AP - 96

ANNUAL MONITORING REPORT

YEAR(S): 2011

Basin Environmental Service Technologies, LLC

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Effective Solutions

RECEIVED

APR 2 2012

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

2011 ANNUAL MONITORING REPORT

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: 2006-142
NMOCD Reference Number: ~~1RP-838~~ AP-96

Prepared for:

PLAINS

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

March 2012

Ben J. Arguijo
Project Manager

PLAINS
ALL AMERICAN

RECEIVED

APR 2 2012

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

March 29, 2012

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

Re: Plains All American – 2011 Annual Monitoring Reports
5 Sites in Lea County, New Mexico
1 Site in Eddy County, New Mexico

Dear Mr. Hansen:

Plains All American is an operator of crude oil pipelines and terminal facilities in the state of New Mexico. Plains All American actively monitors certain historical release sites exhibiting groundwater impacts, consistent with assessments and work plans developed in consