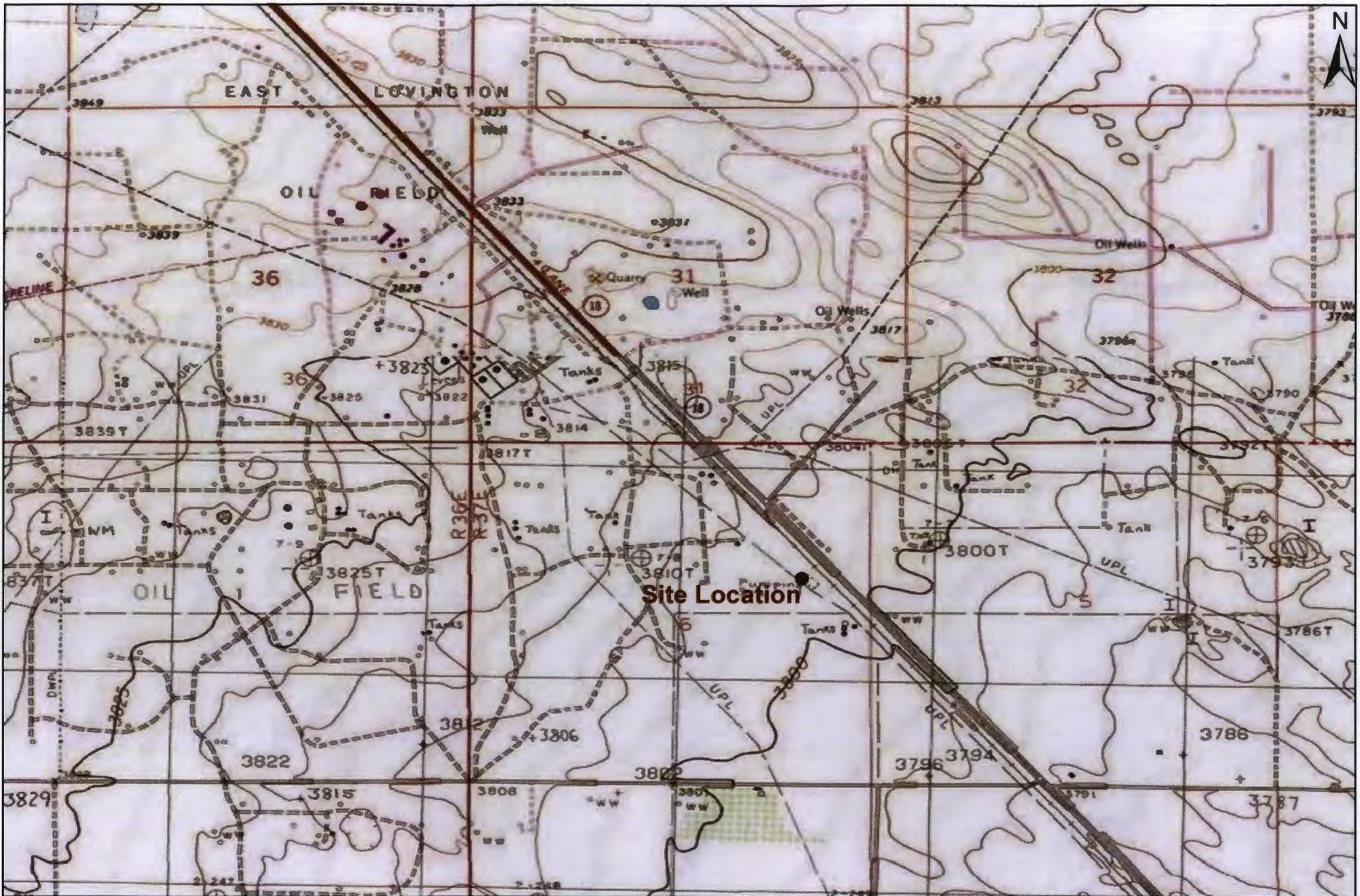
Basin Environmental Service Technologies, LLC, has prepared this *Quarterly Monitoring Report* to the best of its ability. No other warranty, expressed or implied, is made or intended. Basin Environmental has examined and relied upon documents referenced in the report and on oral statements made by certain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

8.0 DISTRIBUTION

- Copy 1: Edward Hansen
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Figures



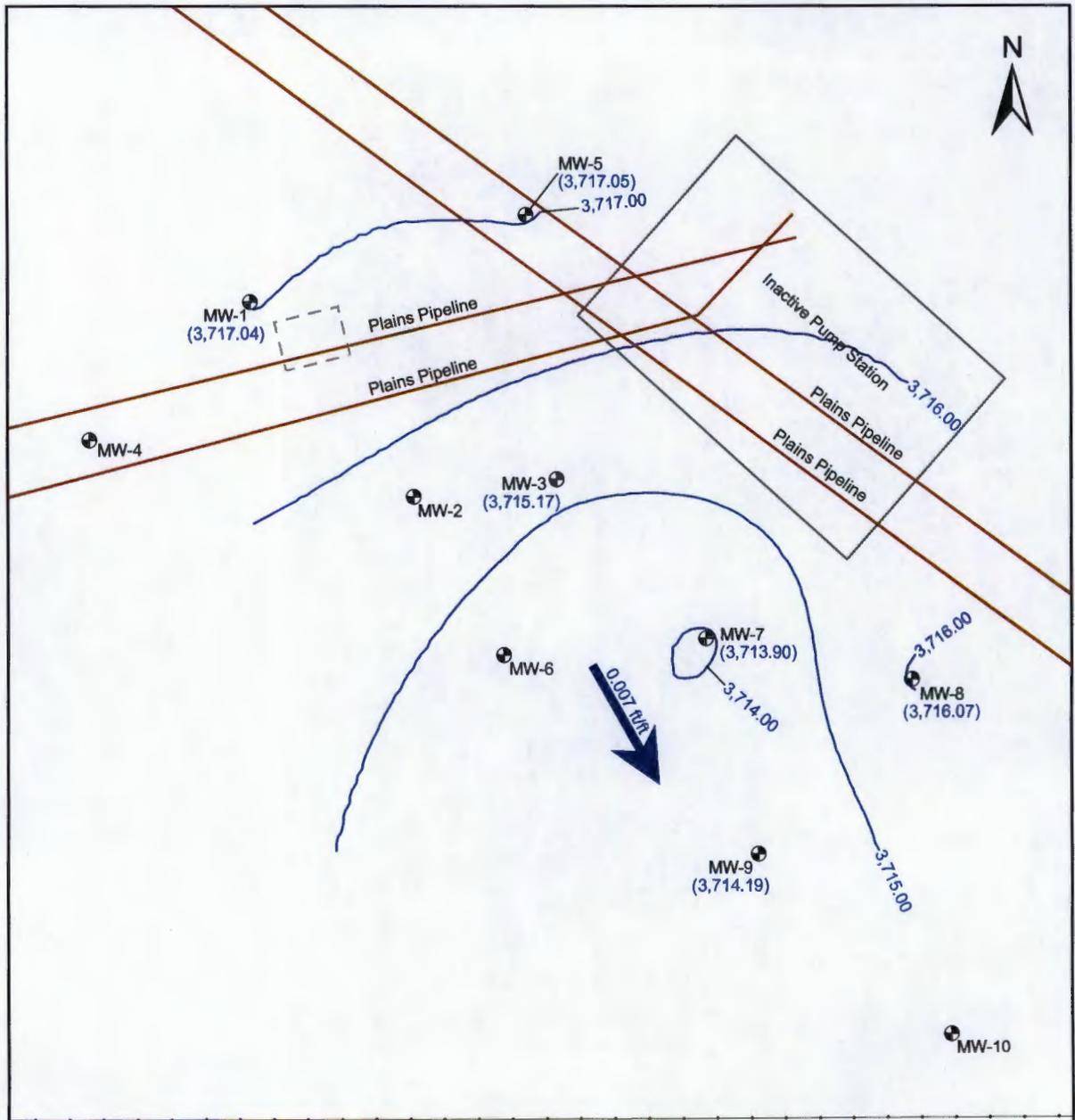
1,000 500 0 1,000 2,000
 Distance in Feet

Figure 1
 Site Location Map
 Plains Marketing, LP
 Lovington Gathering WTI
 Lea County, New Mexico
 Plains SRS #: 2006-142
 NMOCD Reference #: 1RP-838



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

Drawn By: BJA	Checked By: BRB
July 2, 2013	Scale: 1" = 2,000'



Groundwater Gradient magnitude measured between monitor wells MW-1 and MW-9. Monitor wells MW-2, MW-4, MW-6 & MW-10 were not used in map construction.



Legend:	
Pipeline	Monitor Well
Fence	Irrigation Well
Excavation Extent	
(3,720) Groundwater Elevation (ft)	
0.007 R/R Groundwater Gradient & Magnitude	

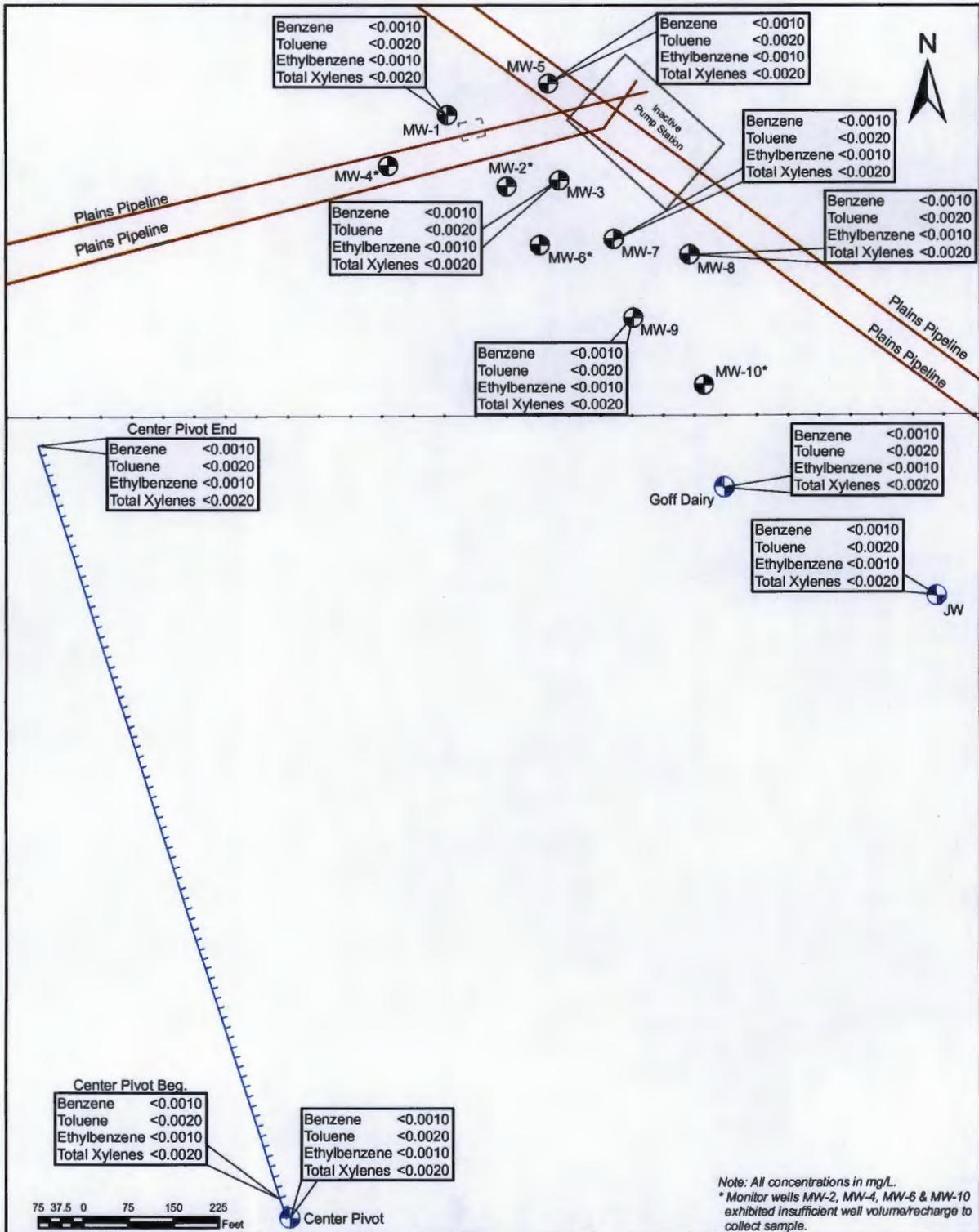
Figure 2
Inferred Groundwater Gradient Map
 3Q2013
 Plains Marketing, LP
 Lovington Gathering WTI
 SRS # 2006-142
 Lea County, New Mexico

Basin Environmental Service Technologies
 Effective Solutions

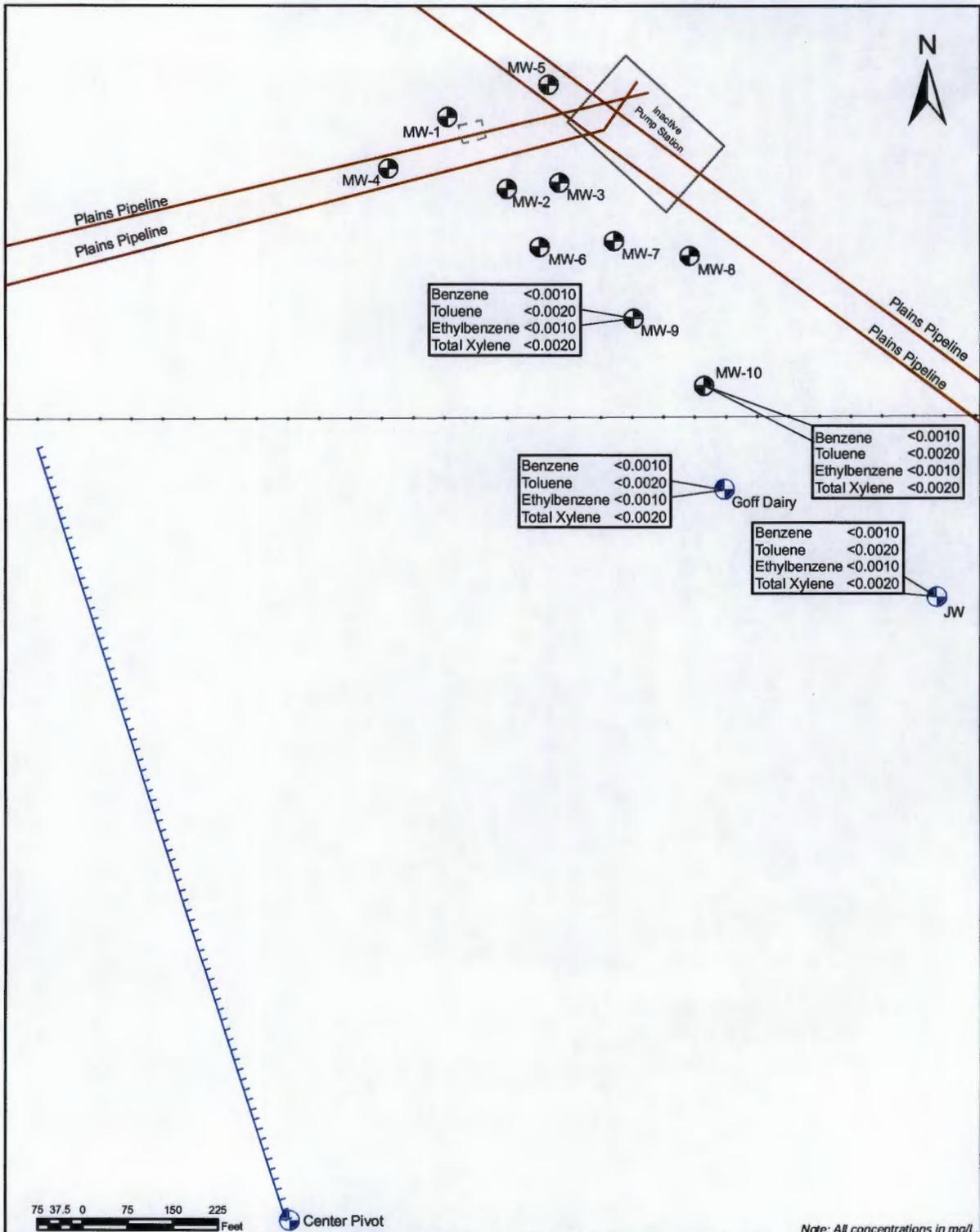
Basin Environmental Service Technologies
 3100 Plains Hwy.
 Lovington, NM 88260

Drawn By: BJA	Checked By: BRB
August 28, 2013	Scale: 1" = 100'

Goff Dairy Well



Legend: Pipeline Excavation Extent Fence Center Pivot Monitor Well Irrigation Well	Figure 3A Groundwater Concentration Map 3Q2013 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
			August 28, 2013	Scale: 1" = 250'



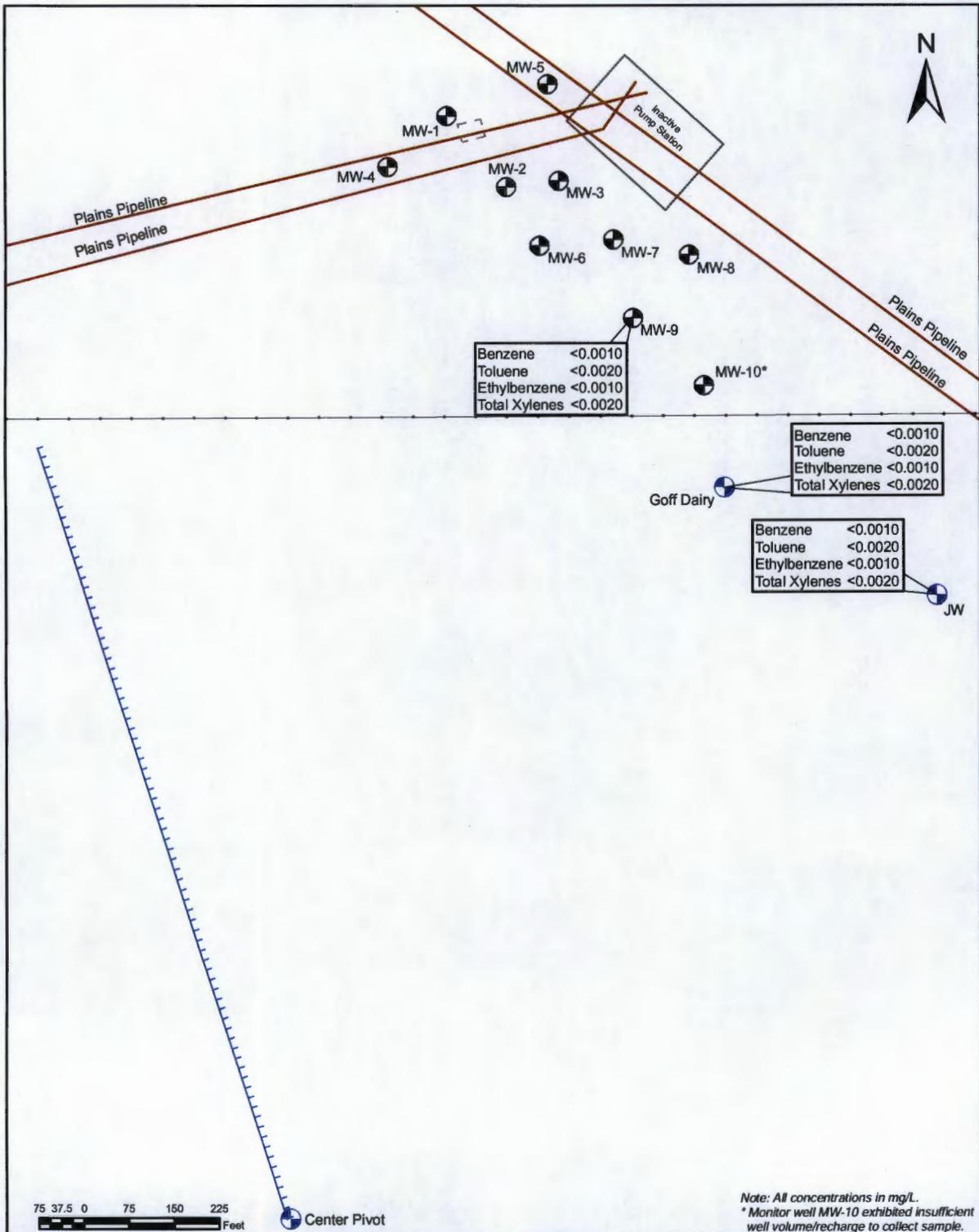
Legend:

	Pipeline
	Excavation Extent
	Fence
	Center Pivot
	Monitor Well
	Irrigation Well

Figure 3B
Groundwater Concentration Map
July 2013
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
July 23, 2013	Scale: 1" = 250'



Legend:

	Pipeline
	Excavation Extent
	Fence
	Center Pivot
	Monitor Well
	Irrigation Well

Figure 3C
Groundwater Concentration Map
 September 2013
 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
Sept. 26, 2013	Scale: 1" = 250'

Tables

**TABLE 1
2013 GROUNDWATER ELEVATION DATA**

**PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: 1RP-838**

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW-1	02/22/13	3,806.60	-	87.53	-	3,719.07
	05/23/13	3,806.60	-	89.37	-	3,717.23
	08/21/13	3,806.60	-	89.56	-	3,717.04
MW-2	02/22/13	3,806.31	-	87.41	-	3,718.90
	05/23/13	3,806.31	-	Dry	-	-
	08/21/13	3,806.31	-	Dry	-	-
MW-3	02/22/13	3,806.19	-	87.37	-	3,718.82
	05/23/13	3,806.19	-	89.34	-	3,716.85
	08/21/13	3,806.19	-	91.02	-	3,715.17
MW-4	02/22/13	3,806.67	-	87.69	-	3,718.98
	05/23/13	3,806.67	-	89.65	-	3,717.02
	08/21/13	3,806.67	-	Dry	-	-
MW-5	02/22/13	3,806.30	-	87.24	-	3,719.06
	05/23/13	3,806.30	-	89.00	-	3,717.30
	08/21/13	3,806.30	-	89.25	-	3,717.05
MW-6	02/22/13	3,806.08	-	87.40	-	3,718.68
	05/23/13	3,806.08	-	89.60	-	3,716.48
	08/21/13	3,806.08	-	Dry	-	-
MW-7	02/22/13	3,806.05	-	87.81	-	3,718.24
	05/23/13	3,806.05	-	89.99	-	3,716.06
	08/21/13	3,806.05	-	92.15	-	3,713.90
MW-8	02/22/13	3,805.89	-	87.32	-	3,718.57
	05/23/13	3,805.89	-	89.55	-	3,716.34
	08/21/13	3,805.89	-	89.82	-	3,716.07
MW-9	02/22/13	3,806.02	-	87.68	-	3,718.34
	05/23/13	3,806.02	-	90.03	-	3,715.99
	08/21/13	3,806.02	-	91.83	-	3,714.19

**TABLE 1
2013 GROUNDWATER ELEVATION DATA**

**PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: 1RP-838**

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW-10	02/22/13	3,806.08	-	89.99	-	3,716.09
	05/23/13	3,806.08	-	90.14	-	3,715.94
	08/21/13	3,806.08	-	Dry	-	-

*Elevations based on the North American Vertical Datum of 1929.
- = Not applicable*

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

**PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: 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-1	10/05/06	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	12/28/06	<0.0010	<0.0010	<0.0010	0.002	<0.0010	0.002	0.002	-	-
	03/16/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	05/31/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	09/25/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/30/07	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/14/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/17/08	0.020	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.020	-	-
	12/02/08	0.035	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.035	-	-
	03/03/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/01/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/04/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/25/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/30/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/11/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/22/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/27/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
08/24/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
02/06/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
08/28/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
02/22/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
05/23/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
08/21/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
MW-2	10/05/06	0.010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.010	-	-
	12/28/06	0.161	<0.0010	<0.0010	0.024	<0.0010	0.024	0.185	-	-
	03/16/07	0.154	<0.0010	<0.0010	0.015	<0.0010	0.015	0.169	-	-
	05/31/07	0.005	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.005	-	-

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

**PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: 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	09/25/07	0.050	<0.0010	<0.0010	0.003	<0.0010	0.003	0.053	-	-
	11/30/07	0.928	<0.0010	<0.005	0.036	<0.005	0.036	0.964	-	-
	03/11/08	0.095	<0.0020	<0.0010	0.0032	<0.0010	0.0032	0.098	-	-
	06/14/08	0.003	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.003	-	-
	09/17/08	0.159	<0.0020	<0.0010	0.004	<0.0010	0.004	0.163	-	-
	12/02/08	0.050	0.002	<0.0010	0.007	0.001	0.008	0.060	-	-
	03/03/09	0.036	<0.0020	<0.0010	0.0026	<0.0010	0.0026	0.038	-	-
	06/18/09	0.0097	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.010	-	-
	09/01/09	0.084	<0.0020	<0.0010	0.0083	<0.0010	0.0083	0.093	-	-
	12/18/09	0.0129	<0.0020	<0.0010	0.0095	<0.0010	0.0095	0.022	-	-
	03/04/10	0.0026	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0026	-	-
	05/25/10	0.0023	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0023	-	-
	08/30/10	0.0406	<0.0020	<0.0010	0.0132	<0.0010	0.0132	0.0538	-	-
	11/11/10	0.0087	<0.0020	<0.0010	0.091	<0.0010	0.091	0.0997	-	-
	03/22/11	0.0361	<0.0020	<0.0010	0.0605	0.0011	0.0616	0.0977	-	-
	05/27/11	0.00222	<0.0020	<0.0010	0.00297	<0.0010	0.00297	0.00519	-	-
	09/30/11	0.179	<0.0020	0.00275	0.00345	0.00212	0.00557	0.187	-	-
	11/09/11	Dry								
	02/06/12	0.00187	<0.0020	<0.0010	0.00212	0.00102	0.00314	0.00501	-	-
	05/23/12	Dry								
08/28/12	Dry									
11/27/12	Dry									
02/28/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
05/23/13	Dry									
08/21/13	Dry									
MW-3	10/05/06	6.60	<0.0010	<0.0010	0.072	<0.0010	0.072	6.67	-	-
	12/28/06	1.02	<0.0010	0.005	0.028	<0.0010	0.028	1.05	-	-
	03/16/07	1.48	<0.0010	0.013	0.034	<0.0010	0.034	1.53	-	-
	05/31/07	1.66	0.010	0.034	0.029	0.012	0.041	1.75	-	-
	09/25/07	0.494	0.023	0.020	0.014	0.007	0.021	0.56	-	-
	11/30/07	5.93	0.027	0.273	0.141	0.074	0.215	6.45	-	-
	03/11/08	1.159	0.107	0.177	0.066	0.139	0.205	1.65	-	-
	06/14/08	0.214	0.002	0.007	0.012	0.005	0.017	0.24	-	-

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

PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: 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-3	09/17/08	0.026	<0.0020	<0.0010	0.002	<0.0010	0.002	0.03	-	-
	12/02/08	0.024	<0.0020	<0.0010	0.004	0.001	0.005	0.03	-	-
	03/03/09	1.367	0.0305	0.0251	0.0173	0.0158	0.0331	1.46	-	-
	06/18/09	0.0031	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/01/09	0.0073	0.0033	<0.0010	0.0028	0.0015	0.0043	0.01	-	-
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/04/10	0.0011	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0011	-	-
	05/25/10	0.0109	0.0033	<0.0010	0.0048	0.0027	0.0075	0.0217	-	-
	08/30/10	0.0092	0.0036	<0.0010	0.006	0.0033	0.0093	0.0221	-	-
	11/11/10	0.0033	<0.0020	<0.0010	0.0023	0.0013	0.0036	0.0069	-	-
	03/22/11	0.00904	0.00283	<0.0010	0.00815	0.00375	0.0119	0.0238	-	-
	05/27/11	0.0205	<0.0020	<0.0010	0.00308	0.00116	0.00424	0.0247	-	-
	08/24/11	0.0262	0.00333	<0.0010	0.00827	0.00312	0.0114	0.0409	-	-
	11/09/11	0.00211	<0.0020	<0.0010	0.00231	0.00114	0.00345	0.00556	-	-
	02/06/12	0.0214	0.00306	0.00126	0.00751	0.00345	0.0110	0.0367	-	-
	05/23/12	0.00929	0.00201	<0.0010	0.00584	0.00261	0.00845	0.0198	-	-
	08/28/12	0.00747	<0.0020	<0.0010	<0.0020	0.00136	0.00136	0.00883	-	-
	11/27/12	0.0120	0.00284	0.00109	0.00710	0.00252	0.00962	0.0256	-	-
02/22/13	0.0112	<0.0020	<0.0010	0.00302	0.00212	0.00514	0.0163	-	-	
05/23/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
08/21/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
MW-4	12/28/06	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	03/16/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	05/30/07	<0.0010	0.001	<0.0010	<0.0010	<0.0010	<0.0010	0.001	-	-
	09/25/07	<0.0010	0.001	<0.0010	<0.0020	<0.0010	<0.0020	0.001	-	-
	11/30/07	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/14/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/17/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/02/08	<0.0010	0.006	<0.0010	<0.0020	<0.0010	<0.0020	0.006	-	-
	03/03/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
06/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
09/01/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	

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

**PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: 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-4	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/04/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/25/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/30/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/11/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/22/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/27/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	4.76	<0.0050
	08/24/11	0.00119	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.00119	-	-
	11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/06/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/28/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/22/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
08/21/13	Dry									
MW-5	12/28/06	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	03/16/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	05/30/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	09/25/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/30/07	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/14/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/17/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/02/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/03/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/01/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/04/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/25/10	0.0014	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0014	-	-
08/30/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
11/11/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	

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

PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: 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	03/22/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/27/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/24/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/06/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/28/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/22/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
08/21/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
MW-6	12/28/06	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	03/16/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	05/30/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	09/25/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/30/07	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/14/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/17/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/02/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/03/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/18/09	0.0044	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0044	-	-
	09/01/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/18/09	0.013	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0130	-	-
	03/04/10	0.0063	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0063	-	-
	05/25/10	0.0059	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0059	-	-
	08/30/10	0.0053	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0053	-	-
	11/11/10	0.0082	<0.0020	<0.0010	0.0035	<0.0010	0.0035	0.0117	-	-
03/22/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
05/27/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
08/24/11	0.105	<0.0020	<0.0010	0.0597	0.00309	0.0628	0.168	-	-	
11/09/11	0.00356	<0.0020	<0.0010	0.0388	<0.0010	0.0388	0.0424	-	-	
02/06/12	0.0129	<0.0020	0.00106	0.133	<0.0010	0.133	0.147	-	-	

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

PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: 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-6	05/23/12	0.00768	<0.0010	<0.0010	0.157	<0.0010	0.157	0.165	-	-
	08/28/12	<0.0010	<0.0020	<0.0010	0.0026	<0.0010	0.0026	0.0026	-	-
	11/27/12	0.00121	<0.0020	<0.0010	0.0414	<0.0010	0.0414	0.0426	-	-
	02/22/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/21/13	Dry								
MW-7	12/28/06	0.047	<0.0010	<0.0010	0.001	<0.0010	0.001	0.0480	-	-
	03/16/07	0.047	<0.0010	<0.0010	0.015	<0.0010	0.015	0.0620	-	-
	05/31/07	0.039	<0.0010	<0.0010	0.005	<0.0010	0.005	0.0440	-	-
	09/25/07	0.037	<0.0010	<0.0010	0.030	<0.0010	0.03	0.0670	-	-
	11/30/07	0.026	<0.0020	<0.0010	0.022	<0.0010	0.022	0.0480	-	-
	03/11/08	0.095	<0.0020	<0.0010	0.0032	<0.0010	0.0032	0.0982	-	-
	06/14/08	0.138	<0.0020	<0.0010	0.016	<0.0010	0.016	0.1540	-	-
	09/17/08	0.353	<0.0020	<0.0010	0.003	<0.0010	0.003	0.3560	-	-
	12/02/08	0.036	<0.0020	<0.0010	0.003	0.002	0.005	0.0410	-	-
	03/03/09	0.0775	<0.0020	<0.0010	0.0327	<0.0010	0.0327	0.1102	-	-
	06/18/09	0.057	<0.0020	<0.0010	0.0329	<0.0010	0.0329	0.0899	-	-
	09/01/09	0.012	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0120	-	-
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/04/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/25/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/30/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/11/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/22/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/27/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/24/11	0.00192	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.00192	-	-
11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
02/06/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
08/28/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
02/22/13	<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 #: 2006-142
NMOCD REFERENCE #: 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-7	05/23/13	0.0087	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0087	-	-
	08/21/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
MW-8	03/16/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	05/31/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	09/25/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/30/07	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/14/08	0.008	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.008	-	-
	09/17/08	0.568	<0.0100	<0.005	<0.0100	<0.005	<0.0100	0.568	-	-
	12/02/08	0.234	0.046	0.008	0.041	0.013	0.054	0.342	-	-
	03/03/09	0.0284	<0.0020	<0.0010	0.0068	<0.0010	0.0068	0.0352	-	-
	06/18/09	0.0045	<0.0020	0.0016	0.0032	<0.0010	0.0032	0.0093	-	-
	09/01/09	0.0013	<0.0020	0.0011	0.0141	<0.0010	0.0141	0.0165	-	-
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/04/10	<0.0010	<0.0020	0.0011	<0.0020	<0.0010	<0.0020	0.0011	-	-
	05/25/10	0.0012	<0.0020	0.001	<0.0020	<0.0010	<0.0020	0.0022	-	-
	08/30/10	<0.0010	<0.0020	0.0014	<0.0020	<0.0010	<0.0020	0.0014	-	-
11/11/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
03/22/11	<0.0010	<0.0020	<0.0010	<0.0020	0.00154	0.00154	0.00154	-	-	
05/27/11	<0.0010	<0.0020	<0.0010	<0.0020	0.00260	0.00260	0.00260	-	-	
08/24/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
02/06/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
08/28/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
02/22/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
05/23/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
08/21/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
MW-9	09/25/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/30/07	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-

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

**PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: 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	06/14/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/17/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/02/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/03/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/01/09	0.9717	0.0641	<0.0100	0.0867	0.0422	0.1289	1.1647	-	-
	09/10/09	1.838	<0.0200	<0.0100	0.0537	<0.0100	0.0537	1.8917	-	-
	10/05/09	0.985	<0.0020	<0.0010	0.0442	<0.0010	0.0442	1.0292	-	-
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/04/10	0.0192	<0.0020	<0.0010	0.0027	<0.0010	0.0027	0.0219	-	-
	05/25/10	0.0421	<0.0020	<0.0010	0.0063	<0.0010	0.0063	0.0484	-	-
	08/30/10	0.1259	<0.0020	<0.0010	0.0344	<0.0010	0.0344	0.1603	-	-
	11/11/10	0.0265	<0.0020	<0.0010	0.0097	<0.0010	0.0097	0.0362	-	-
	03/22/11	0.00335	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.00335	-	-
	05/27/11	0.00406	<0.0020	<0.0010	0.00326	<0.0010	0.00326	0.00732	-	-
	08/24/11	<0.0010	<0.0020	<0.0010	0.00237	<0.0010	0.00237	0.00237	-	-
	11/09/11	0.00179	<0.0020	<0.0010	0.00349	<0.0010	0.00349	0.00528	-	-
	12/14/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	01/05/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/06/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/01/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/18/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/19/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	07/30/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/28/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/11/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/19/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	01/30/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/22/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/27/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/09/13	<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 #: 2006-142
NMOCD REFERENCE #: 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	05/29/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
	06/25/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
	07/16/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
	08/21/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
	09/19/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
MW-10	11/02/09	<0.005	<0.005	<0.005	<0.010	<0.005	<0.010	<0.010	-	-	
	03/04/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
	05/25/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
	08/30/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
	11/11/10	0.0350	<0.0020	<0.0010	0.0035	<0.0010	0.0035	0.0385	-	-	
	03/22/11	0.0568	<0.0020	<0.0010	0.00333	<0.0010	0.00333	0.0601	-	-	
	05/27/11	1.52	<0.0020	0.00107	0.0113	<0.0010	0.0113	1.53	-	-	
	07/11/11	3.00	0.00265	0.00365	0.0248	0.00232	0.0271	3.03	-	-	
	08/24/11	0.654	<0.0020	0.00158	0.0177	0.00262	0.0203	0.676	-	-	
	10/10/11	0.183	<0.0020	<0.0010	0.121	<0.0010	0.121	0.304	-	-	
	10/31/11	0.053	<0.0020	0.0014	0.0944	0.00222	0.0966	0.151	-	-	
	11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
	12/14/11	0.00846	0.00226	<0.0010	0.0261	<0.0010	0.0261	0.0368	-	-	
	01/05/12	0.00432	<0.0020	<0.0010	0.0126	<0.0010	0.0126	0.0169	-	-	
	02/06/12	0.00233	<0.0020	<0.0010	0.00644	<0.0010	0.00644	0.00877	-	-	
	03/01/12	0.00134	<0.0020	<0.0010	0.00423	<0.0010	0.00423	0.00557	-	-	
	04/18/12	0.00338	<0.0020	<0.0010	0.0175	<0.0010	0.0175	0.0209	-	-	
	05/23/12	0.00387	<0.0010	<0.0010	0.103	<0.0010	0.103	0.107	-	-	
	06/19/12	<0.0010	<0.0010	<0.0010	0.0157	<0.0010	0.0157	0.0157	-	-	
	07/30/12					Dry					
08/28/12	<0.0010	<0.0020	<0.0010	0.0134	0.00138	0.0148	0.0148	-	-		
09/11/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-		
10/31/12	<0.0010	<0.0020	0.00124	0.00308	0.00149	0.00457	0.00581	-	-		
11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-		
12/19/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-		
01/30/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-		
02/22/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-		
03/27/13	<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 #: 2006-142
NMOCD REFERENCE #: 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	04/09/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/25/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	07/16/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/21/13	Dry								
	09/19/13	Dry								
Goff Dairy Well	05/27/11	0.00125	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.00123	-	-
	07/11/11	0.00262	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.00262	-	-
	08/24/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/10/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/14/11	<0.0010	<0.0020	0.00111	<0.0020	<0.0010	<0.0020	0.00111	-	-
	01/05/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/06/12	<0.0010	<0.0020	0.00111	0.00201	<0.0010	0.00201	0.00201	-	-
	03/01/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/18/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	07/30/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/28/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/11/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/27/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
04/09/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
06/25/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
07/16/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
08/21/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
09/19/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
Goff Dairy - Ctr. Pivot Well	07/07/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/24/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/10/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/09/11	<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 #: 2006-142
NMCD REFERENCE #: 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 Well	12/14/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	01/05/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/06/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/01/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/18/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/19/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	07/30/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/28/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/11/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/19/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/28/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/27/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/09/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
06/25/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
08/21/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
Goff Dairy - Ctr. Pivot Beg.	07/07/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/24/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/10/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/01/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/18/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/19/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	07/30/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/11/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/28/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
03/27/13	<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 #: 2006-142
NMOCD REFERENCE #: 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.	04/09/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/25/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/21/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
Goff Dairy - Ctr. Pivot End	07/07/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/24/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/10/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/01/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/18/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/19/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	07/30/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/11/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/28/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/27/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
04/09/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
06/25/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
08/21/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
JW Well	07/14/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/24/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/10/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/01/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/18/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/19/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	07/30/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
08/28/12	<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 #: 2006-142
NMOCD REFERENCE #: 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)
JW Well	09/11/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/19/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	01/31/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/28/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/27/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/09/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/29/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/25/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	07/16/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/21/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/19/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
NMOCD REGULATORY STANDARD		0.01	0.75	0.75	TOTAL XYLENES 0.62				1.6	0.05

Appendices

Appendix A
Laboratory Analytical Reports

Analytical Report 466896
for
PLAINS ALL AMERICAN EH&S

Project Manager: Ben Arguijjo

Lovington Gathering WTI

2006-142

23-JUL-13

Collected By: Client



12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-13-14-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)



23-JUL-13

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

Reference: XENCO Report No(s): **466896**
Lovington Gathering WTI
Project Address:

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(s) 466896. 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. 466896 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,

Kelsey Brooks
Project Manager

*Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY*

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



Sample Cross Reference 466896



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-9	W	07-16-13 00:00		466896-001
MW-10	W	07-16-13 00:00		466896-002
Goff Dairy Well	W	07-16-13 00:00		466896-003
JW Well	W	07-16-13 00:00		466896-004



CASE NARRATIVE



Client Name: PLAINS ALL AMERICAN EH&S

Project Name: Lovington Gathering WTI

Project ID: 2006-142
Work Order Number(s): 466896

Report Date: 23-JUL-13
Date Received: 07/17/2013

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analysis Summary 466896

PLAINS ALL AMERICAN EH&S, Midland, TX



Project Id: 2006-142

Contact: Ben Arguijjo

Project Name: Lovington Gathering WTI

Date Received in Lab: Wed Jul-17-13 08:43 am

Report Date: 23-JUL-13

Project Location:

Project Manager: Kelsey Brooks

Analysis Requested	Lab Id:	466896-001	466896-002	466896-003	466896-004		
	Field Id:	MW-9	MW-10	Goff Dairy Well	JW Well		
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER		
	Sampled:	Jul-16-13 00:00	Jul-16-13 00:00	Jul-16-13 00:00	Jul-16-13 00:00		
BTEX by EPA 8021	Extracted:	Jul-22-13 16:00	Jul-22-13 16:00	Jul-22-13 16:00	Jul-22-13 16:00		
	Analyzed:	Jul-22-13 21:19	Jul-22-13 21:35	Jul-22-13 21:51	Jul-22-13 22:07		
	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		
Ethylbenzenc		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		
Xylenes, Total		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

Kelsey Brooks
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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Certified and approved by numerous States and Agencies.

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4143 Greenbriar Dr, Stafford, TX 77477	(281) 240-4200	(281) 240-4280
9701 Harry Hines Blvd , Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
2505 North Falkenburg Rd, Tampa, FL 33619	(813) 620-2000	(813) 620-2033
12600 West I-20 East, Odessa, TX 79765	(432) 563-1800	(432) 563-1713
6017 Financial Drive, Norcross, GA 30071	(770) 449-8800	(770) 449-5477
3725 E. Atlanta Ave, Phoenix, AZ 85040	(602) 437-0330	



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 466896,

Project ID: 2006-142

Lab Batch #: 918983

Sample: 466896-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 07/22/13 21:19

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0292	0.0300	97	80-120	
4-Bromofluorobenzene	0.0268	0.0300	89	80-120	

Lab Batch #: 918983

Sample: 466896-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 07/22/13 21:35

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0289	0.0300	96	80-120	
4-Bromofluorobenzene	0.0260	0.0300	87	80-120	

Lab Batch #: 918983

Sample: 466896-003 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 07/22/13 21:51

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0259	0.0300	86	80-120	

Lab Batch #: 918983

Sample: 466896-004 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 07/22/13 22:07

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	0.0253	0.0300	84	80-120	

Lab Batch #: 918983

Sample: 641457-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 07/22/13 21:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0251	0.0300	84	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 : 466896,

Project ID: 2006-142

Lab Batch #: 918983

Sample: 641457-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 07/22/13 20:15

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0330	0.0300	110	80-120	
4-Bromofluorobenzene	0.0287	0.0300	96	80-120	

Lab Batch #: 918983

Sample: 641457-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 07/22/13 20:31

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0323	0.0300	108	80-120	
4-Bromofluorobenzene	0.0297	0.0300	99	80-120	

Lab Batch #: 918983

Sample: 466896-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 07/22/13 23:59

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0330	0.0300	110	80-120	
4-Bromofluorobenzene	0.0311	0.0300	104	80-120	

Lab Batch #: 918983

Sample: 466896-001 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 07/23/13 00:15

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0320	0.0300	107	80-120	
4-Bromofluorobenzene	0.0301	0.0300	100	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



BS / BSD Recoveries



Project Name: Lovington Gathering WTI

Work Order #: 466896

Analyst: KEB

Date Prepared: 07/22/2013

Project ID: 2006-142

Date Analyzed: 07/22/2013

Lab Batch ID: 918983

Sample: 641457-1-BKS

Batch #: 1

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	0.101	101	0.100	0.101	101	0	70-125	25	
Toluene	<0.00200	0.100	0.0964	96	0.100	0.0973	97	1	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0979	98	0.100	0.100	100	2	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.193	97	0.200	0.198	99	3	70-131	25	
o-Xylene	<0.00100	0.100	0.0956	96	0.100	0.0981	98	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 #: 466896

Project ID: 2006-142

Lab Batch ID: 918983

QC- Sample ID: 466896-001 S

Batch #: 1 Matrix: Water

Date Analyzed: 07/22/2013

Date Prepared: 07/22/2013

Analyst: KEB

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	0.111	111	0.100	0.105	105	6	70-125	25	
Toluene	<0.00200	0.100	0.107	107	0.100	0.102	102	5	70-125	25	
Ethylbenzene	<0.00100	0.100	0.111	111	0.100	0.106	106	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	0.109	109	0.100	0.104	104	5	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, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In



Client: PLAINS ALL AMERICAN EH&S

Date/ Time Received: 07/17/2013 08:43:00 AM

Work Order #: 466896

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)?	1
#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: *Kelsey Brooks* Date: 07/18/2013
 Kelsey Brooks

Checklist reviewed by: *Kelsey Brooks* Date: 07/18/2013
 Kelsey Brooks



CHAIN OF CUSTODY RECORD

Houston 4143 Greenbriar Dr. Stafford, TX 77477 (281)240-4200 Odessa 12600 West I-20 East Odessa, TX 79765 (432)563-1800
 Hobbs: 4008 N Grimes Hobbs, NM 88240 (575)392-7550

Page 1 of 1

LAB W.O.#: 466896

Field billable Hrs: _____

- | | |
|-----------------------|----------------------|
| VA Vial Amber | ES Encore Sampler |
| VC Vial Clear | TS TerraCore Sampler |
| VP Vial Pre-preserved | AC Air Canister |
| GA Glass Amber | TB Tedlar Bag |
| GC Glass Clear | ZB Zip Lock Bag |
| PA Plastic Amber | PC Plastic Clear |
| PC Plastic Clear | |

Company: Basin Environmental Service Technologies, LLC		Phone: (575)396-2378
Address: 3100 Plains Hwy.		Fax: (575)396-1429
City: Lovington	State: NM	Zip: 88260
PM/Attn: Ben J. Argujo	Email: bjarjujo@basinenv.com	
Project ID: Lovington Gathering WTI SRS #2006-142		PO#: PAA-J Henry
Invoice To: Jason Henry Plains All American		Quote #: _____
Sampler Signature: <i>Ben J. Argujo</i>	Circle One Event: Daily Weekly Monthly Quarterly Semi-Annual Annual N/A	

TAT Work Days = D Need results by: _____ Time: _____
 Std (5-7D) 6Hrs 1D 2D 3D 4D 5D 7D 10D 14D Other _____

Well ID	Well Name	Date	Type	Vol	Count
1	MW-9	7/16/13	GW		3
2	MW-10	7/16/13	GW		3
3	Goff Dairy Well	7/16/13	GW		3
4	JW Well	7/16/13	GW		3
5					
6					
7					
8					
9					
0					

TPH	BTEX	Chloride	VC	E,I						
	X									
	X									
	X									
	X									

Size(s) 2oz 4oz 8oz 16oz 32oz 1Gal
 40ml 125 ml 250 ml 500 ml, 1L, Other _____

- Preservative Type Codes**
- | | | |
|--------------------------------|---|------------------|
| A None | E HCL | I Ice |
| B HNO ₃ | F MeOH | J MCAA |
| H ₂ SO ₄ | G Na ₂ S ₂ O ₈ | K ZnAc&NaOH |
| D NaOH | H NaHSO ₄ | L Asbc Acid&NaOH |
| O | | |

- Matrix Type Codes**
- | | |
|--------------------|-----------------------|
| GW Ground Water | S Soil/Sediment/Solid |
| WW Waste Water | W Wipe |
| DW Drinking Water | A Air |
| SW Surface Water | O Oil |
| OW Ocean/Sea Water | T Tissue |
| PL Product-Liquid | U Urine |
| PS Product-Solid | B Blood |
| SL Sludge | |
| Other | |

REMARKS

CTLs	TRRP	DW	NPDES	LPST	DryCh	FL TX GA NC SC NJ PA OK LA	1 2 3 4 CLP AFCEE QAPP	ADaPT SEDD ERPIMS	Match Incomplete	1522	310	Non-Conformances found?	
Other:						AL NM Other	NELAC DoD-ELAP Other:	XLS Other:	Absent Unclear			Samples intact upon arrival?	
1	<i>Ben J. Argujo</i>						7-17-13	8:40	<i>Shannon</i>	MS	7/17/13	843	Received on Wet Ice?
2													Labeled with proper preservatives?
3													Received within holding time?
4													Custody seals intact?
													VOCs rec'd w/o headspace?
													Proper containers used?
													pH verified acceptable and VOCs?
													Received on time to meet HT's?

B&A Laboratories: Hobbs 575-392-7550 Dallas 214-902-0300 Houston 281-242-4200 Odessa 432-563-1800 San Antonio 210-509-3334 Phoenix 602-437-0330 C.O.C. Serial # _____
 FTS Service Centers: Atlanta 770-449-8800 Lakeland 863-646-8526 Tampa 803-543-8099 Philadelphia 610-955-5649 South Carolina 803-543-8099

Execution of this document by client creates a legal and binding agreement between client and Xenco for analytical and testing services provided by Xenco to client under Xenco's standard terms and conditions unless previously agreed in writing. Terms of payment are Net 30 days, and all past due amounts shall accrue interest at 1.5% per month until paid in full. All laboratory analytical data and reports generated by Xenco remain the exclusive property of Xenco until invoices for such data are paid in full. Revision Date: Nov 12 2009

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XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In



Client: PLAINS ALL AMERICAN EH&S

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Date/ Time Received: 07/17/2013 08:43:00 AM

Temperature Measuring device used :

Work Order #: 466896

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1
#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: *Kelsey Brooks* Date: 07/18/2013
 Kelsey Brooks

Checklist reviewed by: *Kelsey Brooks* Date: 07/18/2013
 Kelsey Brooks

Analytical Report 469081, 469097

for

PLAINS ALL AMERICAN EH&S

Project Manager: Ben Arguijo

Lovington Gathering WTI

SRS# 2006-142

28-AUG-13

Collected By: Client



12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-13-14-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-AUG-13

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

Reference: XENCO Report No(s): **469081**
Lovington Gathering WTI
Project Address: 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) 469081. 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. 469081 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,

Kelsey Brooks
Project Manager

*Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
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Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America



Sample Cross Reference 469081



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-1	W	08-21-13 12:00		469081-001
MW-3	W	08-21-13 11:00		469081-002
MW-5	W	08-21-13 11:30		469081-003
MW-7	W	08-21-13 10:00		469081-004
MW-8	W	08-21-13 09:30		469081-005
MW-9	W	08-21-13 14:30		469081-006



Sample Cross Reference 469097



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
JW WELL	W	08-21-13 14:15		469097-001
GOFF DAIRY WELL	W	08-21-13 14:00		469097-002
GOFF DAIRY--CTR. PIVOT WELL	W	08-21-13 13:40		469097-003
GOFF DAIRY--CTR. PIVOT END	W	08-21-13 13:50		469097-004
GOFF DAIRY--CTR. PIVOT BEG.	W	08-21-13 13:30		469097-005



CASE NARRATIVE



Client Name: PLAINS ALL AMERICAN EH&S

Project Name: Lovington Gathering WTI

Project ID: SRS# 2006-142
Work Order Number(s): 469081

Report Date: 28-AUG-13
Date Received: 08/23/2013

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



CASE NARRATIVE



Client Name: PLAINS ALL AMERICAN EH&S

Project Name: Lovington Gathering WTI

Project ID: SRS# 2006-142
Work Order Number(s): 469097

Report Date: 28-AUG-13
Date Received: 08/23/2013

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analysis Summary 469081

PLAINS ALL AMERICAN EH&S, Midland, TX



Project Id: SRS# 2006-142

Contact: Ben Arguijo

Project Name: Lovington Gathering WTI

Date Received in Lab: Fri Aug-23-13 09:34 am

Report Date: 28-AUG-13

Project Location: NM

Project Manager: Kelsey Brooks

Analysis Requested	Lab Id:	469081-001	469081-002	469081-003	469081-004	469081-005	469081-006
	Field Id:	MW-1	MW-3	MW-5	MW-7	MW-8	MW-9
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
	Sampled:	Aug-21-13 12:00	Aug-21-13 11:00	Aug-21-13 11:30	Aug-21-13 10:00	Aug-21-13 09:30	Aug-21-13 14:30
BTEX by EPA 8021B	Extracted:	Aug-27-13 10:00					
	Analyzed:	Aug-27-13 14:40	Aug-27-13 14:57	Aug-27-13 15:12	Aug-27-13 15:28	Aug-27-13 16:45	Aug-27-13 17:01
	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					
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.

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

Kelsey Brooks
Project Manager



Certificate of Analysis Summary 469097

PLAINS ALL AMERICAN EH&S, Midland, TX



Project Id: SRS# 2006-142

Contact: Ben Arguijo

Project Location:

Project Name: Lovington Gathering WTI

Date Received in Lab: Fri Aug-23-13 09:45 am

Report Date: 28-AUG-13

Project Manager: Kelsey Brooks

Analysis Requested	Lab Id:	469097-001	469097-002	469097-003	469097-004	469097-005	
	Field Id:	JW WELL	GOFF DAIRY WELL	GOFF DAIRY--CTR. PIVO	GOFF DAIRY--CTR. PIVO	GOFF DAIRY--CTR. PIVO	
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER	WATER	
	Sampled:	Aug-21-13 14:15	Aug-21-13 14:00	Aug-21-13 13:40	Aug-21-13 13:50	Aug-21-13 13:30	
BTEX by EPA 8021B	Extracted:	Aug-27-13 10:00	Aug-27-13 10:00	Aug-27-13 10:00	Aug-27-13 10:00	Aug-27-13 10:00	
	Analyzed:	Aug-27-13 17:17	Aug-27-13 17:33	Aug-27-13 17:49	Aug-27-13 18:06	Aug-27-13 18:22	
	Units/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	
Toluene		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	
m,p-Xylenes		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	
Total Xylenes		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	

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

Kelsey Brooks
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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3725 E. Atlanta Ave, Phoenix, AZ 85040	(770) 449-8800	(770) 449-5477
	(602) 437-0330	



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 469081,

Project ID: SRS# 2006-142

Lab Batch #: 921619

Sample: 469081-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/27/13 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	0.0300	0.0300	100	80-120	
4-Bromofluorobenzene	0.0250	0.0300	83	80-120	

Lab Batch #: 921619

Sample: 469081-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/27/13 14:57

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0292	0.0300	97	80-120	
4-Bromofluorobenzene	0.0247	0.0300	82	80-120	

Lab Batch #: 921619

Sample: 469081-003 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/27/13 15:12

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0244	0.0300	81	80-120	

Lab Batch #: 921619

Sample: 469081-004 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/27/13 15:28

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	0.0250	0.0300	83	80-120	

Lab Batch #: 921619

Sample: 469081-005 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/27/13 16:45

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	0.0241	0.0300	80	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 : 469081,

Project ID: SRS# 2006-142

Lab Batch #: 921619

Sample: 469081-006 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/27/13 17:01

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0298	0.0300	99	80-120	
4-Bromofluorobenzene	0.0247	0.0300	82	80-120	

Lab Batch #: 921619

Sample: 643137-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/27/13 13:42

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0254	0.0300	85	80-120	

Lab Batch #: 921619

Sample: 643137-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/27/13 12:54

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0332	0.0300	111	80-120	
4-Bromofluorobenzene	0.0267	0.0300	89	80-120	

Lab Batch #: 921619

Sample: 643137-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/27/13 13:10

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0293	0.0300	98	80-120	
4-Bromofluorobenzene	0.0260	0.0300	87	80-120	

Lab Batch #: 921619

Sample: 469081-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/27/13 15:44

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0292	0.0300	97	80-120	
4-Bromofluorobenzene	0.0271	0.0300	90	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



BS / BSD Recoveries



Project Name: Lovington Gathering WTI

Work Order #: 469081

Analyst: JUM

Date Prepared: 08/27/2013

Project ID: SRS# 2006-142

Date Analyzed: 08/27/2013

Lab Batch ID: 921619

Sample: 643137-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

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	0.105	105	0.100	0.104	104	1	70-125	25	
Toluene	<0.00200	0.100	0.0976	98	0.100	0.0962	96	1	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0939	94	0.100	0.0929	93	1	71-129	25	
m,p-Xylenes	<0.00200	0.200	0.185	93	0.200	0.184	92	1	70-131	25	
o-Xylene	<0.00100	0.100	0.0926	93	0.100	0.0916	92	1	71-133	25	

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

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

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

All results are based on MDL and Validated for QC Purposes



Form 3 - MS Recoveries



Project Name: Lovington Gathering WTI

Work Order #: 469081

Lab Batch #: 921619

Date Analyzed: 08/27/2013

QC- Sample ID: 469081-001 S

Reporting Units: mg/L

Date Prepared: 08/27/2013

Batch #: 1

Project ID: SRS# 2006-142

Analyst: JUM

Matrix: Water

BTEX by EPA 8021B		MATRIX / MATRIX SPIKE RECOVERY STUDY				
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Benzene	<0.00100	0.100	0.119	119	70-125	
Toluene	<0.00200	0.100	0.110	110	70-125	
Ethylbenzene	<0.00100	0.100	0.107	107	71-129	
m,p-Xylenes	<0.00200	0.200	0.210	105	70-131	
o-Xylene	<0.00100	0.100	0.105	105	71-133	

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

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

All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 469097,

Project ID: SRS# 2006-142

Lab Batch #: 921619

Sample: 469097-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/27/13 17:17

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	0.0249	0.0300	83	80-120	

Lab Batch #: 921619

Sample: 469097-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/27/13 17:33

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0297	0.0300	99	80-120	
4-Bromofluorobenzene	0.0246	0.0300	82	80-120	

Lab Batch #: 921619

Sample: 469097-003 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/27/13 17:49

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	0.0255	0.0300	85	80-120	

Lab Batch #: 921619

Sample: 469097-004 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/27/13 18:06

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0300	0.0300	100	80-120	
4-Bromofluorobenzene	0.0247	0.0300	82	80-120	

Lab Batch #: 921619

Sample: 469097-005 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/27/13 18:22

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0252	0.0300	84	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 : 469097,

Project ID: SRS# 2006-142

Lab Batch #: 921619

Sample: 643137-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/27/13 13:42

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0254	0.0300	85	80-120	

Lab Batch #: 921619

Sample: 643137-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/27/13 12:54

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0332	0.0300	111	80-120	
4-Bromofluorobenzene	0.0267	0.0300	89	80-120	

Lab Batch #: 921619

Sample: 643137-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/27/13 13:10

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0293	0.0300	98	80-120	
4-Bromofluorobenzene	0.0260	0.0300	87	80-120	

Lab Batch #: 921619

Sample: 469081-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 08/27/13 15:44

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0292	0.0300	97	80-120	
4-Bromofluorobenzene	0.0271	0.0300	90	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



BS / BSD Recoveries



Project Name: Lovington Gathering WTI

Work Order #: 469097

Analyst: JUM

Date Prepared: 08/27/2013

Project ID: SRS# 2006-142

Date Analyzed: 08/27/2013

Lab Batch ID: 921619

Sample: 643137-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

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	0.105	105	0.100	0.104	104	1	70-125	25	
Toluene	<0.00200	0.100	0.0976	98	0.100	0.0962	96	1	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0939	94	0.100	0.0929	93	1	71-129	25	
m,p-Xylenes	<0.00200	0.200	0.185	93	0.200	0.184	92	1	70-131	25	
o-Xylene	<0.00100	0.100	0.0926	93	0.100	0.0916	92	1	71-133	25	

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

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

Blank Spike Duplicate Recovery [G] = 100*(F)/[E]

All results are based on MDL and Validated for QC Purposes



Form 3 - MS Recoveries



Project Name: Lovington Gathering WTI

Work Order #: 469097

Lab Batch #: 921619

Date Analyzed: 08/27/2013

QC- Sample ID: 469081-001 S

Reporting Units: mg/L

Date Prepared: 08/27/2013

Batch #: 1

Project ID: SRS# 2006-142

Analyst: JUM

Matrix: Water

MATRIX / MATRIX SPIKE RECOVERY STUDY						
BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Benzene	<0.00100	0.100	0.119	119	70-125	
Toluene	<0.00200	0.100	0.110	110	70-125	
Ethylbenzene	<0.00100	0.100	0.107	107	71-129	
m,p-Xylenes	<0.00200	0.200	0.210	105	70-131	
o-Xylene	<0.00100	0.100	0.105	105	71-133	

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

BRL - Below Reporting Limit



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In



Client: PLAINS ALL AMERICAN EH&S
Date/ Time Received: 08/23/2013 09:45:00 AM
Work Order #: 469097

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)?	1.5
#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)?	No
#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?	N/A

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

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

Checklist completed by: *Kelsey Brooks* Date: 08/23/2013
 Kelsey Brooks

Checklist reviewed by: *Kelsey Brooks* Date: 08/23/2013
 Kelsey Brooks



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In



Client: PLAINS ALL AMERICAN EH&S

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Date/ Time Received: 08/23/2013 09:34:00 AM

Temperature Measuring device used :

Work Order #: 469081

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.5
#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)?	No
#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?	N/A

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

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

Checklist completed by: *Kelsey Brooks* Date: 08/23/2013
Kelsey Brooks

Checklist reviewed by: *Kelsey Brooks* Date: 08/23/2013
Kelsey Brooks

Analytical Report 470800
for
PLAINS ALL AMERICAN EH&S

Project Manager: Ben Arguijo

Lovington Gathering WTI

SRS#2006-142

26-SEP-13

Collected By: Client



12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-13-15-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)



26-SEP-13

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

Reference: XENCO Report No(s): **470800**
Lovington Gathering WTI
Project Address:

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) 470800. 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. 470800 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,

Kelsey Brooks
Project Manager

*Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY*

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



Sample Cross Reference 470800



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-9	W	09-19-13 15:30		470800-001
JW Well	W	09-19-13 10:30		470800-002
Goff Dairy Well	W	09-19-13 10:00		470800-003



CASE NARRATIVE



Client Name: PLAINS ALL AMERICAN EH&S

Project Name: Lovington Gathering WTI

Project ID: SRS#2006-142
Work Order Number(s): 470800

Report Date: 26-SEP-13
Date Received: 09/20/2013

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analysis Summary 470800

PLAINS ALL AMERICAN EH&S, Midland, TX



Project Id: SRS#2006-142

Contact: Ben Arguijo

Project Name: Lovington Gathering WTI

Date Received in Lab: Fri Sep-20-13 08:40 am

Report Date: 26-SEP-13

Project Location:

Project Manager: Kelsey Brooks

Analysis Requested	Lab Id:	470800-001	470800-002	470800-003			
	Field Id:	MW-9	JW Well	Goff Dairy Well			
	Depth:						
	Matrix:	WATER	WATER	WATER			
	Sampled:	Sep-19-13 15:30	Sep-19-13 10:30	Sep-19-13 10:00			
BTEX by EPA 8021	Extracted:	Sep-25-13 17:00	Sep-25-13 17:00	Sep-25-13 17:00			
	Analyzed:	Sep-25-13 22:44	Sep-25-13 23:00	Sep-25-13 23:16			
	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			
Xylenes, Total		ND 0.00100	ND 0.00100	ND 0.00100			
Total BTEX		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

Kelsey Brooks
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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Houston - Dallas - San Antonio - Atlanta - Midland/Odessa - Tampa/Lakeland - Phoenix - Latin America

4143 Greenbriar Dr, Stafford, TX 77477	Phone	Fax
9701 Harry Hines Blvd, Dallas, TX 75220	(281) 240-4200	(281) 240-4280
5332 Blackberry Drive, San Antonio TX 78238	(214) 902 0300	(214) 351-9139
2505 North Falkenburg Rd, Tampa, FL 33619	(210) 509-3334	(210) 509-3335
12600 West I-20 East, Odessa, TX 79765	(813) 620-2000	(813) 620-2033
6017 Financial Drive, Norcross, GA 30071	(432) 563-1800	(432) 563-1713
3725 E. Atlanta Ave, Phoenix, AZ 85040	(770) 449-8800	(770) 449-5477
	(602) 437-0330	



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 470800,

Project ID: SRS#2006-142

Lab Batch #: 923642

Sample: 470800-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/25/13 22:44

SURROGATE RECOVERY STUDY

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

Lab Batch #: 923642

Sample: 470800-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/25/13 23:00

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0306	0.0300	102	80-120	
4-Bromofluorobenzene	0.0297	0.0300	99	80-120	

Lab Batch #: 923642

Sample: 470800-003 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/25/13 23:16

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0297	0.0300	99	80-120	

Lab Batch #: 923642

Sample: 644409-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/25/13 20:53

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0307	0.0300	102	80-120	
4-Bromofluorobenzene	0.0296	0.0300	99	80-120	

Lab Batch #: 923642

Sample: 644409-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/25/13 20:05

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	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 : 470800,

Project ID: SRS#2006-142

Lab Batch #: 923642

Sample: 644409-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/25/13 20:21

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0310	0.0300	103	80-120	
4-Bromofluorobenzene	0.0313	0.0300	104	80-120	

Lab Batch #: 923642

Sample: 470800-003 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/26/13 09:00

SURROGATE RECOVERY STUDY

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

Lab Batch #: 923642

Sample: 470800-003 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 09/26/13 08:44

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0309	0.0300	103	80-120	
4-Bromofluorobenzene	0.0331	0.0300	110	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



BS / BSD Recoveries



Project Name: Lovington Gathering WTI

Work Order #: 470800

Analyst: ARM

Date Prepared: 09/25/2013

Project ID: SRS#2006-142

Date Analyzed: 09/25/2013

Lab Batch ID: 923642

Sample: 644409-1-BKS

Batch #: 1

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	0.108	108	0.100	0.114	114	5	70-125	25	
Toluene	<0.00200	0.100	0.106	106	0.100	0.113	113	6	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0988	99	0.100	0.105	105	6	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.198	99	0.200	0.210	105	6	70-131	25	
o-Xylene	<0.00100	0.100	0.0992	99	0.100	0.106	106	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



Form 3 - MS / MSD Recoveries



Project Name: Lovington Gathering WTI

Work Order #: 470800

Project ID: SRS#2006-142

Lab Batch ID: 923642

QC- Sample ID: 470800-003 S

Batch #: 1 Matrix: Water

Date Analyzed: 09/26/2013

Date Prepared: 09/25/2013

Analyst: ARM

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	0.117	117	0.100	0.125	125	7	70-125	25	
Toluene	<0.00200	0.100	0.115	115	0.100	0.124	124	8	70-125	25	
Ethylbenzene	<0.00100	0.100	0.109	109	0.100	0.115	115	5	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.219	110	0.200	0.231	116	5	70-131	25	
o-Xylene	<0.00100	0.100	0.108	108	0.100	0.115	115	6	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, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



XENCO Laboratories



Prelogin/Nonconformance Report- Sample Log-In

Client: PLAINS ALL AMERICAN EH&S

Date/ Time Received: 09/20/2013 08:40:00 AM

Work Order #: 470800

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)?	7.1
#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)?	No
#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?	N/A

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

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

Checklist completed by: *Candace James*
 Candace James

Date: 09/23/2013

Checklist reviewed by: *Julian Martinez*
 Julian Martinez

Date: 09/23/2013



XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In



Client: PLAINS ALL AMERICAN EH&S
 Date/ Time Received: 09/20/2013 08:40:00 AM
 Work Order #: 470800

Acceptable Temperature Range: 0 - 6 degC
 Air and Metal samples Acceptable Range: Ambient
 Temperature Measuring device used :

Sample Receipt Checklist	Comments
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#2 *Shipping container in good condition?	Yes
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#19 Subcontract of sample(s)?	No
#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?	N/A

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

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

Checklist completed by: *Candace James*
 Candace James

Date: 09/23/2013

Checklist reviewed by: _____

Date: 09/23/2013

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 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.	

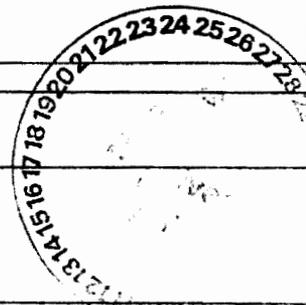
LOCATION OF RELEASE

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

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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Pat Caperton	
By Whom? Camille Reynolds	Date and Hour 4-21-2006 @ 15:35	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	



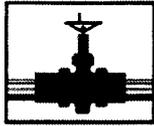
If a Watercourse was Impacted, Describe Fully.*

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 noc	Phone: 505-441-	Attached <input type="checkbox"/>



PLAINS
PIPELINE, L.P.

RECEIVED OCD

2013 JUL 31 P 2: 21

July 5, 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 July 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 second quarter of 2013.

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

Basin Environmental Service Technologies, LLC RECEIVED OCD

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

Fax: (575) 396-1429



2013 JUL 31 P 2: 21

QUARTERLY MONITORING REPORT
April - June 2013

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 #: 2006-0142
NMOCD Reference #: 1RP-838

Prepared for:



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

Prepared By:

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

July 2013

A handwritten signature in black ink, appearing to read "Ben J. Arguijo", written over a horizontal line.

Ben J. Arguijo
Project Manager

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FIGURES

Figure 1 – Site Location Map

Figure 2 – Inferred Groundwater Gradient Map – 2Q2013

Figure 3A – Groundwater Concentration Map – 2Q2013

Figure 3B – Groundwater Concentration Map – April 2013

Figure 3C – Groundwater Concentration Map – June 2013

TABLES

Table 1 – Groundwater Elevation Data - 2Q2013

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 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 in the second quarter (April - June) of 2013 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 release on the Lovington Gathering WTI pipeline. Failure of a section of the six-inch (6") steel gathering line during purging resulted in a release of sweet crude oil. The failure was attributed to internal corrosion. The release was immediately reported to the NMOCD Hobbs District Office. The "Release Notification and Corrective Action" (Form C-141) indicated approximately twelve barrels (12 bbls) of crude oil was released from the pipeline, and approximately eight barrels (8 bbls) were recovered, resulting in a net loss of four barrels (4 bbls) of crude oil. The release occurred in a pasture containing various oil and gas production facilities and resulted in a visibly stained surface area measuring approximately one thousand, five hundred square feet (1,500 ft²). The Form C-141 is provided as Appendix B.

During initial response activities, the pipeline was repaired utilizing a pipeline clamp, and visibly stained soil was excavated and placed on plastic sheeting to mitigate any further hydrocarbon impact to the underlying soil. The excavated area was fenced in and is characterized by a Plains pipeline right-of-way adjacent to an idled Plains pump station.

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. A series of eleven (11) soil borings were advanced to depths ranging from 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 phase-separated hydrocarbons (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 TPH concentrations 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 samples collected from monitor well MW-7 indicated additional monitor wells would be 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 standards 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 Remediation 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.

On May 15, 2013, an Oxygen Release Compound (ORC®) filter sock was installed in monitor well MW-3 to facilitate enhanced aerobic biodegradation of the dissolved-phase plume.

3.2 Groundwater Monitoring

A quarterly groundwater monitoring event was conducted on May 23, 2013 (2Q2013), to assess the levels and extent of dissolved-phase constituents and 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. Inclement weather precluded sample collection from monitor well MW-9. Monitor well MW-9 was sampled in a follow-up site visit on May 29, 2013.

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 9, May 29, and June 25, 2013.

Prior to the May 2013 monthly monitoring event, the Goff Dairy Well and Ctr. Pivot Well were valved off to facilitate harvesting/planting activities in the Goff Dairy #9 Pivot, precluding sample collection from the two (2) wells and the two (2) locations on the Goff Dairy Center Pivot (Goff Dairy - Ctr. Pivot Beginning and Goff Dairy - Ctr. Pivot End). The wells were not placed back in service until early to mid-June.

Locations of groundwater monitoring wells and the inferred groundwater gradient, which was constructed from groundwater elevation measurements collected during the 2Q2013 sampling event, are depicted in Figure 2A, "Inferred Groundwater Gradient Map – 2Q2013". The groundwater gradient map indicates a general gradient of approximately 0.002 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 3,715.94 feet in monitor well

MW-10 and 3,717.30 feet in monitor well MW-5. Groundwater elevation data is provided as Table 1, "2013 Groundwater Elevation Data".

No PSH was detected in any of the on-site monitor wells during the 2Q2013 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 using 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 2Q2013 groundwater monitoring event is summarized below. Groundwater contaminant concentrations are depicted in Figure 3A, "Groundwater Concentration Map - 2Q2013".

- Benzene concentrations were less than the laboratory MDL in all submitted groundwater samples, with the exception of the sample collected from monitor well MW-7, which exhibited a benzene concentration of 0.0087 mg/L. 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 were both less than the laboratory MDL and 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, May, and June 2013 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 2013" and "Groundwater Concentration Map - June 2013", respectively. Groundwater contaminant concentrations for the May sampling event are included in Figure 3A, "Groundwater Concentration Map - 2Q2013".

- **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, 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 QA/QC PROCEDURES

5.1 Groundwater Sampling

Groundwater samples were submitted to Xenco Laboratories in Odessa, Texas, for analysis of BTEX constituent concentrations in accordance with EPA Method SW846-8021b. All samples were analyzed within seven (7) days of the collection date.

5.2 Decontamination of Equipment

Cleaning and decontamination of the sampling equipment was the responsibility of the environmental technician. Prior to use, and between each sample, the sampling equipment was cleaned with Liqui-Nox® detergent and rinsed with distilled water.

5.3 Laboratory Protocol

The laboratory was responsible for proper QA/QC procedures after signing the chain-of-custody form(s). These procedures were either transmitted with the laboratory analytical reports or are on file at the laboratory.

6.0 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 2013 calendar year.

The ORC filter sock installed in monitor well MW-3 to facilitate enhanced aerobic biodegradation of the dissolved-phase plume will be inspected and replaced (if necessary) 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 2013 reporting period will be submitted to the NMOCD by April 1, 2014.

7.0 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.

8.0 DISTRIBUTION

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Figures

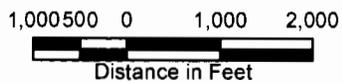
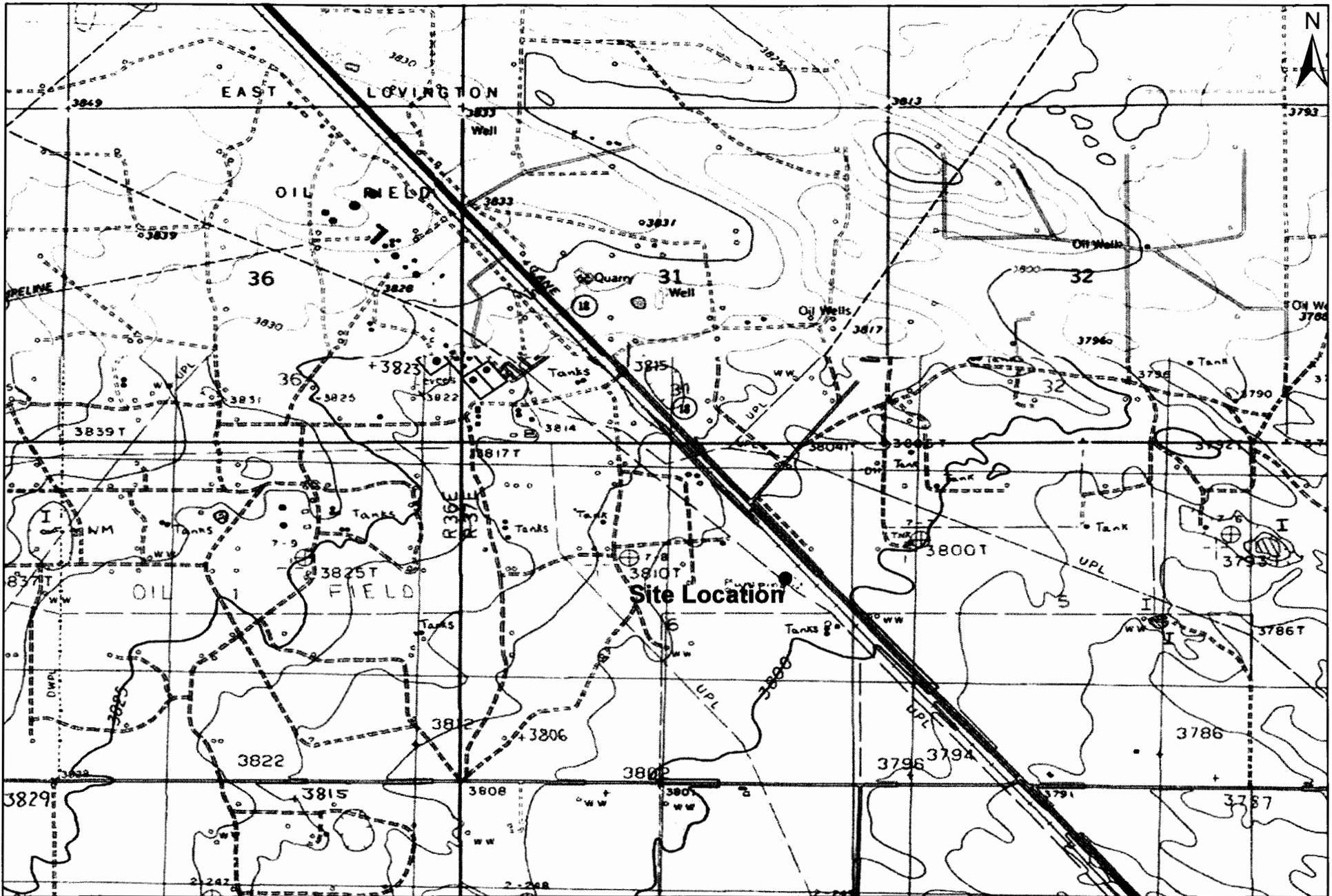


Figure 1
 Site Location Map
 Plains Marketing, LP
 Lovington Gathering WTI
 Lea County, New Mexico
 Plains SRS #: 2006-142
 NMOC Reference #: 1RP-838



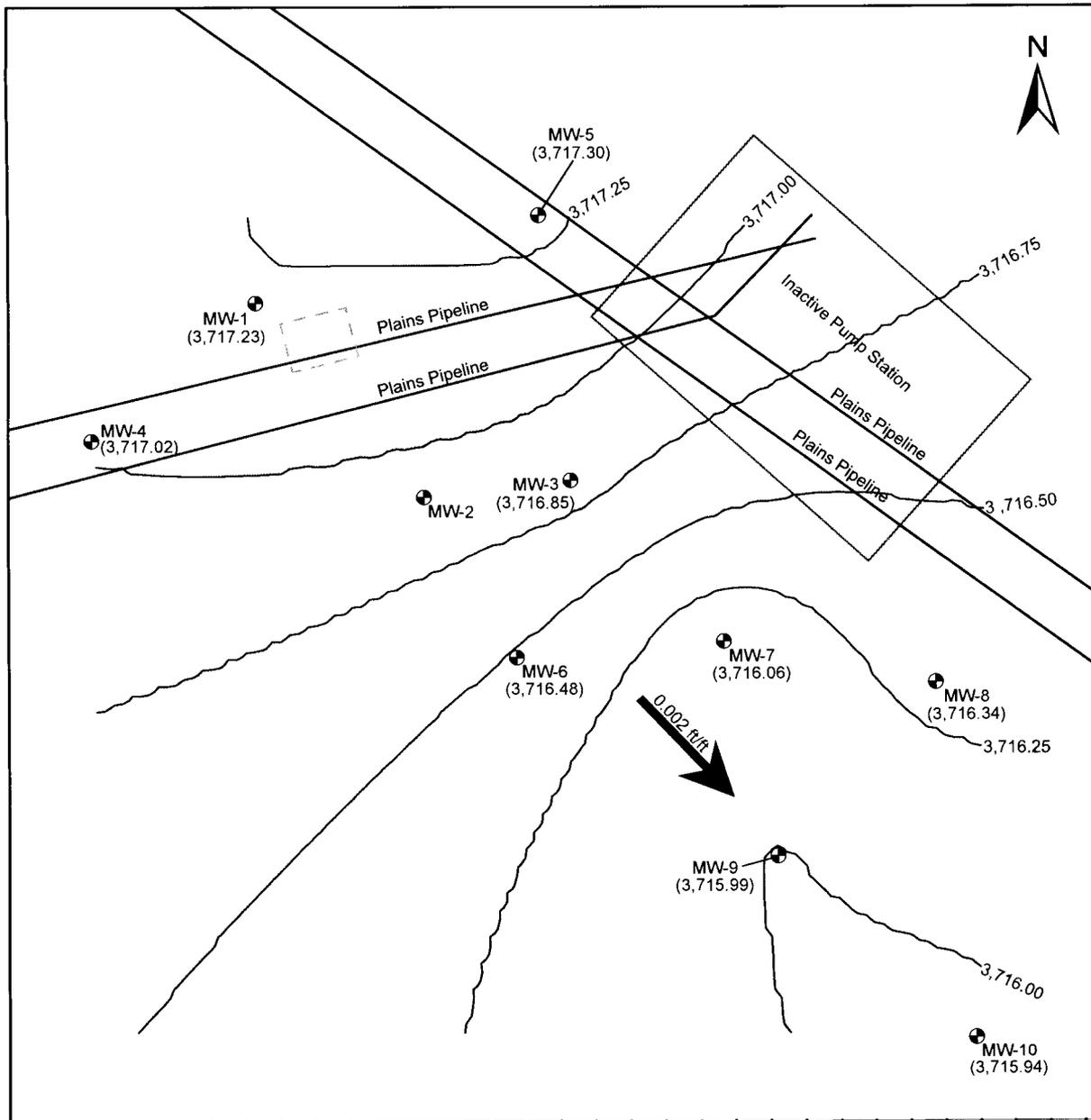
Basin Environmental Service Technologies, LLC
 3100 Plains Hwy.
 Lovington, NM 88260

Drawn By: BJA

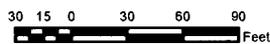
Checked By: BRB

July 2, 2013

Scale: 1" = 2,000'



Groundwater Gradient magnitude measured between monitor wells MW-1 and MW-10. Monitor well MW-2 was not used in map construction.



Goff Dairy Well

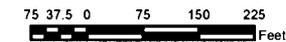
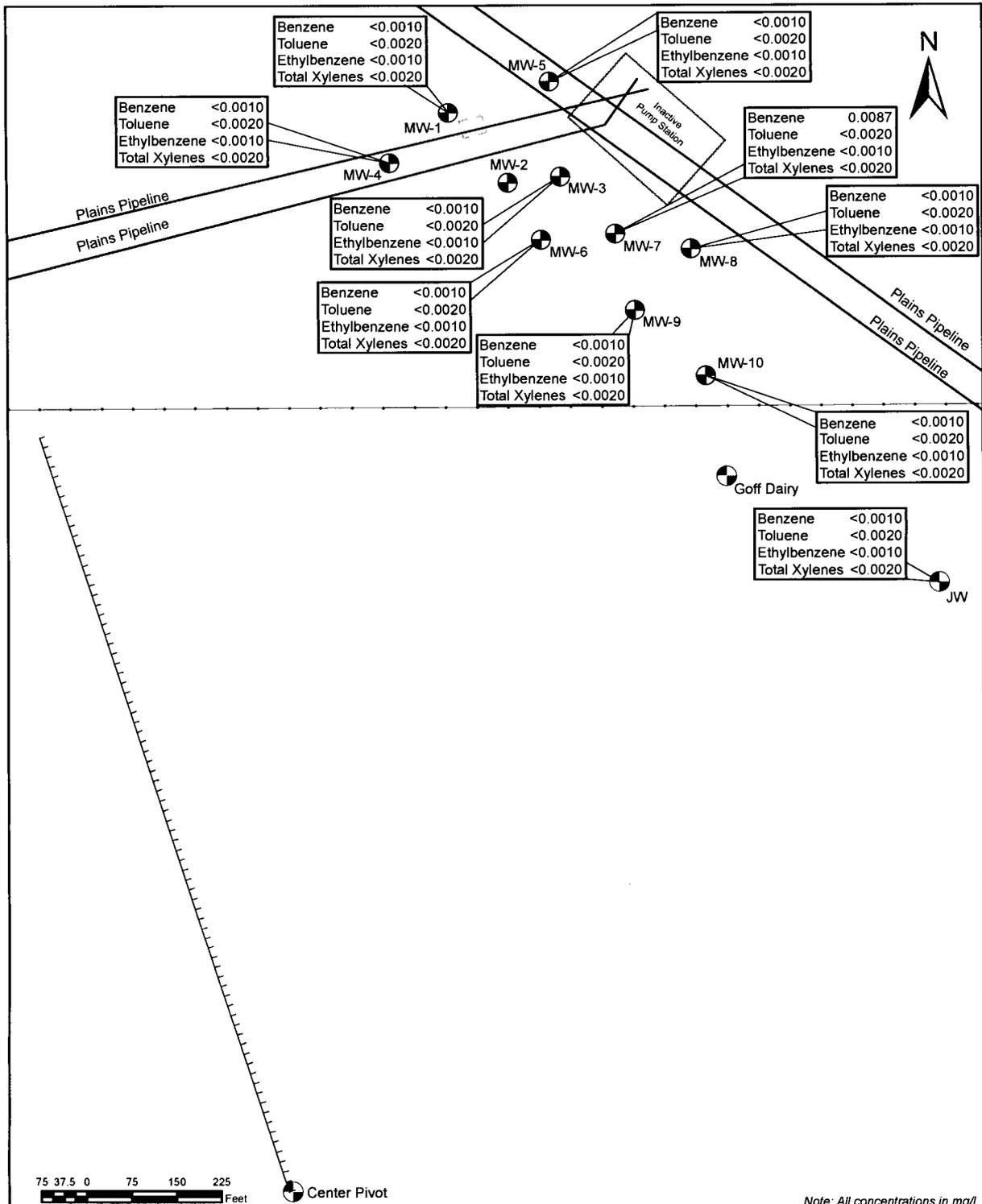
Pipeline	Monitor Well
Fence	Irrigation Well
Excavation Extent	
(3,720) Groundwater Elevation (ft)	
0.002 ft/ft Groundwater Gradient & Magnitude	

Figure 2
Inferred Groundwater Gradient Map - 2Q2013
2Q2013
Plains Marketing, LP
Lovington Gathering WTI
Lea County, New Mexico
Plains SRS #: 2006-142
NMOC Reference #: 1RP-838



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

Drawn By: BJA	Checked By: BRB
July 2, 2013	Scale: 1" = 100'



Note: All concentrations in mg/L.

Legend:

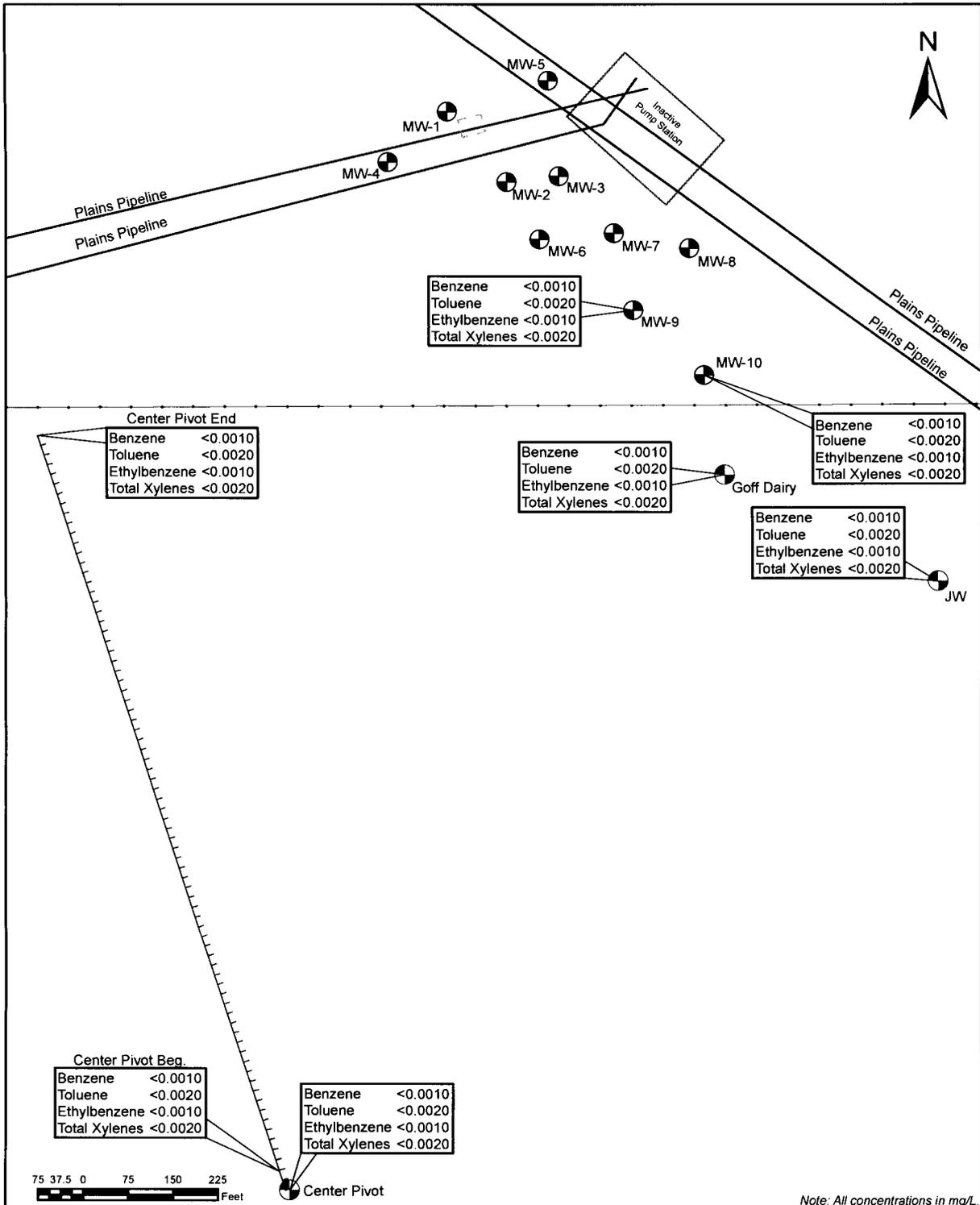
	Pipeline
	Excavation Extent
	Fence
	Center Pivot
	Monitor Well
	Irrigation Well

Figure 3A
Groundwater Concentration Map - 2Q2013
 Plains Marketing, LP
 Lovington Gathering WTI
 Lea County, New Mexico
 Plains SRS #: 2006-142
 NMOCD Reference #: 1RP-838



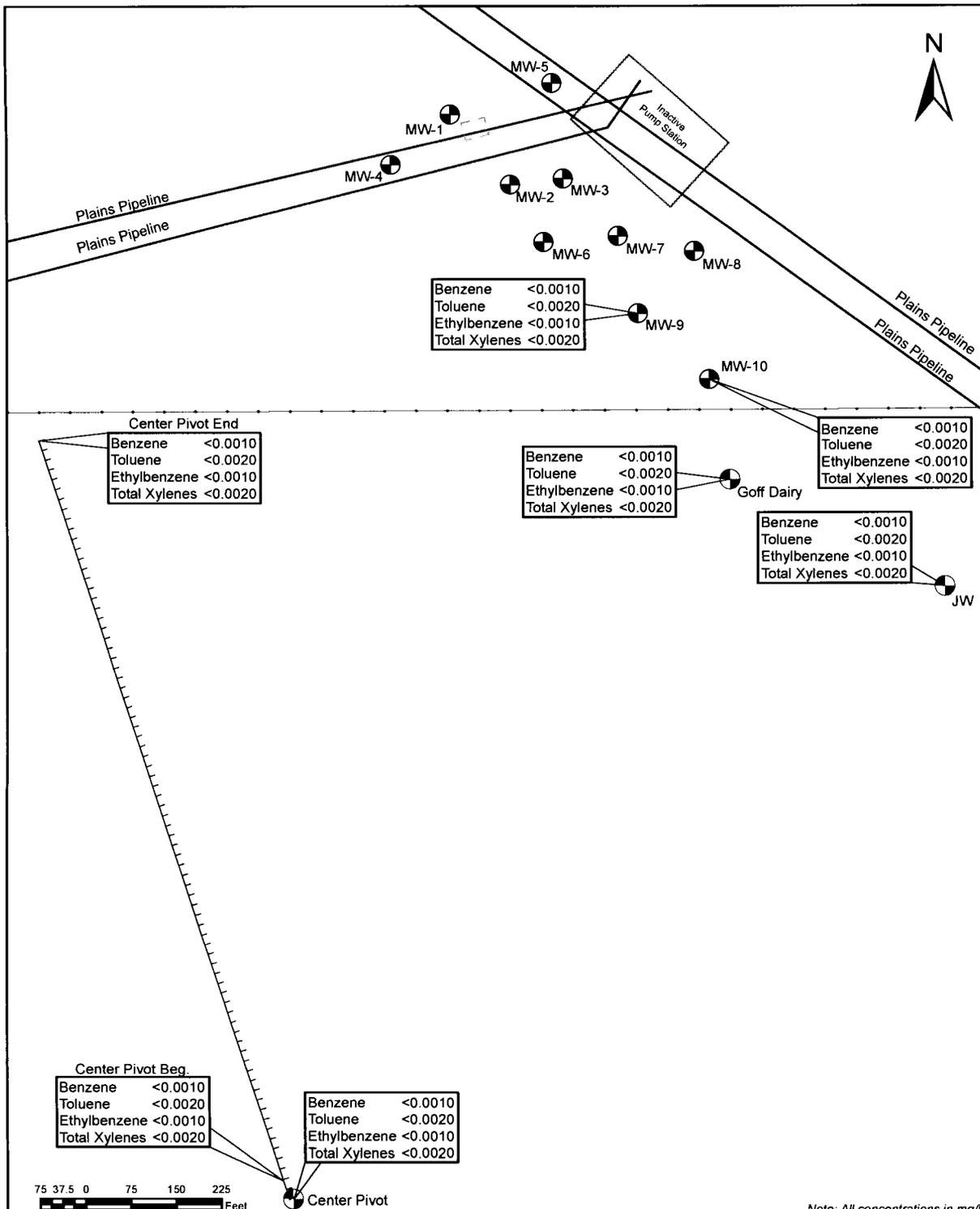
Basin Environmental Service Technologies
 3100 Plains Hwy.
 Lovington, NM 88260

Drawn By: BJA	Checked By: BRB
July 2, 2013	Scale: 1" = 250'



Note: All concentrations in mg/L.

Legend: Pipeline Excavation Extent Fence Center Pivot Monitor Well Irrigation Well	Figure 3B Groundwater Concentration Map - April 2013 Plains Marketing, LP Lovington Gathering WTI Lea County, New Mexico Plains SRS #: 2006-142 NMOC Reference #: 1RP-838		Basin Environmental Service Technologies 3100 Plains Hwy. Lovington, NM 88260	
			Drawn By: BJA July 2, 2013	Checked By: BRB Scale: 1" = 250'



Legend:

- Pipeline
- - - Excavation Extent
- Fence
- Center Pivot
- ⊙ Monitor Well
- ⊙ Irrigation Well

Figure 3C
Groundwater Concentration Map - June 2013
Plains Marketing, LP
Lovington Gathering WT1
Lea County, New Mexico
Plains SRS #: 2006-142
NMOC Reference #: 1RP-838



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

Drawn By: BJA	Checked By: BRB
July 2, 2013	Scale: 1" = 250'

Tables

**TABLE 1
2013 GROUNDWATER ELEVATION DATA**

**PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: 1RP-838**

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW-1	02/22/13	3,806.60	-	87.53	-	3,719.07
	05/23/13	3,806.60	-	89.37	-	3,717.23
MW-2	02/22/13	3,806.31	-	87.41	-	3,718.90
	05/23/13	3,806.31	-	Dry	-	-
MW-3	02/22/13	3,806.19	-	87.37	-	3,718.82
	05/23/13	3,806.19	-	89.34	-	3,716.85
MW-4	02/22/13	3,806.67	-	87.69	-	3,718.98
	05/23/13	3,806.67	-	89.65	-	3,717.02
MW-5	02/22/13	3,806.30	-	87.24	-	3,719.06
	05/23/13	3,806.30	-	89.00	-	3,717.30
MW-6	02/22/13	3,806.08	-	87.40	-	3,718.68
	05/23/13	3,806.08	-	89.60	-	3,716.48
MW-7	02/22/13	3,806.05	-	87.81	-	3,718.24
	05/23/13	3,806.05	-	89.99	-	3,716.06
MW-8	02/22/13	3,805.89	-	87.32	-	3,718.57
	05/23/13	3,805.89	-	89.55	-	3,716.34
MW-9	02/22/13	3,806.02	-	87.68	-	3,718.34
	05/23/13	3,806.02	-	90.03	-	3,715.99
MW-10	02/22/13	3,806.08	-	89.99	-	3,716.09
	05/23/13	3,806.08	-	90.14	-	3,715.94

Elevations based on the North American Vertical Datum of 1929.
- = Not applicable

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

**PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: 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-1	10/05/06	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	12/28/06	<0.0010	<0.0010	<0.0010	0.002	<0.0010	0.002	0.002	-	-
	03/16/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	05/31/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	09/25/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/30/07	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/14/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/17/08	0.020	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.020	-	-
	12/02/08	0.035	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.035	-	-
	03/03/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/01/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/04/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/25/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/30/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/11/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/22/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/27/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/24/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/06/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/28/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/22/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
MW-2	10/05/06	0.010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.010	-	-
	12/28/06	0.161	<0.0010	<0.0010	0.024	<0.0010	0.024	0.185	-	-
	03/16/07	0.154	<0.0010	<0.0010	0.015	<0.0010	0.015	0.169	-	-
	05/31/07	0.005	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.005	-	-
	09/25/07	0.050	<0.0010	<0.0010	0.003	<0.0010	0.003	0.053	-	-
	11/30/07	0.928	<0.0010	<0.005	0.036	<0.005	0.036	0.964	-	-
	03/11/08	0.095	<0.0020	<0.0010	0.0032	<0.0010	0.0032	0.098	-	-
	06/14/08	0.003	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.003	-	-
	09/17/08	0.159	<0.0020	<0.0010	0.004	<0.0010	0.004	0.163	-	-
	12/02/08	0.050	0.002	<0.0010	0.007	0.001	0.008	0.060	-	-
	03/03/09	0.036	<0.0020	<0.0010	0.0026	<0.0010	0.0026	0.038	-	-
	06/18/09	0.0097	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.010	-	-
	09/01/09	0.084	<0.0020	<0.0010	0.0083	<0.0010	0.0083	0.093	-	-

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

**PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: 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	12/18/09	0.0129	<0.0020	<0.0010	0.0095	<0.0010	0.0095	0.022	-	-
	03/04/10	0.0026	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0026	-	-
	05/25/10	0.0023	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0023	-	-
	08/30/10	0.0406	<0.0020	<0.0010	0.0132	<0.0010	0.0132	0.0538	-	-
	11/11/10	0.0087	<0.0020	<0.0010	0.091	<0.0010	0.091	0.0997	-	-
	03/22/11	0.0361	<0.0020	<0.0010	0.0605	0.0011	0.0616	0.0977	-	-
	05/27/11	0.00222	<0.0020	<0.0010	0.00297	<0.0010	0.00297	0.00519	-	-
	09/30/11	0.179	<0.0020	0.00275	0.00345	0.00212	0.00557	0.187	-	-
	11/09/11									
	02/06/12	0.00187	<0.0020	<0.0010	0.00212	0.00102	0.00314	0.00501	-	-
	05/23/12									
	08/28/12									
	11/27/12									
	02/28/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/13									
MW-3	10/05/06	6.60	<0.0010	<0.0010	0.072	<0.0010	0.072	6.67	-	-
	12/28/06	1.02	<0.0010	0.005	0.028	<0.0010	0.028	1.05	-	-
	03/16/07	1.48	<0.0010	0.013	0.034	<0.0010	0.034	1.53	-	-
	05/31/07	1.66	0.010	0.034	0.029	0.012	0.041	1.75	-	-
	09/25/07	0.494	0.023	0.020	0.014	0.007	0.021	0.56	-	-
	11/30/07	5.93	0.027	0.273	0.141	0.074	0.215	6.45	-	-
	03/11/08	1.159	0.107	0.177	0.066	0.139	0.205	1.65	-	-
	06/14/08	0.214	0.002	0.007	0.012	0.005	0.017	0.24	-	-
	09/17/08	0.026	<0.0020	<0.0010	0.002	<0.0010	0.002	0.03	-	-
	12/02/08	0.024	<0.0020	<0.0010	0.004	0.001	0.005	0.03	-	-
	03/03/09	1.367	0.0305	0.0251	0.0173	0.0158	0.0331	1.46	-	-
	06/18/09	0.0031	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/01/09	0.0073	0.0033	<0.0010	0.0028	0.0015	0.0043	0.01	-	-
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/04/10	0.0011	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0011	-	-
	05/25/10	0.0109	0.0033	<0.0010	0.0048	0.0027	0.0075	0.0217	-	-
	08/30/10	0.0092	0.0036	<0.0010	0.006	0.0033	0.0093	0.0221	-	-
	11/11/10	0.0033	<0.0020	<0.0010	0.0023	0.0013	0.0036	0.0069	-	-
	03/22/11	0.00904	0.00283	<0.0010	0.00815	0.00375	0.0119	0.0238	-	-
	05/27/11	0.0205	<0.0020	<0.0010	0.00308	0.00116	0.00424	0.0247	-	-
08/24/11	0.0262	0.00333	<0.0010	0.00827	0.00312	0.0114	0.0409	-	-	
11/09/11	0.00211	<0.0020	<0.0010	0.00231	0.00114	0.00345	0.00556	-	-	
02/06/12	0.0214	0.00306	0.00126	0.00751	0.00345	0.0110	0.0367	-	-	
05/23/12	0.00929	0.00201	<0.0010	0.00584	0.00261	0.00845	0.0198	-	-	
08/28/12	0.00747	<0.0020	<0.0010	<0.0020	0.00136	0.00136	0.00883	-	-	
11/27/12	0.0120	0.00284	0.00109	0.00710	0.00252	0.00962	0.0256	-	-	

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

**PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: 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-3	02/22/13	0.0112	<0.0020	<0.0010	0.00302	0.00212	0.00514	0.0163	-	-
	05/23/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
MW-4	12/28/06	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	03/16/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	05/30/07	<0.0010	0.001	<0.0010	<0.0010	<0.0010	<0.0010	0.001	-	-
	09/25/07	<0.0010	0.001	<0.0010	<0.0020	<0.0010	<0.0020	0.001	-	-
	11/30/07	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/14/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/17/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/02/08	<0.0010	0.006	<0.0010	<0.0020	<0.0010	<0.0020	0.006	-	-
	03/03/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/01/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/04/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/25/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/30/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/11/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/22/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/27/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	4.76	<0.0050
	08/24/11	0.00119	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.00119	-	-
11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
02/06/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
08/28/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
02/22/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
05/23/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
MW-5	12/28/06	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	03/16/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	05/30/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	09/25/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/30/07	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/14/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/17/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/02/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/03/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
06/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: 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	09/01/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/04/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/25/10	0.0014	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0014	-	-
	08/30/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/11/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/22/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/27/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/24/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/06/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/28/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/22/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
05/23/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
MW-6	12/28/06	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	03/16/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	05/30/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	09/25/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/30/07	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/14/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/17/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/02/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/03/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/18/09	0.0044	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0044	-	-
	09/01/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/18/09	0.013	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0130	-	-
	03/04/10	0.0063	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0063	-	-
	05/25/10	0.0059	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0059	-	-
	08/30/10	0.0053	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0053	-	-
	11/11/10	0.0082	<0.0020	<0.0010	0.0035	<0.0010	0.0035	0.0117	-	-
	03/22/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/27/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
08/24/11	0.105	<0.0020	<0.0010	0.0597	0.00309	0.0628	0.168	-	-	
11/09/11	0.00356	<0.0020	<0.0010	0.0388	<0.0010	0.0388	0.0424	-	-	
02/06/12	0.0129	<0.0020	0.00106	0.133	<0.0010	0.133	0.147	-	-	
05/23/12	0.00768	<0.0010	<0.0010	0.157	<0.0010	0.157	0.165	-	-	
08/28/12	<0.0010	<0.0020	<0.0010	0.0026	<0.0010	0.0026	0.0026	-	-	
11/27/12	0.00121	<0.0020	<0.0010	0.0414	<0.0010	0.0414	0.0426	-	-	

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: 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-6	02/22/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
MW-7	12/28/06	0.047	<0.0010	<0.0010	0.001	<0.0010	0.001	0.0480	-	-
	03/16/07	0.047	<0.0010	<0.0010	0.015	<0.0010	0.015	0.0620	-	-
	05/31/07	0.039	<0.0010	<0.0010	0.005	<0.0010	0.005	0.0440	-	-
	09/25/07	0.037	<0.0010	<0.0010	0.030	<0.0010	0.03	0.0670	-	-
	11/30/07	0.026	<0.0020	<0.0010	0.022	<0.0010	0.022	0.0480	-	-
	03/11/08	0.095	<0.0020	<0.0010	0.0032	<0.0010	0.0032	0.0982	-	-
	06/14/08	0.138	<0.0020	<0.0010	0.016	<0.0010	0.016	0.1540	-	-
	09/17/08	0.353	<0.0020	<0.0010	0.003	<0.0010	0.003	0.3560	-	-
	12/02/08	0.036	<0.0020	<0.0010	0.003	0.002	0.005	0.0410	-	-
	03/03/09	0.0775	<0.0020	<0.0010	0.0327	<0.0010	0.0327	0.1102	-	-
	06/18/09	0.057	<0.0020	<0.0010	0.0329	<0.0010	0.0329	0.0899	-	-
	09/01/09	0.012	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0120	-	-
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/04/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/25/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/30/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/11/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
03/22/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
05/27/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
08/24/11	0.00192	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.00192	-	-	
11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
02/06/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
08/28/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
02/22/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
05/23/13	0.0087	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0087	-	-	
MW-8	03/16/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	05/31/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	09/25/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/30/07	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/14/08	0.008	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.008	-	-
	09/17/08	0.568	<0.0100	<0.005	<0.0100	<0.005	<0.0100	0.568	-	-
	12/02/08	0.234	0.046	0.008	0.041	0.013	0.054	0.342	-	-
	03/03/09	0.0284	<0.0020	<0.0010	0.0068	<0.0010	0.0068	0.0352	-	-
06/18/09	0.0045	<0.0020	0.0016	0.0032	<0.0010	0.0032	0.0093	-	-	
09/01/09	0.0013	<0.0020	0.0011	0.0141	<0.0010	0.0141	0.0165	-	-	

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: 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	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/04/10	<0.0010	<0.0020	0.0011	<0.0020	<0.0010	<0.0020	0.0011	-	-
	05/25/10	0.0012	<0.0020	0.001	<0.0020	<0.0010	<0.0020	0.0022	-	-
	08/30/10	<0.0010	<0.0020	0.0014	<0.0020	<0.0010	<0.0020	0.0014	-	-
	11/11/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/22/11	<0.0010	<0.0020	<0.0010	<0.0020	0.00154	0.00154	0.00154	-	-
	05/27/11	<0.0010	<0.0020	<0.0010	<0.0020	0.00260	0.00260	0.00260	-	-
	08/24/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/06/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/28/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/22/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
MW-9	09/25/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/30/07	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/14/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/17/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/02/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/03/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/01/09	0.9717	0.0641	<0.0100	0.0867	0.0422	0.1289	1.1647	-	-
	09/10/09	1.838	<0.0200	<0.0100	0.0537	<0.0100	0.0537	1.8917	-	-
	10/05/09	0.985	<0.0020	<0.0010	0.0442	<0.0010	0.0442	1.0292	-	-
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/04/10	0.0192	<0.0020	<0.0010	0.0027	<0.0010	0.0027	0.0219	-	-
	05/25/10	0.0421	<0.0020	<0.0010	0.0063	<0.0010	0.0063	0.0484	-	-
	08/30/10	0.1259	<0.0020	<0.0010	0.0344	<0.0010	0.0344	0.1603	-	-
	11/11/10	0.0265	<0.0020	<0.0010	0.0097	<0.0010	0.0097	0.0362	-	-
	03/22/11	0.00335	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.00335	-	-
	05/27/11	0.00406	<0.0020	<0.0010	0.00326	<0.0010	0.00326	0.00732	-	-
	08/24/11	<0.0010	<0.0020	<0.0010	0.00237	<0.0010	0.00237	0.00237	-	-
	11/09/11	0.00179	<0.0020	<0.0010	0.00349	<0.0010	0.00349	0.00528	-	-
	12/14/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	01/05/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/06/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/01/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/18/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/12	<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 #: 2006-142
NMOCD REFERENCE #: 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	06/19/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	07/30/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/28/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/11/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/19/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	01/30/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/22/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/27/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/09/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/29/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/25/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
MW-10	11/02/09	<0.005	<0.005	<0.005	<0.010	<0.005	<0.010	<0.010	-	-
	03/04/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/25/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/30/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/11/10	0.0350	<0.0020	<0.0010	0.0035	<0.0010	0.0035	0.0385	-	-
	03/22/11	0.0568	<0.0020	<0.0010	0.00333	<0.0010	0.00333	0.0601	-	-
	05/27/11	1.52	<0.0020	0.00107	0.0113	<0.0010	0.0113	1.53	-	-
	07/11/11	3.00	0.00265	0.00365	0.0248	0.00232	0.0271	3.03	-	-
	08/24/11	0.654	<0.0020	0.00158	0.0177	0.00262	0.0203	0.676	-	-
	10/10/11	0.183	<0.0020	<0.0010	0.121	<0.0010	0.121	0.304	-	-
	10/31/11	0.053	<0.0020	0.0014	0.0944	0.00222	0.0966	0.151	-	-
	11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/14/11	0.00846	0.00226	<0.0010	0.0261	<0.0010	0.0261	0.0368	-	-
	01/05/12	0.00432	<0.0020	<0.0010	0.0126	<0.0010	0.0126	0.0169	-	-
	02/06/12	0.00233	<0.0020	<0.0010	0.00644	<0.0010	0.00644	0.00877	-	-
	03/01/12	0.00134	<0.0020	<0.0010	0.00423	<0.0010	0.00423	0.00557	-	-
	04/18/12	0.00338	<0.0020	<0.0010	0.0175	<0.0010	0.0175	0.0209	-	-
	05/23/12	0.00387	<0.0010	<0.0010	0.103	<0.0010	0.103	0.107	-	-
	06/19/12	<0.0010	<0.0010	<0.0010	0.0157	<0.0010	0.0157	0.0157	-	-
	07/30/12									
	08/28/12	<0.0010	<0.0020	<0.0010	0.0134	0.00138	0.0148	0.0148	-	-
	09/11/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/12	<0.0010	<0.0020	0.00124	0.00308	0.00149	0.00457	0.00581	-	-
	11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/19/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	01/30/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/22/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/27/13	<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 #: 2006-142
NMOCD REFERENCE #: 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	04/09/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/25/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
Goff Dairy Well	05/27/11	0.00125	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.00123	-	-
	07/11/11	0.00262	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.00262	-	-
	08/24/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/10/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/14/11	<0.0010	<0.0020	0.00111	<0.0020	<0.0010	<0.0020	0.00111	-	-
	01/05/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/06/12	<0.0010	<0.0020	0.00111	0.00201	<0.0010	<0.0020	0.00201	-	-
	03/01/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/18/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	07/30/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/28/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/11/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
03/27/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
04/09/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
06/25/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
Goff Dairy - Ctr. Pivot Well	07/07/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/24/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/10/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/14/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	01/05/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/06/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/01/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/18/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/19/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	07/30/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/28/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/11/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
10/31/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
12/19/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
02/28/13	<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 #: 2006-142
NMOCD REFERENCE #: 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 Well	03/27/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/09/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/25/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
Goff Dairy - Ctr. Pivot Beg.	07/07/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/24/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/10/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/01/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/18/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/19/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	07/30/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/11/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/28/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/27/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
04/09/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
06/25/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
Goff Dairy - Ctr. Pivot End	07/07/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/24/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/10/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/01/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/18/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/19/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	07/30/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/11/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/28/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/27/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
04/09/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
06/25/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-	
JW Well	07/14/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/24/11	<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 #: 2006-142
NMOCD REFERENCE #: 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)
JW Well	10/10/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/01/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/18/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/19/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	07/30/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/28/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/11/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/19/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	01/31/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/28/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/27/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/09/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/29/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/25/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
NMOCD REGULATORY STANDARD		0.01	0.75	0.75	TOTAL XYLENES 0.62				1.6	0.05

Appendices

Appendix A
Laboratory Analytical Reports

Analytical Report 460960
for
PLAINS ALL AMERICAN EH&S

Project Manager: Ben Arguijo
Lovington Gathering WTI SRS #2006-142

17-APR-13

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)



17-APR-13

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

Reference: XENCO Report No(s): **460960**
Lovington Gathering WTI SRS #2006-142
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) 460960. 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. 460960 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 460960



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI SRS #2006-142

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Center Pivot Well	W	04-09-13 08:25		460960-001
Center Pivot Beg	W	04-09-13 08:30		460960-002
Center Pivot End	W	04-09-13 08:35		460960-003
Goff Dairy Well	W	04-09-13 08:45		460960-004
J.W. Well	W	04-09-13 09:00		460960-005
MW-9	W	04-09-13 10:05		460960-006
MW-10	W	04-09-13 10:00		460960-007



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S
Project Name: Lovington Gathering WTI SRS #2006-142



Project ID:
Work Order Number(s): 460960

Report Date: 17-APR-13
Date Received: 04/09/2013

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analysis Summary 460960

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI SRS #2006-142



Project Id:

Contact: Ben Arguijo

Project Location: Lovington

Date Received in Lab: Tue Apr-09-13 03:25 pm

Report Date: 17-APR-13

Project Manager: Nicholas Straccione

Analysis Requested	Lab Id:	460960-001	460960-002	460960-003	460960-004	460960-005	460960-006
	Field Id:	Center Pivot Well	Center Pivot Beg	Center Pivot End	Goff Dairy Well	J.W. Well	MW-9
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
	Sampled:	Apr-09-13 08:25	Apr-09-13 08:30	Apr-09-13 08:35	Apr-09-13 08:45	Apr-09-13 09:00	Apr-09-13 10:05
BTEX by EPA 8021B	Extracted:	Apr-12-13 08:00	Apr-12-13 08:00	Apr-12-13 08:00	Apr-12-13 08:00	Apr-12-13 08:00	Apr-12-13 08:00
	Analyzed:	Apr-12-13 09:55	Apr-12-13 10:10	Apr-12-13 10:26	Apr-12-13 10:42	Apr-12-13 10:58	Apr-12-13 11:14
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL	mg/L RL
Benzene		ND 0.00100	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	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
Total Xylenes		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

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



Certificate of Analysis Summary 460960

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI SRS #2006-142



Project Id:

Contact: Ben Arguijo

Project Location: Lovington

Date Received in Lab: Tue Apr-09-13 03:25 pm

Report Date: 17-APR-13

Project Manager: Nicholas Straccione

Analysis Requested	Lab Id:	460960-007				
	Field Id:	MW-10				
	Depth:					
	Matrix:	WATER				
	Sampled:	Apr-09-13 10:00				
BTEX by EPA 8021B	Extracted:	Apr-12-13 08:00				
	Analyzed:	Apr-12-13 11:30				
	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				
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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 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

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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 SRS #2006-142

Work Orders : 460960,

Project ID:

Lab Batch #: 911347

Sample: 460960-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04/12/13 09:55

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0344	0.0300	115	80-120	
4-Bromofluorobenzene	0.0243	0.0300	81	80-120	

Lab Batch #: 911347

Sample: 460960-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04/12/13 10:10

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0330	0.0300	110	80-120	
4-Bromofluorobenzene	0.0268	0.0300	89	80-120	

Lab Batch #: 911347

Sample: 460960-003 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04/12/13 10:26

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0338	0.0300	113	80-120	
4-Bromofluorobenzene	0.0248	0.0300	83	80-120	

Lab Batch #: 911347

Sample: 460960-004 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04/12/13 10:42

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	0.0252	0.0300	84	80-120	

Lab Batch #: 911347

Sample: 460960-005 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04/12/13 10:58

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0331	0.0300	110	80-120	
4-Bromofluorobenzene	0.0241	0.0300	80	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 SRS #2006-142

Work Orders : 460960,

Project ID:

Lab Batch #: 911347

Sample: 460960-006 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04/12/13 11:14

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0331	0.0300	110	80-120	
4-Bromofluorobenzene	0.0244	0.0300	81	80-120	

Lab Batch #: 911347

Sample: 460960-007 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04/12/13 11:30

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0329	0.0300	110	80-120	
4-Bromofluorobenzene	0.0244	0.0300	81	80-120	

Lab Batch #: 911347

Sample: 636546-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04/12/13 09:39

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0329	0.0300	110	80-120	
4-Bromofluorobenzene	0.0251	0.0300	84	80-120	

Lab Batch #: 911347

Sample: 636546-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04/12/13 08:51

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0313	0.0300	104	80-120	
4-Bromofluorobenzene	0.0285	0.0300	95	80-120	

Lab Batch #: 911347

Sample: 636546-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04/12/13 09:07

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0307	0.0300	102	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 SRS #2006-142

Work Orders : 460960,

Lab Batch #: 911347

Sample: 460960-001 S / MS

Project ID:

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 04/12/13 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	0.0287	0.0300	96	80-120	
4-Bromofluorobenzene	0.0271	0.0300	90	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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



BS / BSD Recoveries



Project Name: Lovington Gathering WTI SRS #2006-142

Work Order #: 460960

Analyst: DYV

Date Prepared: 04/12/2013

Project ID:

Date Analyzed: 04/12/2013

Lab Batch ID: 911347

Sample: 636546-1-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	0.0921	92	0.100	0.0952	95	3	70-125	25
Toluene	<0.00200	0.100	0.0815	82	0.100	0.0836	84	3	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0829	83	0.100	0.0854	85	3	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.167	84	0.200	0.172	86	3	70-131	25	
o-Xylene	<0.00100	0.100	0.0845	85	0.100	0.0877	88	4	71-133	25	

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

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

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

All results are based on MDL and Validated for QC Purposes



Form 3 - MS Recoveries



Project Name: Lovington Gathering WTI SRS #2006-142

Work Order #: 460960

Lab Batch #: 911347

Date Analyzed: 04/12/2013

Date Prepared: 04/12/2013

Project ID:

Analyst: DYV

QC- Sample ID: 460960-001 S

Batch #: 1

Matrix: Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
	Benzene	<0.00100	0.100	0.0884	88	70-125
Toluene	<0.00200	0.100	0.0782	78	70-125	
Ethylbenzene	<0.00100	0.100	0.0810	81	71-129	
m_p-Xylenes	<0.00200	0.200	0.163	82	70-131	
o-Xylene	<0.00100	0.100	0.0823	82	71-133	

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



XENCO Laboratories



Prelogin/Nonconformance Report- Sample Log-In

Client: PLAINS ALL AMERICAN EH&S

Acceptable Temperature Range: 0 - 6 degC

Date/ Time Received: 04/09/2013 03:25:00 PM

Air and Metal samples Acceptable Range: Ambient

Work Order #: 460960

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	5.2
#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 464134
for
PLAINS ALL AMERICAN EH&S

Project Manager: Ben Arguijo

Lovington Gathering WTI

2006-142

05-JUN-13

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)



05-JUN-13

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

Reference: XENCO Report No(s): **464134**
Lovington Gathering WTI
Project Address: Lovington, 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) 464134. 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. 464134 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,

Kelsey Brooks
Project Manager

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Sample Cross Reference 464134



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-1	W	05-23-13 14:45		464134-001
MW-3	W	05-23-13 14:00		464134-002
MW-4	W	05-23-13 15:00		464134-003
MW-5	W	05-23-13 14:25		464134-004
MW-6	W	05-23-13 14:40		464134-005
MW-7	W	05-23-13 11:30		464134-006
MW-8	W	05-23-13 11:10		464134-007
MW-9	W	05-29-13 10:20		464134-008
MW-10	W	05-23-13 10:35		464134-009
JW Well	W	05-29-13 11:40		464134-010



CASE NARRATIVE



Client Name: PLAINS ALL AMERICAN EH&S

Project Name: Lovington Gathering WTI

Project ID: 2006-142

Work Order Number(s): 464134

Report Date: 05-JUN-13

Date Received: 05/29/2013

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-915358 BTEX by EPA 8021B

SW8021BM

Batch 915358, Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.

Samples affected are: 464134-004, -006.

The Laboratory Control Sample for Toluene, m,p-Xylenes, Benzene, Ethylbenzene, o-Xylene is within laboratory Control Limits



Certificate of Analysis Summary 464134

PLAINS ALL AMERICAN EH&S, Midland, TX



Project Id: 2006-142

Contact: Ben Arguijo

Project Location: Lovington, NM

Project Name: Lovington Gathering WTI

Date Received in Lab: Wed May-29-13 02:00 pm

Report Date: 05-JUN-13

Project Manager: Kelsey Brooks

Analysis Requested	Lab Id:	464134-001	464134-002	464134-003	464134-004	464134-005	464134-006
	Field Id:	MW-1	MW-3	MW-4	MW-5	MW-6	MW-7
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
	Sampled:	May-23-13 14:45	May-23-13 14:00	May-23-13 15:00	May-23-13 14:25	May-23-13 14:40	May-23-13 11:30
BTEX by EPA 8021B	Extracted:	May-31-13 11:00	May-31-13 11:00	May-31-13 11:00	Jun-04-13 11:30	May-31-13 11:00	Jun-04-13 11:30
	Analyzed:	May-31-13 12:35	May-31-13 12:52	May-31-13 13:08	Jun-04-13 13:18	May-31-13 20:08	Jun-04-13 13:34
	Units/RL:	mg/L RL					
Benzene		ND 0.00100	0.00868 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	0.00868 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

Kelsey Brooks
Project Manager



Certificate of Analysis Summary 464134

PLAINS ALL AMERICAN EH&S, Midland, TX



Project Name: Lovington Gathering WTI

Project Id: 2006-142

Contact: Ben Arguijo

Project Location: Lovington, NM

Date Received in Lab: Wed May-29-13 02:00 pm

Report Date: 05-JUN-13

Project Manager: Kelsey Brooks

Analysis Requested	Lab Id:	464134-007	464134-008	464134-009	464134-010		
	Field Id:	MW-8	MW-9	MW-10	JW Well		
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER		
	Sampled:	May-23-13 11:10	May-29-13 10:20	May-23-13 10:35	May-29-13 11:40		
BTEX by EPA 8021B	Extracted:	May-31-13 11:00	May-31-13 11:00	May-31-13 11:00	May-31-13 11:00		
	Analyzed:	May-31-13 14:13	May-31-13 20:57	May-31-13 14:46	May-31-13 21:13		
	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.

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Kelsey Brooks
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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(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 : 464134,

Project ID: 2006-142

Lab Batch #: 915160

Sample: 464134-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/31/13 12:35

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0271	0.0300	90	80-120	
4-Bromofluorobenzene	0.0288	0.0300	96	80-120	

Lab Batch #: 915160

Sample: 464134-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/31/13 12:52

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0280	0.0300	93	80-120	
4-Bromofluorobenzene	0.0281	0.0300	94	80-120	

Lab Batch #: 915160

Sample: 464134-003 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/31/13 13:08

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0274	0.0300	91	80-120	
4-Bromofluorobenzene	0.0294	0.0300	98	80-120	

Lab Batch #: 915160

Sample: 464134-007 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/31/13 14:13

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	0.0323	0.0300	108	80-120	

Lab Batch #: 915160

Sample: 464134-009 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/31/13 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	0.0255	0.0300	85	80-120	
4-Bromofluorobenzene	0.0299	0.0300	100	80-120	

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



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 464134,

Project ID: 2006-142

Lab Batch #: 915160

Sample: 464134-005 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/31/13 20:08

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0333	0.0300	111	80-120	
4-Bromofluorobenzene	0.0271	0.0300	90	80-120	

Lab Batch #: 915160

Sample: 464134-008 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/31/13 20:57

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0269	0.0300	90	80-120	
4-Bromofluorobenzene	0.0279	0.0300	93	80-120	

Lab Batch #: 915160

Sample: 464134-010 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/31/13 21:13

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0312	0.0300	104	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

Lab Batch #: 915358

Sample: 464134-004 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 06/04/13 13:18

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0279	0.0300	93	80-120	
4-Bromofluorobenzene	0.0286	0.0300	95	80-120	

Lab Batch #: 915358

Sample: 464134-006 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 06/04/13 13:34

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0332	0.0300	111	80-120	
4-Bromofluorobenzene	0.0245	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 : 464134,

Project ID: 2006-142

Lab Batch #: 915160

Sample: 639030-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/31/13 12:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0245	0.0300	82	80-120	
4-Bromofluorobenzene	0.0344	0.0300	115	80-120	

Lab Batch #: 915358

Sample: 639146-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 06/04/13 13:01

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0275	0.0300	92	80-120	
4-Bromofluorobenzene	0.0278	0.0300	93	80-120	

Lab Batch #: 915160

Sample: 639030-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/31/13 11:30

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0240	0.0300	80	80-120	
4-Bromofluorobenzene	0.0268	0.0300	89	80-120	

Lab Batch #: 915358

Sample: 639146-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 06/04/13 12:29

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0307	0.0300	102	80-120	
4-Bromofluorobenzene	0.0273	0.0300	91	80-120	

Lab Batch #: 915160

Sample: 639030-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/31/13 11:46

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0358	0.0300	119	80-120	
4-Bromofluorobenzene	0.0316	0.0300	105	80-120	

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



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 464134,

Project ID: 2006-142

Lab Batch #: 915358

Sample: 639146-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 06/04/13 12:45

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	0.0329	0.0300	110	80-120	

Lab Batch #: 915160

Sample: 464134-010 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/31/13 21:30

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0272	0.0300	91	80-120	
4-Bromofluorobenzene	0.0285	0.0300	95	80-120	

Lab Batch #: 915358

Sample: 464200-004 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 06/04/13 14:56

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0268	0.0300	89	80-120	
4-Bromofluorobenzene	0.0296	0.0300	99	80-120	

Lab Batch #: 915160

Sample: 464134-010 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 05/31/13 21:46

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0253	0.0300	84	80-120	
4-Bromofluorobenzene	0.0332	0.0300	111	80-120	

Lab Batch #: 915358

Sample: 464200-004 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 06/04/13 15:12

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0246	0.0300	82	80-120	
4-Bromofluorobenzene	0.0347	0.0300	116	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



BS / BSD Recoveries



Project Name: Lovington Gathering WTI

Work Order #: 464134

Analyst: DYV

Date Prepared: 05/31/2013

Project ID: 2006-142
Date Analyzed: 05/31/2013

Lab Batch ID: 915160

Sample: 639030-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

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	0.112	112	0.100	0.105	105	6	70-125	25	
Toluene	<0.00200	0.100	0.108	108	0.100	0.112	112	4	70-125	25	
Ethylbenzene	<0.00100	0.100	0.109	109	0.100	0.113	113	4	71-129	25	
m,p-Xylenes	<0.00200	0.200	0.233	117	0.200	0.225	113	3	70-131	25	
o-Xylene	<0.00100	0.100	0.113	113	0.100	0.104	104	8	71-133	25	

Analyst: DYV

Date Prepared: 06/04/2013

Date Analyzed: 06/04/2013

Lab Batch ID: 915358

Sample: 639146-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

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	0.107	107	0.100	0.106	106	1	70-125	25	
Toluene	<0.00200	0.100	0.106	106	0.100	0.111	111	5	70-125	25	
Ethylbenzene	<0.00100	0.100	0.118	118	0.100	0.118	118	0	71-129	25	
m,p-Xylenes	<0.00200	0.200	0.215	108	0.200	0.220	110	2	70-131	25	
o-Xylene	<0.00100	0.100	0.107	107	0.100	0.106	106	1	71-133	25	

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

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

Blank Spike Duplicate Recovery [G] = 100*(F)/[E]

All results are based on MDL and Validated for QC Purposes



Form 3 - MS / MSD Recoveries



Project Name: Lovington Gathering WTI

Work Order #: 464134

Project ID: 2006-142

Lab Batch ID: 915160

QC- Sample ID: 464134-010 S

Batch #: 1 Matrix: Water

Date Analyzed: 05/31/2013

Date Prepared: 05/31/2013

Analyst: DYV

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	0.0834	83	0.100	0.0884	88	6	70-125	25	
Toluene	<0.00200	0.100	0.0821	82	0.100	0.0998	100	19	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0912	91	0.100	0.106	106	15	71-129	25	
m,p-Xylenes	<0.00200	0.200	0.163	82	0.200	0.188	94	14	70-131	25	
o-Xylene	<0.00100	0.100	0.0814	81	0.100	0.0861	86	6	71-133	25	

Lab Batch ID: 915358

QC- Sample ID: 464200-004 S

Batch #: 1 Matrix: Water

Date Analyzed: 06/04/2013

Date Prepared: 06/04/2013

Analyst: DYV

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	0.0201	0.100	0.117	97	0.100	0.118	98	1	70-125	25	
Toluene	<0.00200	0.100	0.105	105	0.100	0.109	109	4	70-125	25	
Ethylbenzene	<0.00100	0.100	0.112	112	0.100	0.114	114	2	71-129	25	
m,p-Xylenes	<0.00200	0.200	0.211	106	0.200	0.226	113	7	70-131	25	
o-Xylene	<0.00100	0.100	0.103	103	0.100	0.113	113	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, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In



Client: PLAINS ALL AMERICAN EH&S
 Date/ Time Received: 05/29/2013 02:00:00 PM
 Work Order #: 464134

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)?	1
#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: *Kelsey Brooks* Date: 05/30/2013
 Kelsey Brooks

Checklist reviewed by: *Kelsey Brooks* Date: 05/30/2013
 Kelsey Brooks

Analytical Report 465764
for
PLAINS ALL AMERICAN EH&S

Project Manager: Ben Arguijo

Lovington Gathering WTI

2006-142

03-JUL-13

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)



03-JUL-13

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

Reference: XENCO Report No(s): **465764**
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) 465764. 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. 465764 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,

Kelsey Brooks
Project Manager

*Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY*

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



Sample Cross Reference 465764



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-9	W	06-25-13 09:40		465764-001
MW-10	W	06-25-13 09:30		465764-002
Goff Dairy Well	W	06-25-13 10:00		465764-003
JW Well	W	06-25-13 10:15		465764-004
Goff Dairy-Ctr. Pivot Well	W	06-25-13 10:30		465764-005
Goff Dairy-Ctr. Pivot Beg.	W	06-25-13 10:45		465764-006
Goff Dairy-Ctr. Pivot End	W	06-25-13 11:00		465764-007



CASE NARRATIVE



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

Project ID: 2006-142
Work Order Number(s): 465764

Report Date: 03-JUL-13
Date Received: 06/26/2013

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analysis Summary 465764

PLAINS ALL AMERICAN EH&S, Midland, TX



Project Id: 2006-142

Contact: Ben Arguijo

Project Location: Lovington

Project Name: Lovington Gathering WTI

Date Received in Lab: Wed Jun-26-13 03:43 pm

Report Date: 03-JUL-13

Project Manager: Kelsey Brooks

Analysis Requested	Lab Id:	465764-001	465764-002	465764-003	465764-004	465764-005	465764-006
	Field Id:	MW-9	MW-10	Goff Dairy Well	JW Well	Goff Dairy-Ctr. Pivot Well	Goff Dairy-Ctr. Pivot Beg.
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
	Sampled:	Jun-25-13 09:40	Jun-25-13 09:30	Jun-25-13 10:00	Jun-25-13 10:15	Jun-25-13 10:30	Jun-25-13 10:45
BTEX by EPA 8021B	Extracted:	Jul-02-13 08:30	Jul-02-13 08:30				
	Analyzed:	Jul-02-13 11:56	Jul-02-13 12:12	Jul-02-13 12:28	Jul-02-13 12:44	Jul-02-13 13:00	Jul-02-13 13:16
	Units/RL:	mg/L RL	mg/L RL				
Benzene		ND 0.00100	ND 0.00100				
Toluene		ND 0.00200	ND 0.00200				
Ethylbenzene		ND 0.00100	ND 0.00100				
m,p-Xylenes		ND 0.00200	ND 0.00200				
o-Xylene		ND 0.00100	ND 0.00100				
Total Xylenes		ND 0.00100	ND 0.00100				
Total BTEX		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

Kelsey Brooks
Project Manager



Certificate of Analysis Summary 465764

PLAINS ALL AMERICAN EH&S, Midland, TX



Project Name: Lovington Gathering WTI

Project Id: 2006-142

Contact: Ben Arguijo

Project Location: Lovington

Date Received in Lab: Wed Jun-26-13 03:43 pm

Report Date: 03-JUL-13

Project Manager: Kelsey Brooks

Analysis Requested	Lab Id:	465764-007				
	Field Id:	Goff Dairy-Ctr. Pivot End				
	Depth:					
	Matrix:	WATER				
	Sampled:	Jun-25-13 11:00				
BTEX by EPA 8021B	Extracted:	Jul-02-13 08:30				
	Analyzed:	Jul-02-13 13:32				
	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				
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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Kelsey Brooks
Project Manager



Certificate of Analytical Results 465764



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

Sample Id: **MW-9**
Lab Sample Id: 465764-001

Matrix: Water
Date Collected: 06.25.13 09.40

Date Received: 06.26.13 15.43

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: DYV

% Moisture:

Analyst: DYV

Date Prep: 07.02.13 08.30

Seq Number: 917642

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00100	mg/L	07.02.13 11.56	U	1
Toluene	108-88-3	ND	0.00200	mg/L	07.02.13 11.56	U	1
Ethylbenzene	100-41-4	ND	0.00100	mg/L	07.02.13 11.56	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	mg/L	07.02.13 11.56	U	1
o-Xylene	95-47-6	ND	0.00100	mg/L	07.02.13 11.56	U	1
Total Xylenes	1330-20-7	ND	0.00100	mg/L	07.02.13 11.56	U	1
Total BTEX		ND	0.00100	mg/L	07.02.13 11.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	119	%	80-120	07.02.13 11.56	
4-Bromofluorobenzene	460-00-4	84	%	80-120	07.02.13 11.56	



Certificate of Analytical Results 465764



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

Sample Id: **MW-10**
Lab Sample Id: 465764-002

Matrix: Water
Date Collected: 06.25.13 09.30

Date Received: 06.26.13 15.43

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: DYV

% Moisture:

Analyst: DYV

Date Prep: 07.02.13 08.30

Seq Number: 917642

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00100	mg/L	07.02.13 12.12	U	1
Toluene	108-88-3	ND	0.00200	mg/L	07.02.13 12.12	U	1
Ethylbenzene	100-41-4	ND	0.00100	mg/L	07.02.13 12.12	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	mg/L	07.02.13 12.12	U	1
o-Xylene	95-47-6	ND	0.00100	mg/L	07.02.13 12.12	U	1
Total Xylenes	1330-20-7	ND	0.00100	mg/L	07.02.13 12.12	U	1
Total BTEX		ND	0.00100	mg/L	07.02.13 12.12	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	119	%	80-120	07.02.13 12.12		
4-Bromofluorobenzene	460-00-4	85	%	80-120	07.02.13 12.12		



Certificate of Analytical Results 465764



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

Sample Id: **Goff Dairy Well**
Lab Sample Id: 465764-003

Matrix: Water
Date Collected: 06.25.13 10.00

Date Received: 06.26.13 15.43

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: DYV

% Moisture:

Analyst: DYV

Date Prep: 07.02.13 08.30

Seq Number: 917642

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00100	mg/L	07.02.13 12.28	U	1
Toluene	108-88-3	ND	0.00200	mg/L	07.02.13 12.28	U	1
Ethylbenzene	100-41-4	ND	0.00100	mg/L	07.02.13 12.28	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	mg/L	07.02.13 12.28	U	1
o-Xylene	95-47-6	ND	0.00100	mg/L	07.02.13 12.28	U	1
Total Xylenes	1330-20-7	ND	0.00100	mg/L	07.02.13 12.28	U	1
Total BTEX		ND	0.00100	mg/L	07.02.13 12.28	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	119	%	80-120	07.02.13 12.28		
4-Bromofluorobenzene	460-00-4	81	%	80-120	07.02.13 12.28		



Certificate of Analytical Results 465764



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id: **JW Well**
Lab Sample Id: 465764-004

Matrix: Water
Date Collected: 06.25.13 10.15

Date Received: 06.26.13 15.43

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: DYV

% Moisture:

Analyst: DYV

Date Prep: 07.02.13 08.30

Seq Number: 917642

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00100	mg/L	07.02.13 12.44	U	1
Toluene	108-88-3	ND	0.00200	mg/L	07.02.13 12.44	U	1
Ethylbenzene	100-41-4	ND	0.00100	mg/L	07.02.13 12.44	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	mg/L	07.02.13 12.44	U	1
o-Xylene	95-47-6	ND	0.00100	mg/L	07.02.13 12.44	U	1
Total Xylenes	1330-20-7	ND	0.00100	mg/L	07.02.13 12.44	U	1
Total BTEX		ND	0.00100	mg/L	07.02.13 12.44	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	117	%	80-120	07.02.13 12.44		
4-Bromofluorobenzene	460-00-4	82	%	80-120	07.02.13 12.44		



Certificate of Analytical Results 465764



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

Sample Id: **Goff Dairy-Ctr. Pivot Well**
Lab Sample Id: 465764-005

Matrix: Water
Date Collected: 06.25.13 10.30

Date Received: 06.26.13 15.43

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: DYV

% Moisture:

Analyst: DYV

Date Prep: 07.02.13 08.30

Seq Number: 917642

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00100	mg/L	07.02.13 13.00	U	1
Toluene	108-88-3	ND	0.00200	mg/L	07.02.13 13.00	U	1
Ethylbenzene	100-41-4	ND	0.00100	mg/L	07.02.13 13.00	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	mg/L	07.02.13 13.00	U	1
o-Xylene	95-47-6	ND	0.00100	mg/L	07.02.13 13.00	U	1
Total Xylenes	1330-20-7	ND	0.00100	mg/L	07.02.13 13.00	U	1
Total BTEX		ND	0.00100	mg/L	07.02.13 13.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	120	%	80-120	07.02.13 13.00	
4-Bromofluorobenzene	460-00-4	83	%	80-120	07.02.13 13.00	



Certificate of Analytical Results 465764



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

Sample Id: **Goff Dairy-Ctr. Pivot Beg.**
Lab Sample Id: 465764-006

Matrix: Water
Date Collected: 06.25.13 10.45

Date Received: 06.26.13 15.43

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: DYV

% Moisture:

Analyst: DYV

Date Prep: 07.02.13 08.30

Seq Number: 917642

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00100	mg/L	07.02.13 13.16	U	1
Toluene	108-88-3	ND	0.00200	mg/L	07.02.13 13.16	U	1
Ethylbenzene	100-41-4	ND	0.00100	mg/L	07.02.13 13.16	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	mg/L	07.02.13 13.16	U	1
o-Xylene	95-47-6	ND	0.00100	mg/L	07.02.13 13.16	U	1
Total Xylenes	1330-20-7	ND	0.00100	mg/L	07.02.13 13.16	U	1
Total BTEX		ND	0.00100	mg/L	07.02.13 13.16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	120	%	80-120	07.02.13 13.16		
4-Bromofluorobenzene	460-00-4	84	%	80-120	07.02.13 13.16		



Certificate of Analytical Results 465764



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

Sample Id: **Goff Dairy-Ctr. Pivot End**
Lab Sample Id: 465764-007

Matrix: Water
Date Collected: 06.25.13 11.00

Date Received: 06.26.13 15.43

Analytical Method: BTEX by EPA 8021B
Tech: DYV
Analyst: DYV
Seq Number: 917642

Date Prep: 07.02.13 08.30

Prep Method: SW5030B
% Moisture:

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	ND	0.00100	mg/L	07.02.13 13.32	U	1
Toluene	108-88-3	ND	0.00200	mg/L	07.02.13 13.32	U	1
Ethylbenzene	100-41-4	ND	0.00100	mg/L	07.02.13 13.32	U	1
m,p-Xylenes	179601-23-1	ND	0.00200	mg/L	07.02.13 13.32	U	1
o-Xylene	95-47-6	ND	0.00100	mg/L	07.02.13 13.32	U	1
Total Xylenes	1330-20-7	ND	0.00100	mg/L	07.02.13 13.32	U	1
Total BTEX		ND	0.00100	mg/L	07.02.13 13.32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	119	%	80-120	07.02.13 13.32		
4-Bromofluorobenzene	460-00-4	86	%	80-120	07.02.13 13.32		



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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 12600 West I-20 East, Odessa, TX 79765
 6017 Financial Drive, Norcross, GA 30071
 3725 E. Atlanta Ave, Phoenix, AZ 85040

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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	



QC Summary 465764



PLAINS ALL AMERICAN EH&S Lovington Gathering WTI

Analytical Method: **BTEX by EPA 8021B**
 Seq Number: 917642
 MB Sample Id: 640592-1-BLK

Matrix: Water
 LCS Sample Id: 640592-1-BKS

Prep Method: SW5030B
 Date Prep: 07.02.13
 LCSD Sample Id: 640592-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.109	109	0.114	114	70-125	4	25	mg/L	07.02.13 10:36	
Toluene	<0.00200	0.100	0.0928	93	0.0920	92	70-125	1	25	mg/L	07.02.13 10:36	
Ethylbenzene	<0.00100	0.100	0.0805	81	0.0820	82	71-129	2	25	mg/L	07.02.13 10:36	
m,p-Xylenes	<0.00200	0.200	0.161	81	0.164	82	70-131	2	25	mg/L	07.02.13 10:36	
o-Xylene	<0.00100	0.100	0.0829	83	0.0846	85	71-133	2	25	mg/L	07.02.13 10:36	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	118		104		107		80-120	%	07.02.13 10:36
4-Bromofluorobenzene	80		87		80		80-120	%	07.02.13 10:36

Analytical Method: **BTEX by EPA 8021B**
 Seq Number: 917642
 Parent Sample Id: 465764-002

Matrix: Water
 MS Sample Id: 465764-002 S

Prep Method: SW5030B
 Date Prep: 07.02.13
 MSD Sample Id: 465764-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.120	120	0.117	117	70-125	3	25	mg/L	07.02.13 14:52	
Toluene	<0.00200	0.100	0.0910	91	0.0933	93	70-125	2	25	mg/L	07.02.13 14:52	
Ethylbenzene	<0.00100	0.100	0.0804	80	0.0837	84	71-129	4	25	mg/L	07.02.13 14:52	
m,p-Xylenes	<0.00200	0.200	0.162	81	0.166	83	70-131	2	25	mg/L	07.02.13 14:52	
o-Xylene	<0.00100	0.100	0.0830	83	0.0842	84	71-133	1	25	mg/L	07.02.13 14:52	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		94		80-120	%	07.02.13 14:52
4-Bromofluorobenzene	81		83		80-120	%	07.02.13 14:52



CHAIN OF CUSTODY RECORD

Houston: 4143 Greenbriar Dr. Stafford, TX 77477 (281)240-4200 Odessa: 12600 West I-20 East Odessa, TX 79765 (432)563-1800
 Hobbs: 4008 N Grimes Hobbs, NM 88240 (575)392-7550

Page 1 of 1

LAB W.O.# : 465764

Field billable Hrs :

VA Vial Amber ES Encore Sampler
 VC Vial Clear TS TerraCore Sampler
 VP Vial Pre-preserved AC Air Canister
 GA Glass Amber TB Tedlar Bag
 GC Glass Clear ZB Zip Lock Bag
 PA Plastic Amber PC Plastic Clear
 PC Plastic Clear
 Other _____

Size(s) 2oz, 4oz, 8oz, 16oz, 32oz, 1Gal
 40ml, 125 ml, 250 ml, 500 ml, 1L, Other _____

** Preservative Type Codes

A. None E. HCL I. Ice C.
 B. HNO₃ F. MeOH J. MCAA
 H₂SO₄ G. Na₂S₂O₃ K. ZnAc&NaOH
 D. NaOH H. NaHSO₄ L. Asc Acid&NaOH
 O. _____

A Matrix Type Codes

GW Ground Water S Soil/Sediment/Solid
 WW Waste Water W Wipe
 DW Drinking Water A Air
 SW Surface Water O Oil
 OW Ocean/Sea Water T Tissue
 PL Product-Liquid U Urine
 PS Product-Solid B Blood
 SL Sludge
 Other _____

REMARKS

Company: Basin Environmental Service Technologies, LLC Phone: (575)396-2378
 Address: 3100 Plains Hwy. Fax: (575)396-1429
 City: Lovington State: NM Zip: 88260
 PM/Attn: Ben J. Arguijo Email: bjarguijo@basinenv.com
 Project ID: Lovington Gathering WT1 SRS #2006-142 PO#: PAA-J. Henry
 Invoice To: Jason Henry Plains All American Quote #:
 Sampler Signature: _____ Circle One Event: Daily Weekly Monthly Quarterly
 Semi-Annual Annual N/A

TAT Work Days = D Need results by: _____ Time: _____

Std (5-7D) 5Hrs 1D 2D 3D 4D 5D 7D 10D 14D Other _____

TPH	BTEX	Chloride	VC	E,I											
			X												
			X												
			X												
			X												
			X												
			X												
			X												

Lab Only

<u>1</u>	MW-9	6/25/13	9:40	GW			3
<u>2</u>	MW-10	6/25/13	9:30	GW			3
<u>3</u>	Goff Dairy Well	6/25/13	10:00	GW			3
<u>4</u>	JW Well	6/25/13	10:15	GW			3
<u>5</u>	Goff Dairy - Ctr. Pivot Well	6/25/13	10:30	GW			3
<u>6</u>	Goff Dairy - Ctr. Pivot Beg.	6/25/13	10:45	GW			3
<u>7</u>	Goff Dairy - Ctr. Pivot End	6/25/13	11:00	GW			3
<u>8</u>							
<u>9</u>							
<u>0</u>							

CTLs TRRP DW NPDES LPST DryChn Other:	FL TX GA NC SC NJ PA OK LA AL NM Other:	1 2 3 4 CLP AFCEE QAPP NELAC DoD-ELAP Other:	ADaPT SEDD ERPIMS XLS Other:	Match Incomplete Absent Unclear	18.52 3	Non-Conformances found? Samples intact upon arrival? Received on Wet Ice? Labeled with proper preservatives? Received within holding time? Custody seals intact? VOCs rec'd w/o headspace? Proper containers used? pH verified-acceptable exd VOCs? Received on time to meet HTs?
1	<i>Just Jones</i>	6-26-13	6:45	<i>Adimp. Edge</i>	6-26-13	6:45
2	<i>Shirley</i>	6-26-13	3:40	<i>MS</i>	6-26-13	3:43
3						
4						

B&A Laboratories: Hobbs 575-392-7550 Dallas 214-902-0300 Houston 281-242-4200 Odessa 432-563-1800 San Antonio 210-509-3334 Phoenix 602-437-0330 C.O.C. Serial #
 FTS Service Centers: Atlanta 770-449-8800 Lakeland 863-646-8526 Tampa 803-543-8099 Philadelphia 610-955-5649 South Carolina 803-543-8099

Execution of this document by client creates a legal and binding agreement between client and Xenco for analytical and testing services provided by Xenco to client under Xenco's standard terms and conditions unless previously agreed in writing. Terms of payment are Net 30 days, and all past due amounts shall accrue interest at 1.5% per month until paid in full. All laboratory analytical data and reports generated by Xenco remain the exclusive property of Xenco until invoices for such data are paid in full. Revision Date Nov 12, 2009

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XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In



Client: PLAINS ALL AMERICAN EH&S
 Date/ Time Received: 06/26/2013 03:43:00 PM
 Work Order #: 465764

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)?	2
#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: *Kelsey Brooks* Date: 06/27/2013
 Kelsey Brooks

Checklist reviewed by: *Kelsey Brooks* Date: 06/27/2013
 Kelsey Brooks

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.
---------------------------	---------------	-----------

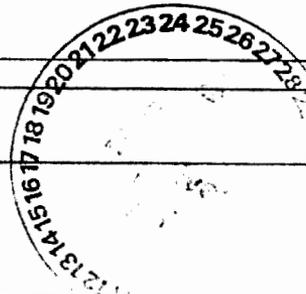
LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	6	17S	37E					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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Pat Caperton	
By Whom? Camille Reynolds	Date and Hour 4-21-2006 @ 15:35	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	



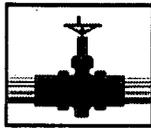
If a Watercourse was Impacted, Describe Fully.*

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 0000	Phone: 505-441-0000	Attached <input type="checkbox"/>



PLAINS
PIPELINE, L.P.

April 9, 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 April 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 first quarter of 2013.

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

RECEIVED OGD
2013 APR 30 P 2:20

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 January - March 2013

**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 2013

Ben J. Arguijo
Project Manager

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FIGURES

Figure 1 – Site Location Map

Figure 2 – Inferred Groundwater Gradient Map – 1Q2013

Figure 3A – Groundwater Concentration Map – 1Q2013

Figure 3B – Groundwater Concentration Map – January 2013

Figure 3C – Groundwater Concentration Map – March 2013

TABLES

Table 1 – Groundwater Elevation Data - 1Q2013

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 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 first quarter (January - March) of 2013 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 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 phase-separated hydrocarbons (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 TPH concentrations 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 February 22, 2013 (1Q2013), to assess the levels and extent of dissolved-phase constituents and 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. The well was sampled during a follow-up site visit on February 28, 2013.

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 January 30, February 28, and March 27, 2013.

Prior to the January 2013 monthly monitoring event, the Goff Dairy Well and Ctr. Pivot Well were valved off to facilitate harvesting activities in the Goff Dairy #9 Pivot, precluding sample collection from the two (2) wells and the two (2) locations on the Goff Dairy Center Pivot (Goff Dairy - Ctr. Pivot Beginning and Goff Dairy - Ctr. Pivot End). The wells were not placed back in service until early to mid-February.

Access restrictions precluded sample collection from the JW Well by the Environmental Technician on January 30, 2013. The well was sampled during a follow-up site visit on January 31, 2013, in which the Project Manager was accompanied on-site by the landowner, Mr. J. Lynn Walker. Verbal permission for Basin Environmental to access the site on subsequent site visits (without prior approval from the current tenant) was granted by the landowner.

A cross-connection hazard with a chemical storage tank on the Goff Dairy Well precluded sample collection from the irrigation well during the February 2013 monthly monitoring event. A dedicated sample port was installed on the well prior to the March 2013 monthly monitoring event.

Locations of groundwater monitoring wells and the inferred groundwater gradient, which was constructed from groundwater elevation measurements collected during the 1Q2013 sampling event, are depicted in Figure 2A, "Inferred Groundwater Gradient Map – 1Q2013". The groundwater gradient map indicates a general gradient of approximately 0.01 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 3,716.09 feet in monitor well MW-10 and 3,719.07 feet in monitor well MW-1. Groundwater elevation data is provided as Table 1, "Groundwater Elevation Data - 1Q2013".

No PSH was detected in any of the on-site monitor wells during the 1Q2013 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 1Q2013 groundwater monitoring event is summarized below. Groundwater contaminant concentrations are depicted in Figure 3A, "Groundwater Concentration Map - 1Q2013".

- Benzene 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-6, MW-7, MW-8, MW-9, and MW-10 to 0.0112 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 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-2, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, and MW-10 to 0.00514 mg/L in the groundwater sample collected from monitor well MW-3. 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, February, and March 2013 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 2013" and "Groundwater Concentration Map - March 2013", respectively. Groundwater contaminant concentrations for the February sampling event are included in Figure 3A, "Groundwater Concentration Map - 1Q2013".

- **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, 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 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 2013 calendar year.

In April 2013, 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 2013 reporting period will be submitted to the NMOCD by April 1, 2014.

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

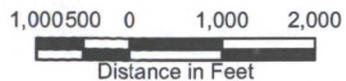
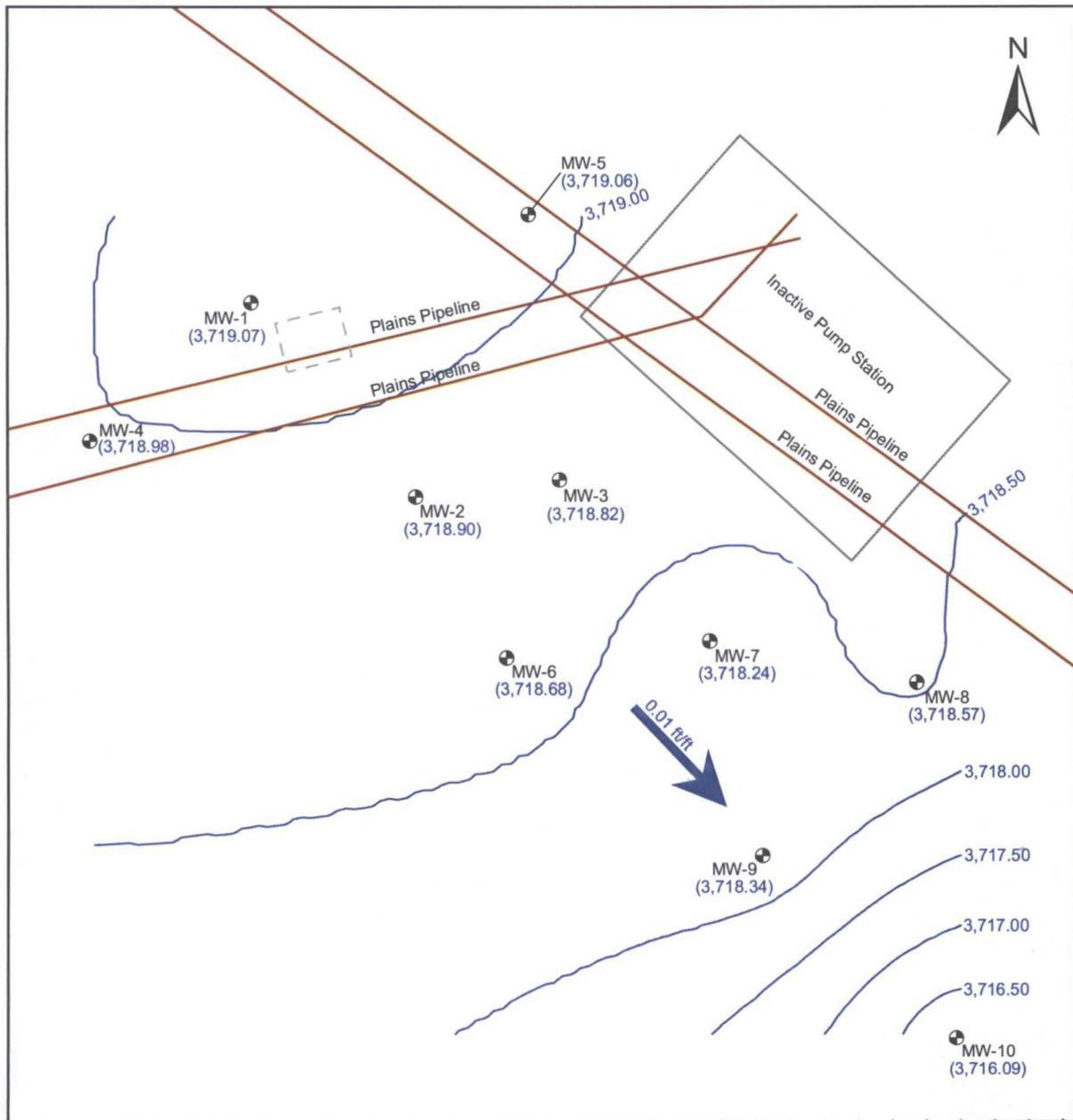


Figure 1
Site Location Map
 Plains Marketing, LP
 Lovington Gathering WT1
 SRS # 2006-142
 Lea County, New Mexico



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

Drawn By: BJA	Checked By: BRB
July 8, 2011	Scale: 1" = 2000'



Groundwater Gradient magnitude measured between monitor wells MW-1 and MW-10



Goff Dairy Well

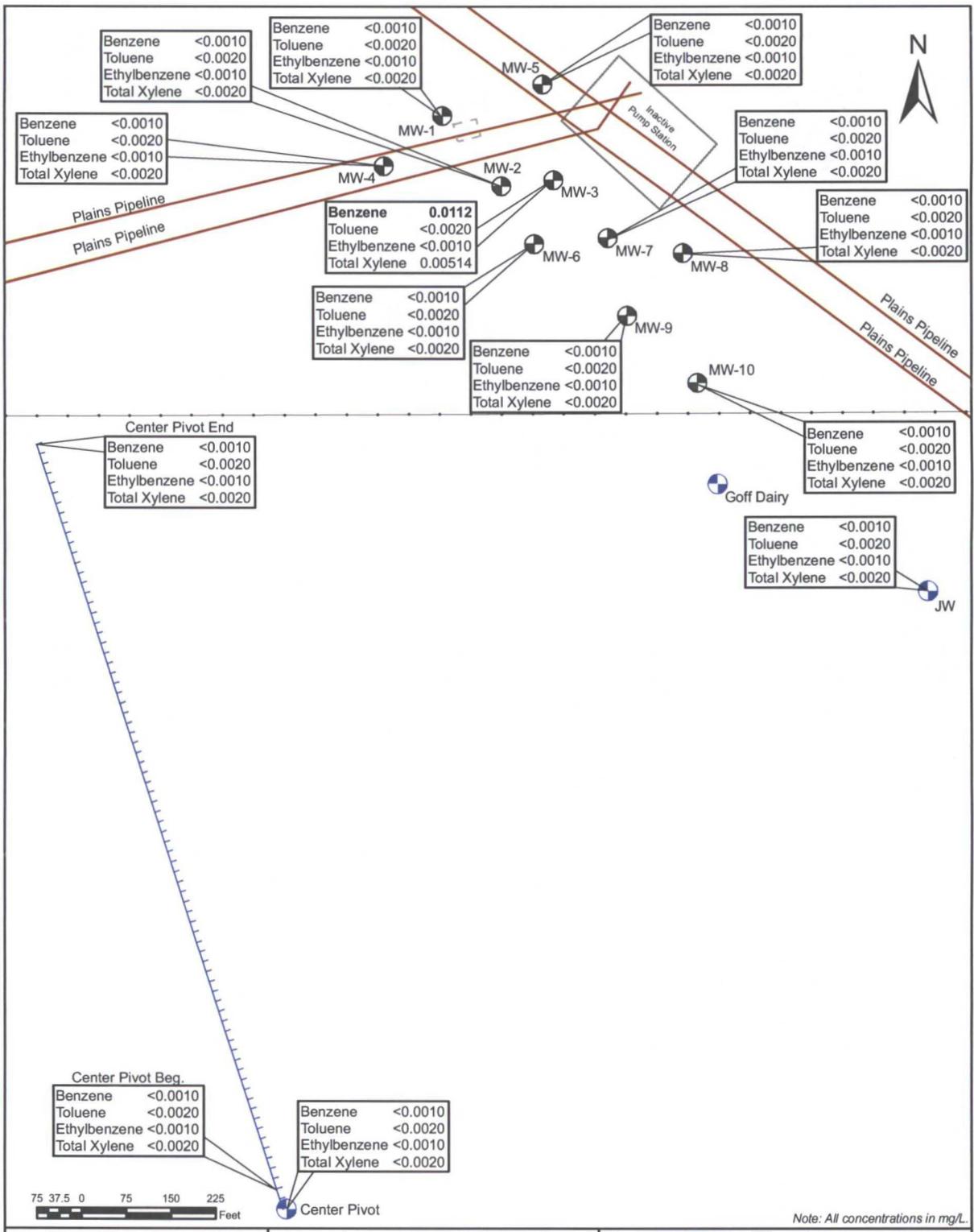
Pipeline	Monitor Well
Fence	Irrigation Well
Excavation Extent	
(3,720) Groundwater Elevation (ft)	
Groundwater Gradient & Magnitude	

Figure 2
Inferred Groundwater Gradient Map
1Q2013
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
April 3, 2013	Scale: 1" = 100'



Legend:

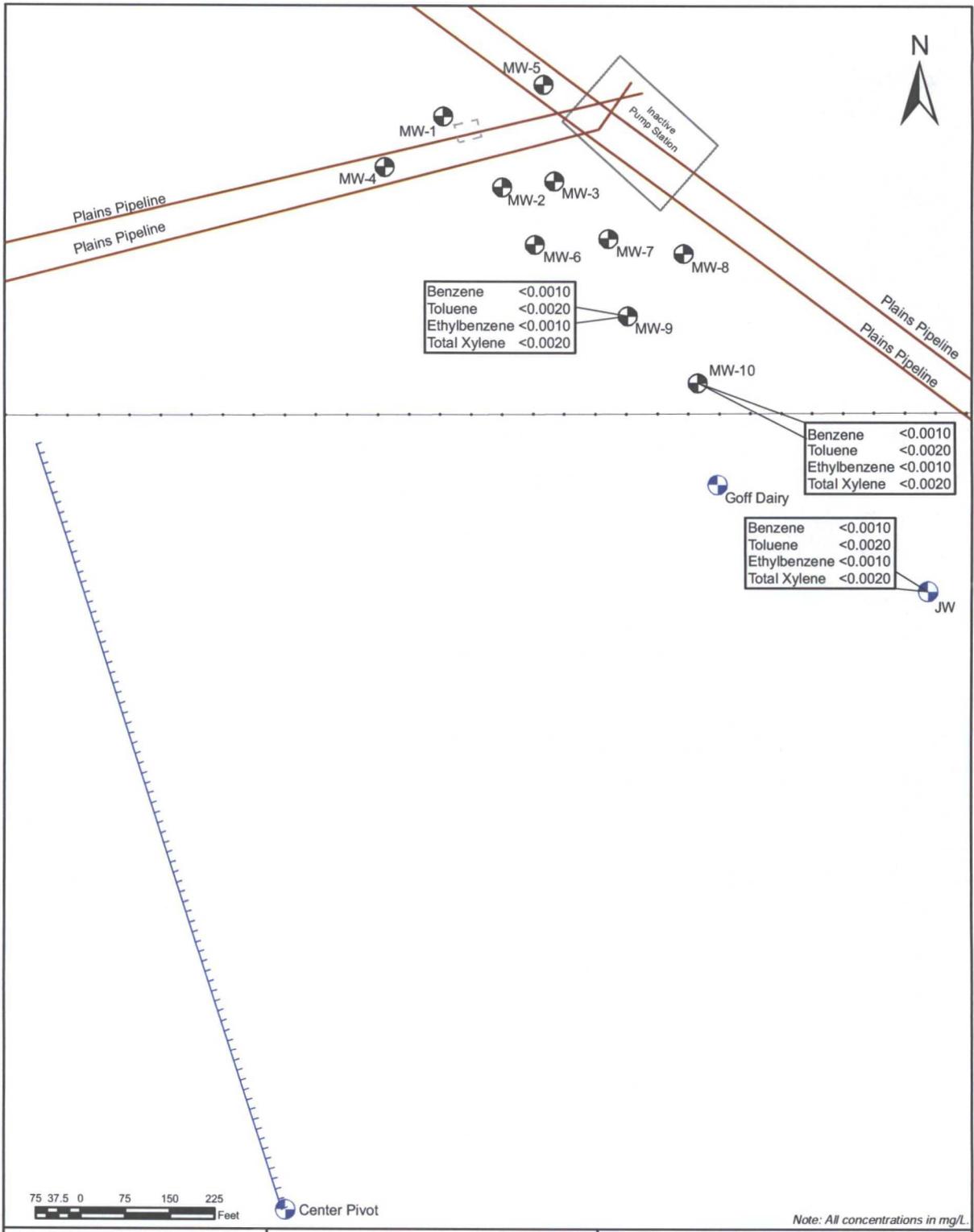
- Pipeline
- Excavation Extent
- Fence
- Center Pivot
- Monitor Well
- Irrigation Well

Figure 3A
Groundwater Concentration Map
1Q2013
Plains Marketing, LP
Lovington Gathering WTI
SRS # 2006-142
Lea County, New Mexico

Basin Environmental Service Technologies
 Effective Solutions

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

Drawn By: BJA	Checked By: BRB
April 4, 2013	Scale: 1" = 250'



Legend:

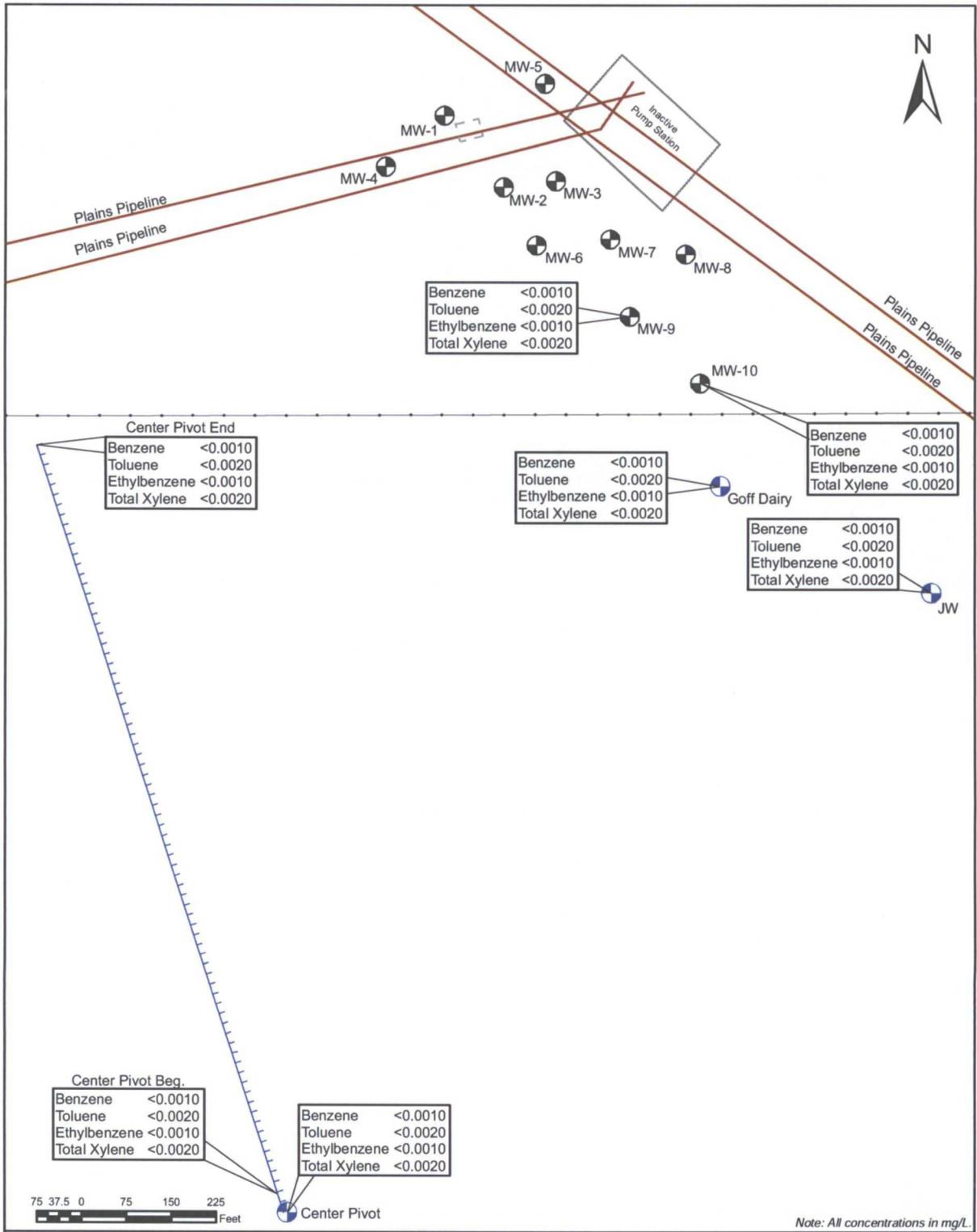
- Pipeline
- Excavation Extent
- Fence
- Center Pivot
- Monitor Well
- Irrigation Well

Figure 3B
Groundwater Concentration Map
 January 2013
 Plains Marketing, LP
 Lovington Gathering WTI
 SRS # 2006-142
 Lea County, New Mexico

Basin Environmental Service Technologies
 Effective Solutions

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

Drawn By: BJA	Checked By: BRB
April 4, 2013	Scale: 1" = 250'



Legend:

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

Figure 3C
Groundwater Concentration Map
March 2013
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
April 4, 2013	Scale: 1" = 250'

Tables

**TABLE 1
GROUNDWATER ELEVATION DATA - 1Q2013**

**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	02/22/13	3,806.60	-	87.53	-	3,719.07
MW-2	02/22/13	3,806.31	-	87.41	-	3,718.90
MW-3	02/22/13	3,806.19	-	87.37	-	3,718.82
MW-4	02/22/13	3,806.67	-	87.69	-	3,718.98
MW-5	02/22/13	3,806.30	-	87.24	-	3,719.06
MW-6	02/22/13	3,806.08	-	87.40	-	3,718.68
MW-7	02/22/13	3,806.05	-	87.81	-	3,718.24
MW-8	02/22/13	3,805.89	-	87.32	-	3,718.57
MW-9	02/22/13	3,806.02	-	87.68	-	3,718.34
MW-10	02/22/13	3,806.08	-	89.99	-	3,716.09

Elevations based on the North American Vertical Datum of 1929.

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS NO: 2006-142
NMCD 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-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	-	-
"	2/22/2013	<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	-	-

**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	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	-	-
"	11/9/2011	Dry								
"	2/6/2012	0.00187	<0.0020	<0.0010	0.00212	0.00102	0.00314	0.00501	-	-
"	5/23/2012	Dry								
"	8/28/2012	Dry								
"	11/27/2012	Dry								
"	2/28/2013	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
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	-	-

**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-3	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	-	-
"	11/27/2012	0.0120	0.00284	0.00109	0.00710	0.00252	0.00962	0.0256	-	-
"	2/22/2013	0.0112	<0.0020	<0.0010	0.00302	0.00212	0.00514	0.0163	-	-
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	-	-
"	2/22/2013	<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	-	-

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	6/14/2008	<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	-	-
"	11/27/2012	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	2/22/2013	<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	-	-

**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-6	5/27/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	8/24/2011	0.105	<0.0020	<0.0010	0.0597	0.00309	0.0628	0.168	-	-
"	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	-	-
"	11/27/2012	0.00121	<0.0020	<0.0010	0.0414	<0.0010	0.0414	0.0426	-	-
"	2/22/2013	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
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	-	-
"	2/22/2013	<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	-	-

**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	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	-	-
"	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	-	-
"	2/22/2013	<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	-	-

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-9	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	-	-
"	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	-	-
"	1/30/2013	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	2/22/2013	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	3/27/2013	<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	-	-

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

PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS NO: 2006-142
NMCD 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	6/19/2012	<0.0010	<0.0010	<0.0010	0.0157	<0.0010	0.0157	0.0157	-	-
"	7/30/2012	Dry								
"	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	-	-
"	1/30/2013	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	2/22/2013	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	3/27/2013	<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	-	-
"	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	-	-
"	3/27/2013	<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	<0.0010	<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	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 Well	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	-	-
"	2/28/2013	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	3/27/2013	<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	-	-
"	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	-	-
"	2/28/2013	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	3/27/2013	<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	-	-

**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 End	2/28/2013	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	3/27/2013	<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	-	-
"	1/31/2013	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	2/28/2013	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	3/27/2013	<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 456861,456863

for PLAINS ALL AMERICAN EH&S

Project Manager: Ben Arguijo
Lovington Gathering WTI SRS #2006-142

08-FEB-13

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)



08-FEB-13

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

Reference: XENCO Report No(s): **456861,456863**
Lovington Gathering WTI SRS #2006-142
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) 456861,456863. 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. 456861 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

New Mexico 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 456861,456863



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI SRS #2006-142

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-9	W	01-30-13 14:05		456861-001
MW-10	W	01-30-13 14:20		456861-002
JW Well	W	01-31-13 12:50		456863-001



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

Project Name: Lovington Gathering WTI SRS #2006-142



Project ID:
Work Order Number(s): 456861,456863

Report Date: 08-FEB-13
Date Received: 02/01/2013

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analysis Summary 456861,456863



PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI SRS #2006-142

Project Id:

Contact: Ben Arguijo

Project Location: Lovington

Date Received in Lab: Fri Feb-01-13 12:40 pm

Report Date: 08-FEB-13

Project Manager: Nicholas Straccione

Analysis Requested	Lab Id:	456861-001	456861-002				
	Field Id:	MW-9	MW-10				
	Depth:						
	Matrix:	WATER	WATER				
	Sampled:	Jan-30-13 14:05	Jan-30-13 14:20				
BTEX by EPA 8021B	Extracted:	Feb-06-13 09:00	Feb-06-13 09:00				
	Analyzed:	Feb-06-13 11:44	Feb-06-13 12:01				
	Units/RL:	mg/L RL	mg/L RL				
Benzene		ND 0.00100	ND 0.00100				
Toluene		ND 0.00200	ND 0.00200				
Ethylbenzene		ND 0.00100	ND 0.00100				
m_p-Xylenes		ND 0.00200	ND 0.00200				
o-Xylene		ND 0.00100	ND 0.00100				
Total Xylenes		ND 0.00100	ND 0.00100				
Total BTEX		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

Alejandro Montoya
New Mexico Laboratory Director



Certificate of Analysis Summary 456861,456863



PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI SRS #2006-142

Project Id:

Contact: Ben Arguijo

Date Received in Lab: Fri Feb-01-13 12:40 pm

Report Date: 08-FEB-13

Project Location: Lovington

Project Manager: Nicholas Straccione

Analysis Requested	Lab Id:	456863-001					
	Field Id:	JW Well					
	Depth:						
	Matrix:	WATER					
	Sampled:	Jan-31-13 12:50					
BTEX by EPA 8021B	Extracted:	Feb-06-13 09:00					
	Analyzed:	Feb-06-13 10:55					
	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				
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.

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

Alejandro Montoya
New Mexico 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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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 SRS #2006-142

Work Orders : 456861, 456861,456863

Project ID:

Lab Batch #: 906400

Sample: 456863-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/06/13 10:55

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0335	0.0300	112	80-120	
4-Bromofluorobenzene	0.0317	0.0300	106	80-120	

Lab Batch #: 906400

Sample: 456861-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/06/13 11:44

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0279	0.0300	93	80-120	
4-Bromofluorobenzene	0.0301	0.0300	100	80-120	

Lab Batch #: 906400

Sample: 456861-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/06/13 12:01

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0322	0.0300	107	80-120	
4-Bromofluorobenzene	0.0288	0.0300	96	80-120	

Lab Batch #: 906400

Sample: 633456-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/06/13 10:38

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0254	0.0300	85	80-120	
4-Bromofluorobenzene	0.0252	0.0300	84	80-120	

Lab Batch #: 906400

Sample: 633456-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/06/13 10:21

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0345	0.0300	115	80-120	
4-Bromofluorobenzene	0.0312	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 * A / B

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



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI SRS #2006-142

Work Orders : 456861, 456861,456863

Project ID:

Lab Batch #: 906400

Sample: 633456-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/06/13 10:04

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0292	0.0300	97	80-120	
4-Bromofluorobenzene	0.0283	0.0300	94	80-120	

Lab Batch #: 906400

Sample: 456863-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/06/13 11:11

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0281	0.0300	94	80-120	
4-Bromofluorobenzene	0.0311	0.0300	104	80-120	

Lab Batch #: 906400

Sample: 456863-001 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 02/06/13 11:28

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0316	0.0300	105	80-120	
4-Bromofluorobenzene	0.0313	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 * A / B

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



BS / BSD Recoveries



Project Name: Lovington Gathering WTI SRS #2006-142

Work Order #: 456861, 456861, 456863

Analyst: KEB

Date Prepared: 02/06/2013

Project ID:

Date Analyzed: 02/06/2013

Lab Batch ID: 906400

Sample: 633456-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

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	0.106	106	0.100	0.0849	85	22	70-125	25	
Toluene	<0.00200	0.100	0.107	107	0.100	0.0846	85	23	70-125	25	
Ethylbenzene	<0.00100	0.100	0.108	108	0.100	0.0846	85	24	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.213	107	0.200	0.166	83	25	70-131	25	
o-Xylene	<0.00100	0.100	0.105	105	0.100	0.0842	84	22	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 SRS #2006-142

Work Order #: 456861

Project ID:

Lab Batch ID: 906400

QC- Sample ID: 456863-001 S

Batch #: 1 Matrix: Water

Date Analyzed: 02/06/2013

Date Prepared: 02/06/2013

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	0.0886	89	0.100	0.102	102	14	70-125	25	
Toluene	<0.00200	0.100	0.0840	84	0.100	0.104	104	21	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0854	85	0.100	0.103	103	19	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.165	83	0.200	0.199	100	19	70-131	25	
o-Xylene	<0.00100	0.100	0.0818	82	0.100	0.102	102	22	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



CHAIN OF CUSTODY RECORD

Houston: 4143 Greenbriar Dr. Stafford, TX 77477 (281)240-4200 Odessa: 12800 West I-20 East Odessa, TX 79765 (432)563-1800
 Hobbs: 4008 N Grimes Hobbs, NM 88240 (575)392-7550

Page 1 of 1

LAB W.O #: 450861
 Field billable Hrs: _____

Container	Type	Codes
VA	Vial Amber	ES Encore Sampler
VC	Vial Clear	TS TerraCore Sampler
VP	Vial Pre-preserved	AC Air Canister
GA	Glass Amber	TB Tedlar Bag
GC	Glass Clear	ZB Zip Lock Bag
PA	Plastic Amber	PC Plastic Clear
PC	Plastic Clear	
Other: _____		

Company: Basin Environmental Service Technologies, LLC Phone: (575)396-2378
 Address: 3100 Plains Hwy. Fax: (575)396-1429
 City: Lovington State: NM Zip: 88260
 PM/Attn: Ben Arguijo Email: bjarguljo@basinenv.com
 Project ID: Lovington Gathering WTI PO#: PAA-J. Henry
 SRS #2006-142
 Invoice To: Jason Henry Plains All American Quote #:

TAT Work Days = D Need results by: _____ Time: _____
 Std. (5-7D) 5Hrs 1D 2D 3D 4D 5D 7D 10D 14D Other

Sampler Signature: [Signature] Circle One Event: Daily Weekly (Month) Quarterly
 Semi-Annual Annual N/A

Sample ID	Collection Date	Collection Time	Sample Type	Volume (L)	Volume (G)	Volume (M)	Volume (D)	Volume (O)	Volume (S)
1 MW-9	1/30/13	14:05	GW						3
2 MW-10	1/30/13	14:20	GW						3
3 MW-11	1/30/13	14:30	GW						3
4									
5									
6									
7									
8									
9									
0									

ANALYSES REQUESTED									
TPH	BTEX	Chloride							
	X								
	X								
	X								

Size(s): 2oz, 4oz, 8oz, 16oz, 32oz, 1Gal
 40ml, 125 ml, 250 ml, 500 ml, 1L, Other

Preservative Type Codes				
A. None	E. HCL	I. Ice		
B. HNO ₃	F. MeOH	J. MCAA		C.
H ₂ SO ₄	G. Na ₂ S ₂ O ₈	K. ZnAc&NaOH		
D. NaOH	H. NaHSO ₄	L. Asbc Acid&NaOH		
O.				

Matrix Type Codes			
GW	Ground Water	S	Soil/Sediment/Solid
WW	Waste Water	W	Wipe
DW	Drinking Water	A	Air
SW	Surface Water	O	Oil
OW	Ocean/Sea Water	T	Tissue
PL	Product-Liquid	U	Urine
PS	Product-Solid	B	Blood
SL	Sludge		
Other: _____			

Reg. Program / Clean-up Std: _____ STATE of: CO Regs: _____ CAA/CCLD & Remediation: _____ EDCs: _____ VOCs: _____ Solvents: None

CTLs: TRRP DW NPDES LPST DryCh. FL TX GA NC SC NJ PA OK LA 1 2 3 4 CLP AFCEE QAPP ADAPT SEDD ERPIMS Match Incomplete 18.2 3.15
 Other: AL NM Other: NELAC DoD-ELAP Other: XLS Other: Absent Unclear

Collector/Agency	Location	Date	Time	Signature	Date	Time
<u>[Signature]</u>	Basin Env	1/31/13	13:45	<u>[Signature]</u>	1/31/13	13:45
<u>[Signature]</u>	Basin Env	1/31/13	14:30	<u>[Signature]</u>	1/31/13	14:30
<u>[Signature]</u>	Basin Env	1/31/13	12:40	<u>[Signature]</u>	1/31/13	12:40

REMARKS	
Lab Only:	
Non-Conformances found?	<input checked="" type="checkbox"/>
Samples intact upon arrival?	<input checked="" type="checkbox"/>
Received on Wet Ice?	<input checked="" type="checkbox"/>
Labeled with proper preservatives?	<input checked="" type="checkbox"/>
Received within holding time?	<input checked="" type="checkbox"/>
Custody seals intact?	<input checked="" type="checkbox"/>
VOCs rec'd w/o headspace?	<input checked="" type="checkbox"/>
Proper containers used?	<input checked="" type="checkbox"/>
pH verified-acceptable, excl VOCs?	<input checked="" type="checkbox"/>
Received on time to meet HTs?	<input checked="" type="checkbox"/>

B&A Laboratories: Hobbs 575-392-7550 Dallas 214-902-0300 Houston 281-242-4200 Odessa 432-563-1800 San Antonio 210-509-3334 Phoenix 602-437-0330
 FTS Service Centers: Atlanta 770-449-8800 Lakeland 863-646-8526 Tampa 803-543-8099 Philadelphia 610-955-5649 South Carolina 803-543-8099

C.O.C. Serial # _____

Execution of this document by client creates a legal and binding agreement between client and Xenco for analytical and testing services provided by Xenco to client under Xenco's standard terms and conditions unless previously agreed in writing. Terms of payment are Net 30 days, and all past due amounts shall accrue interest at 1.5% per month until paid in full. All laboratory analytical data and reports generated by Xenco remain the exclusive property of Xenco until invoices for such data are paid in full. Revision Date: Nov 12, 2009



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In



Client: PLAINS ALL AMERICAN EH&S

Date/ Time Received: 02/01/2013 12:40:00 PM

Work Order #: 456861

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)?	1.5
#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: _____



CHAIN OF CUSTODY RECORD

Houston: 4143 Greenbriar Dr. Stafford, TX 77477 (281)240-4200 Odessa: 12600 West I-20 East Odessa, TX 79765 (432)563-1800
Hobbs: 4008 N Grimes Hobbs, NM 88240 (575)392-7550

Page 1 of 1

LAB W.O #: 456863

Field billable Hrs: _____

Company: Basin Environmental Service Technologies, LLC Phone: (575)396-2378
 Address: 3100 Plains Hwy. Fax: (575)396-1429
 City: Lovington State: NM Zip: 88260
 PM/Attn: Ben Arguijo Email: bjaruijo@basinenv.com
 Project ID: Lovington Gathering WTI SRS #2006-142 PO#: PAA-J. Henry
 Invoice To: Jason Henry Plains All American Quote #:
 Sampler Signature: Circle One Event: Daily Weekly Monthly Quarterly
 Semi-Annual Annual N/A

TAT Work Days = D Need results by: _____ Time: _____
 Std (5-7D) 6Hrs 1D 2D 3D 4D 5D 7D 10D 14D Other _____

Container Type Codes

VA	Vial Amber	ES	Encore Sampler
VC	Vial Clear	TS	TerraCore Sampler
VP	Vial Pre-preserved	AC	Air Canister
GA	Glass Amber	TB	Teclor Bag
GC	Glass Clear	ZB	Zip Lock Bag
PA	Plastic Amber	PC	Plastic Clear
PC	Plastic Clear		
Other			

Size(s): 2oz, 4oz, 8oz, 16oz, 32oz, 1Gal
40ml, 125 ml, 250 ml, 500 ml, 1L, Other _____

Preservative Type Codes

A.	None	E.	HCL	I.	Ice
B.	HNO ₃	F.	MeOH	J.	MCAA
H ₂ SO ₄	G.	Na ₂ S ₂ O ₈	K.	ZnAc&NaOH	C.
D.	NaOH	H.	NaHSO ₄	L.	Asbc Acid&NaOH
O.					

Matrix Type Codes

GW	Ground Water	S	Soil/Sediment/Solid
WW	Waste Water	W	Wipe
DW	Drinking Water	A	Air
SW	Surface Water	O	Oil
OW	Ocean/Sea Water	T	Tissue
PL	Product-Liquid	U	Urine
PS	Product-Solid	B	Blood
SL	Sludge		
Other			

Sample ID	Collection Date	Collection Time	Matrix Code	Volume (L)	Volume (ml)	Temperature (°C)	Container	Preservative	Event	Analyte			Lab Only
										TPH	BTEX	Chloride	
1	JW Well	1/31/13	1250	GW							X		
2													
3													
4													
5													
6													
7													
8													
9													
0													

REMARKS

3rd sample set from 1/30/13

Reg. Program	State for Cert. & Regs	QA/QC Level & Certification	MDLs	Doc & Label	Storage Temp °C	Expiry Date
Clear-up Std	TX	Level 2	ADAPT, SEDD, ERPIMS	Match, Incomplete, Absent, Unclear	18° 2 3 1.5	
CTLs TRRP DW NPDES LPST DryCln	FL TX GA NC SC NJ PA OK LA AL NM Other	1 2 3 4 CLP AFCEE QAPP NELAC DoD-ELAP Other	ADAPT SEDD ERPIMS XLS Other	Match Incomplete Absent Unclear	18° 2 3 1.5	
1		1/31/13	1930	J. Zutter MS	1/31/13	12:30
2				J. Zutter XENCO	2/1/13	12:40
3						
4						

Non-Conformances found? _____

Samples intact upon arrival? ✓

Received on Wet Ice? ✓

Labeled with proper preservatives? ✓

Received within holding time? ✓

Custody seals intact? ✓

VOCs rec'd w/o headspace? ✓

Proper containers used? ✓

pH verified-acceptable, excl VOCs? ✓

Received on time to meet HTs? ✓

B&A Laboratories: Hobbs 575-392-7550 Dallas 214-902-0300 Houston 281-242-4200 Odessa 432-563-1800 San Antonio 210-509-3334 Phoenix 602-437-0330
 FTS Service Centers: Atlanta 770-449-8800 Lakeland 863-646-8526 Tampa 803-543-8099 Philadelphia 610-955-5649 South Carolina 803-543-8099

C.O.C. Serial # _____

Analytical Report 458445
for
PLAINS ALL AMERICAN EH&S

Project Manager: Ben Arguijo
Lovington Gathering WTI SRS #2006-142

04-MAR-13

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)



04-MAR-13

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

Reference: XENCO Report No(s): **458445**
Lovington Gathering WTI SRS #2006-142
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) 458445. 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. 458445 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 458445



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI SRS #2006-142

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-1	W	02-22-13 11:30		458445-001
MW-3	W	02-22-13 11:55		458445-002
MW-4	W	02-22-13 12:10		458445-003
MW-5	W	02-22-13 13:05		458445-004
MW-6	W	02-22-13 13:25		458445-005
MW-7	W	02-22-13 13:40		458445-006
MW-8	W	02-22-13 14:00		458445-007
MW-9	W	02-22-13 15:10		458445-008
MW-10	W	02-22-13 14:15		458445-009



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S
Project Name: Lovington Gathering WTI SRS #2006-142



Project ID:
Work Order Number(s): 458445

Report Date: 04-MAR-13
Date Received: 02/27/2013

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analysis Summary 458445

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI SRS #2006-142



Project Id:

Contact: Ben Arguijo

Project Location: Lovington

Date Received in Lab: Wed Feb-27-13 10:20 am

Report Date: 04-MAR-13

Project Manager: Nicholas Straccione

Analysis Requested	Lab Id:	458445-001	458445-002	458445-003	458445-004	458445-005	458445-006
	Field Id:	MW-1	MW-3	MW-4	MW-5	MW-6	MW-7
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
	Sampled:	Feb-22-13 11:30	Feb-22-13 11:55	Feb-22-13 12:10	Feb-22-13 13:05	Feb-22-13 13:25	Feb-22-13 13:40
BTEX by EPA 8021B	Extracted:	Mar-01-13 07:50					
	Analyzed:	Mar-01-13 14:20	Mar-01-13 14:04	Mar-01-13 13:48	Mar-01-13 13:32	Mar-01-13 13:15	Mar-01-13 12:26
	Units/RL:	mg/L RL					
Benzene		ND 0.00100	0.0112 0.00100	ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100
Toluene		ND 0.00200					
Ethylbenzene		ND 0.00100					
m_p-Xylenes		ND 0.00200	0.00302 0.00200	ND 0.00200	ND 0.00200	ND 0.00200	ND 0.00200
o-Xylene		ND 0.00100	0.00212 0.00100	ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100
Total Xylenes		ND 0.00100	0.00514 0.00100	ND 0.00100	ND 0.00100	ND 0.00100	ND 0.00100
Total BTEX		ND 0.00100	0.0163 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



Certificate of Analysis Summary 458445

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI SRS #2006-142



Project Id:

Contact: Ben Arguijo

Date Received in Lab: Wed Feb-27-13 10:20 am

Report Date: 04-MAR-13

Project Location: Lovington

Project Manager: Nicholas Straccione

Analysis Requested	Lab Id:	458445-007	458445-008	458445-009			
	Field Id:	MW-8	MW-9	MW-10			
	Depth:						
	Matrix:	WATER	WATER	WATER			
	Sampled:	Feb-22-13 14:00	Feb-22-13 15:10	Feb-22-13 14:15			
BTEX by EPA 8021B	Extracted:	Mar-01-13 07:50	Mar-01-13 07:50	Mar-01-13 07:50			
	Analyzed:	Mar-01-13 12:09	Mar-01-13 11:53	Mar-01-13 12:59			
	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			

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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9701 Harry Hines Blvd, Dallas, TX 75220	(281) 240-4200	(281) 240-4280
5332 Blackberry Drive, San Antonio TX 78238	(214) 902 0300	(214) 351-9139
2505 North Falkenburg Rd, Tampa, FL 33619	(210) 509-3334	(210) 509-3335
12600 West I-20 East, Odessa, TX 79765	(813) 620-2000	(813) 620-2033
6017 Financial Drive, Norcross, GA 30071	(432) 563-1800	(432) 563-1713
3725 E. Atlanta Ave, Phoenix, AZ 85040	(770) 449-8800	(770) 449-5477
	(602) 437-0330	



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI SRS #2006-142

Work Orders : 458445,

Project ID:

Lab Batch #: 908039

Sample: 458445-008 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/01/13 11:53

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	0.0263	0.0300	88	80-120	

Lab Batch #: 908039

Sample: 458445-007 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/01/13 12:09

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0255	0.0300	85	80-120	
4-Bromofluorobenzene	0.0280	0.0300	93	80-120	

Lab Batch #: 908039

Sample: 458445-006 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/01/13 12:26

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0272	0.0300	91	80-120	
4-Bromofluorobenzene	0.0333	0.0300	111	80-120	

Lab Batch #: 908039

Sample: 458445-009 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/01/13 12:59

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0280	0.0300	93	80-120	
4-Bromofluorobenzene	0.0310	0.0300	103	80-120	

Lab Batch #: 908039

Sample: 458445-005 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/01/13 13:15

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	0.0285	0.0300	95	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI SRS #2006-142

Work Orders : 458445,

Project ID:

Lab Batch #: 908039

Sample: 458445-004 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/01/13 13:32

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	0.0265	0.0300	88	80-120	

Lab Batch #: 908039

Sample: 458445-003 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/01/13 13:48

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

Lab Batch #: 908039

Sample: 458445-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/01/13 14:04

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0264	0.0300	88	80-120	
4-Bromofluorobenzene	0.0274	0.0300	91	80-120	

Lab Batch #: 908039

Sample: 458445-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/01/13 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	0.0275	0.0300	92	80-120	
4-Bromofluorobenzene	0.0269	0.0300	90	80-120	

Lab Batch #: 908039

Sample: 634479-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/01/13 09:10

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0314	0.0300	105	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 SRS #2006-142

Work Orders : 458445,

Project ID:

Lab Batch #: 908039

Sample: 634479-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/01/13 08:38

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0277	0.0300	92	80-120	
4-Bromofluorobenzene	0.0338	0.0300	113	80-120	

Lab Batch #: 908039

Sample: 634479-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/01/13 08:54

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	0.0328	0.0300	109	80-120	

Lab Batch #: 908039

Sample: 458187-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/01/13 10:15

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0275	0.0300	92	80-120	
4-Bromofluorobenzene	0.0345	0.0300	115	80-120	

Lab Batch #: 908039

Sample: 458187-001 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/01/13 10:31

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0332	0.0300	111	80-120	
4-Bromofluorobenzene	0.0305	0.0300	102	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



BS / BSD Recoveries



Project Name: Lovington Gathering WTI SRS #2006-142

Work Order #: 458445

Analyst: KEB

Date Prepared: 03/01/2013

Project ID:

Date Analyzed: 03/01/2013

Lab Batch ID: 908039

Sample: 634479-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

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	0.0936	94	0.100	0.0997	100	6	70-125	25	
Toluene	<0.00200	0.100	0.0925	93	0.100	0.0973	97	5	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0943	94	0.100	0.0962	96	2	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.187	94	0.200	0.194	97	4	70-131	25	
o-Xylene	<0.00100	0.100	0.0936	94	0.100	0.0967	97	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 SRS #2006-142

Work Order #: 458445

Project ID:

Lab Batch ID: 908039

QC- Sample ID: 458187-001 S

Batch #: 1 Matrix: Water

Date Analyzed: 03/01/2013

Date Prepared: 03/01/2013

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	0.107	107	0.100	0.106	106	1	70-125	25	
Toluene	<0.00200	0.100	0.109	109	0.100	0.102	102	7	70-125	25	
Ethylbenzene	<0.00100	0.100	0.109	109	0.100	0.108	108	1	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.205	103	0.200	0.208	104	1	70-131	25	
o-Xylene	<0.00100	0.100	0.102	102	0.100	0.104	104	2	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



CHAIN OF CUSTODY RECORD

Houston: 4143 Greenbriar Dr. Stafford, TX 77477 (281)240-4200 Odessa: 12600 West I-20 East Odessa, TX 79785 (432)563-1800
Hobbs: 4008 N Grimas Hobbs, NM 88240 (575)392-7550

Page 1 of 1

LAB W.O #:

458445

Field billable Hrs :

Container Type Codes	
VA	Vial Amber
VC	Vial Clear
VP	Vial Pre-preserved
GA	Glass Amber
GC	Glass Clear
PA	Plastic Amber
PC	Plastic Clear
Other	
ES	Encore Sampler
TS	TerraCore Sampler
AC	Air Canister
TB	Tedlar Bag
ZB	Zip Lock Bag
PC	Plastic Clear

Size(s): 2oz, 4oz, 8oz, 16oz, 32oz, 1Gal
40ml, 125 ml, 250 ml, 500 ml, 1L, Other

Company: Basin Environmental Service Technologies, LLC Phone: (575)396-2378
 Address: 3100 Plains Hwy. Fax: (575)396-1429
 City: Lovington State: NM Zip: 88260
 PM/Attn: Ben Arguijo Email: bjarguijo@basinenv.com
 Project ID: Lovington Gathering WTI SRS #2006-142 PO#: PAA-J. Henry
 Invoice To: Jason Henry Plains All American Quote #:
 Sampler Signature: Circle One Event: Daily Weekly Monthly Quarterly
 Semi-Annual Annual N/A

TAT Work Days = D Need results by: _____ Time: _____
 Std.(5-7D) 5Hrs 1D 2D 3D 4D 5D 7D 10D 14D Other

Preservative type Codes	
A:	None
B:	HNO ₃
H ₂ SO ₄	G. Na ₂ S ₂ O ₃
D:	NaOH
H:	NaHSO ₄
L:	Asbc Acid&NaOH
O:	
E:	HCL
F:	MeOH
J:	MCAA
K:	ZnAc&NaOH
C:	

Matrix type Codes	
GW	Ground Water
WW	Waste Water
DW	Drinking Water
SW	Surface Water
OW	Ocean/Sea Water
PL	Product-Liquid
PS	Product-Solid
SL	Sludge
Other	
S	Soil/Sediment/Solid
W	Wipe
A	Air
O	Oil
T	Tissue
U	Urine
B	Blood

Sample ID	Collection Date	Collection Time	Volume (L)	Temperature (C)	Other
1	MW-1	2/22/13	11:30		3
2	MW-3	2/22/13	11:55		3
3	MW-4	2/22/13	12:10		3
4	MW-5	2/22/13	13:05		3
5	MW-6	2/22/13	13:25		3
6	MW-7	2/22/13	13:40		3
7	MW-8	2/22/13	14:00		3
8	MW-9	2/22/13	15:10		3
9	MW-10	2/22/13	14:15		3
0					

TPH	BTEX	Chloride																	
	X																		
	X																		
	X																		
	X																		
	X																		
	X																		
	X																		
	X																		
	X																		
	X																		

REMARKS

CTLs	TRRP	DW	NPDES	LPST	DryCln	FL TX GA NC SC NJ PA OK LA	1 2 3 4 CLP AFCEE QAPP	ADaPT SEDD ERPIMS	Match Incomplete	13.92	3	1.5	Non-Conformances found?
Other:						AL NM Other:	NELAC DoD-ELAP Other:	XLS Other:	Absent Unclear				Samples intact upon arrival?
1	<i>Michael</i>					Basin Env	2-27-13	10:10					Received on Wet Ice?
2	<i>MS</i>					MS	2/27/13	10:20					Labeled with proper preservatives?
4													Received within holding time?
													Custody seals intact?
													VOCs rec'd w/o headspace?
													Proper containers used?
													pH verified-acceptable, excl VOCs?
													Received on time to meet HTs?

B&A Laboratories: Hobbs 575-392-7550 Dallas 214-902-0300 Houston 281-242-4200 Odessa 432-563-1800 San Antonio 210-509-3334 Phoenix 602-437-0330 C.O.C. Serial #
 FTS Service Centers: Atlanta 770-449-8800 Lakeland 863-646-8526 Tampa 803-543-8099 Philadelphia 610-955-5649 South Carolina 803-543-8099

Execution of this document by client creates a legal and binding agreement between client and Xenco for analytical and testing services provided by Xenco to client under Xenco's standard terms and conditions unless previously agreed in writing. Terms of payment are Net 30 days, and all past due amounts shall accrue interest at 1.5% per month until paid in full. All laboratory analytical data and reports generated by Xenco remain the exclusive property of Xenco until invoices for such data are paid in full. Revision Date: Nov 12, 2009



Prelogin/Nonconformance Report- Sample Log-In

Client: PLAINS ALL AMERICAN EH&S

Date/ Time Received: 02/27/2013 10:20:00 AM

Work Order #: 458445

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)?	1.5
#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: _____

Analytical Report 458587
for
PLAINS ALL AMERICAN EH&S

Project Manager: Ben Arguijo
Lovington Gathering WTI SRS #2006-142

06-MAR-13

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)



06-MAR-13

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

Reference: XENCO Report No(s): **458587**
Lovington Gathering WTI SRS #2006-142
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) 458587. 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. 458587 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 458587



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI SRS #2006-142

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Goff Dairy - Ctr. Pivot Well	W	02-28-13 09:30		458587-001
Goff Dairy - Ctr. Pivot Beg.	W	02-28-13 09:45		458587-002
Goff Dairy - Ctr. Pivot End	W	02-28-13 10:00		458587-003
J.W. Well	W	02-28-13 10:15		458587-004
MW-2	W	02-28-13 10:45		458587-005



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S
Project Name: Lovington Gathering WTI SRS #2006-142



Project ID:
Work Order Number(s): 458587

Report Date: 06-MAR-13
Date Received: 03/01/2013

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analysis Summary 458587

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI SRS #2006-142



Project Id:

Contact: Ben Arguijo

Project Location: Lovington

Date Received in Lab: Fri Mar-01-13 03:45 pm

Report Date: 06-MAR-13

Project Manager: Nicholas Straccione

Analysis Requested	Lab Id:	458587-001	458587-002	458587-003	458587-004	458587-005	
	Field Id:	Goff Dairy - Ctr. Pivot Well	Goff Dairy - Ctr. Pivot Beg.	Goff Dairy - Ctr. Pivot End	J.W. Well	MW-2	
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER	WATER	
	Sampled:	Feb-28-13 09:30	Feb-28-13 09:45	Feb-28-13 10:00	Feb-28-13 10:15	Feb-28-13 10:45	
BTEX by EPA 8021B	Extracted:	Mar-05-13 10:45	Mar-05-13 10:45	Mar-05-13 10:45	Mar-05-13 10:45	Mar-05-13 10:45	
	Analyzed:	Mar-05-13 16:18	Mar-05-13 16:34	Mar-05-13 16:51	Mar-05-13 17:07	Mar-05-13 17:24	
	Units/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	
Toluene		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	
m_p-Xylenes		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	
Total Xylenes		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	

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 SRS #2006-142

Work Orders : 458587, 458587

Project ID:

Lab Batch #: 908315

Sample: 458587-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/05/13 16:18

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0285	0.0300	95	80-120	
4-Bromofluorobenzene	0.0245	0.0300	82	80-120	

Lab Batch #: 908315

Sample: 458587-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/05/13 16:34

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0257	0.0300	86	80-120	
4-Bromofluorobenzene	0.0268	0.0300	89	80-120	

Lab Batch #: 908315

Sample: 458587-003 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/05/13 16:51

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0266	0.0300	89	80-120	
4-Bromofluorobenzene	0.0264	0.0300	88	80-120	

Lab Batch #: 908315

Sample: 458587-004 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/05/13 17:07

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0307	0.0300	102	80-120	
4-Bromofluorobenzene	0.0272	0.0300	91	80-120	

Lab Batch #: 908315

Sample: 458587-005 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/05/13 17:24

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0270	0.0300	90	80-120	
4-Bromofluorobenzene	0.0328	0.0300	109	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI SRS #2006-142

Work Orders : 458587, 458587

Project ID:

Lab Batch #: 908315

Sample: 634671-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/05/13 12:44

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0343	0.0300	114	80-120	
4-Bromofluorobenzene	0.0259	0.0300	86	80-120	

Lab Batch #: 908315

Sample: 634671-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/05/13 12:11

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0319	0.0300	106	80-120	
4-Bromofluorobenzene	0.0280	0.0300	93	80-120	

Lab Batch #: 908315

Sample: 634671-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/05/13 12:27

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0324	0.0300	108	80-120	
4-Bromofluorobenzene	0.0244	0.0300	81	80-120	

Lab Batch #: 908315

Sample: 458482-002 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/05/13 17:40

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0286	0.0300	95	80-120	
4-Bromofluorobenzene	0.0302	0.0300	101	80-120	

Lab Batch #: 908315

Sample: 458482-002 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/05/13 17:57

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0300	0.0300	100	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



BS / BSD Recoveries



Project Name: Lovington Gathering WTI SRS #2006-142

Work Order #: 458587, 458587

Analyst: KEB

Date Prepared: 03/05/2013

Project ID:

Date Analyzed: 03/05/2013

Lab Batch ID: 908315

Sample: 634671-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

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	0.108	108	0.100	0.0926	93	15	70-125	25	
Toluene	<0.00200	0.100	0.105	105	0.100	0.0856	86	20	70-125	25	
Ethylbenzene	<0.00100	0.100	0.109	109	0.100	0.0880	88	21	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.209	105	0.200	0.171	86	20	70-131	25	
o-Xylene	<0.00100	0.100	0.107	107	0.100	0.0857	86	22	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 SRS #2006-142

Work Order #: 458587

Project ID:

Lab Batch ID: 908315

QC- Sample ID: 458482-002 S

Batch #: 1 Matrix: Water

Date Analyzed: 03/05/2013

Date Prepared: 03/05/2013

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	0.101	101	0.100	0.0922	92	9	70-125	25	
Toluene	<0.00200	0.100	0.0948	95	0.100	0.0912	91	4	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0976	98	0.100	0.0910	91	7	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.187	94	0.200	0.175	88	7	70-131	25	
o-Xylene	<0.00100	0.100	0.0937	94	0.100	0.0843	84	11	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: 03/01/2013 03:45:00 PM

Work Order #: 458587

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: _____

Analytical Report 460151
for
PLAINS ALL AMERICAN EH&S

Project Manager: Ben Arguijo
Lovington Gathering WTI SRS #2006-142

01-APR-13

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)



01-APR-13

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

Reference: XENCO Report No(s): **460151**
Lovington Gathering WTI SRS #2006-142
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) 460151. 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. 460151 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 460151



PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI SRS #2006-142

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
J.W. Well	W	03-27-13 08:15		460151-001
Goff Dairy Well	W	03-27-13 08:35		460151-002
Center Pivot Well	W	03-27-13 08:45		460151-003
Center Pivot Well Beg.	W	03-27-13 08:55		460151-004
Center Pivot Well End	W	03-27-13 09:15		460151-005
MW-9	W	03-27-13 13:30		460151-006
MW-10	W	03-27-13 13:45		460151-007



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S
Project Name: Lovington Gathering WTI SRS #2006-142



Project ID:
Work Order Number(s): 460151

Report Date: 01-APR-13
Date Received: 03/28/2013

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analysis Summary 460151

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI SRS #2006-142



Project Id:

Contact: Ben Arguijo

Project Location: Lovington

Date Received in Lab: Thu Mar-28-13 02:04 pm

Report Date: 01-APR-13

Project Manager: Nicholas Straccione

Analysis Requested	Lab Id:	460151-001	460151-002	460151-003	460151-004	460151-005	460151-006
	Field Id:	J.W. Well	Goff Dairy Well	Center Pivot Well	Center Pivot Well Beg.	Center Pivot Well End	MW-9
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER	WATER	WATER
	Sampled:	Mar-27-13 08:15	Mar-27-13 08:35	Mar-27-13 08:45	Mar-27-13 08:55	Mar-27-13 09:15	Mar-27-13 13:30
BTEX by EPA 8021B	Extracted:	Mar-28-13 16:10	Mar-28-13 16:10	Mar-28-13 16:10	Mar-28-13 16:10	Mar-28-13 16:10	Mar-28-13 16:10
	Analyzed:	Mar-28-13 21:28	Mar-28-13 22:17	Mar-28-13 22:33	Mar-28-13 22:50	Mar-29-13 07:23	Mar-28-13 23:22
	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	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
Total Xylenes		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

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: 1.0%

Nicholas Straccione
Project Manager



Certificate of Analysis Summary 460151

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI SRS #2006-142



Project Id:

Contact: Ben Arguijo

Date Received in Lab: Thu Mar-28-13 02:04 pm

Report Date: 01-APR-13

Project Location: Lovington

Project Manager: Nicholas Straccione

Analysis Requested	Lab Id:	460151-007					
	Field Id:	MW-10					
	Depth:						
	Matrix:	WATER					
	Sampled:	Mar-27-13 13:45					
BTEX by EPA 8021B	Extracted:	Mar-28-13 16:10					
	Analyzed:	Mar-28-13 23:39					
	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				
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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(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 SRS #2006-142

Work Orders : 460151,

Project ID:

Lab Batch #: 910140

Sample: 460151-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/28/13 21:28

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	0.0318	0.0300	106	80-120	

Lab Batch #: 910140

Sample: 460151-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/28/13 22:17

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0311	0.0300	104	80-120	
4-Bromofluorobenzene	0.0319	0.0300	106	80-120	

Lab Batch #: 910140

Sample: 460151-003 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/28/13 22:33

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0316	0.0300	105	80-120	
4-Bromofluorobenzene	0.0307	0.0300	102	80-120	

Lab Batch #: 910140

Sample: 460151-004 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/28/13 22:50

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	0.0303	0.0300	101	80-120	

Lab Batch #: 910140

Sample: 460151-006 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/28/13 23:22

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	0.0260	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 * A / B

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



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI SRS #2006-142

Work Orders : 460151,

Project ID:

Lab Batch #: 910140

Sample: 460151-007 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/28/13 23:39

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0285	0.0300	95	80-120	
4-Bromofluorobenzene	0.0272	0.0300	91	80-120	

Lab Batch #: 910140

Sample: 460151-005 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/29/13 07:23

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0263	0.0300	88	80-120	
4-Bromofluorobenzene	0.0256	0.0300	85	80-120	

Lab Batch #: 910140

Sample: 635836-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/28/13 21:11

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0309	0.0300	103	80-120	
4-Bromofluorobenzene	0.0257	0.0300	86	80-120	

Lab Batch #: 910140

Sample: 635836-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/28/13 20:39

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0309	0.0300	103	80-120	
4-Bromofluorobenzene	0.0304	0.0300	101	80-120	

Lab Batch #: 910140

Sample: 635836-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/28/13 20:55

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0328	0.0300	109	80-120	
4-Bromofluorobenzene	0.0300	0.0300	100	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI SRS #2006-142

Work Orders : 460151,

Project ID:

Lab Batch #: 910140

Sample: 460151-001 S / MS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/28/13 21:44

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	0.0302	0.0300	101	80-120	

Lab Batch #: 910140

Sample: 460151-001 SD / MSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 03/28/13 22:00

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	0.0327	0.0300	109	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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



BS / BSD Recoveries



Project Name: Lovington Gathering WTI SRS #2006-142

Work Order #: 460151

Analyst: KEB

Date Prepared: 03/28/2013

Project ID:

Date Analyzed: 03/28/2013

Lab Batch ID: 910140

Sample: 635836-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

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	0.0933	93	0.100	0.0971	97	4	70-125	25	
Toluene	<0.00200	0.100	0.0901	90	0.100	0.0963	96	7	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0830	83	0.100	0.0866	87	4	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.169	85	0.200	0.178	89	5	70-131	25	
o-Xylene	<0.00100	0.100	0.0930	93	0.100	0.0941	94	1	71-133	25	

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

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

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

All results are based on MDL and Validated for QC Purposes



Form 3 - MS / MSD Recoveries



Project Name: Lovington Gathering WTI SRS #2006-142

Work Order #: 460151

Project ID:

Lab Batch ID: 910140

QC- Sample ID: 460151-001 S

Batch #: 1 Matrix: Water

Date Analyzed: 03/28/2013

Date Prepared: 03/28/2013

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	0.0891	89	0.100	0.0905	91	2	70-125	25	
Toluene	<0.00200	0.100	0.0906	91	0.100	0.0880	88	3	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0816	82	0.100	0.0779	78	5	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.163	82	0.200	0.151	76	8	70-131	25	
o-Xylene	<0.00100	0.100	0.0910	91	0.100	0.0844	84	8	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

Acceptable Temperature Range: 0 - 6 degC

Date/ Time Received: 03/28/2013 02:04:00 PM

Air and Metal samples Acceptable Range: Ambient

Work Order #: 460151

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1
#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)

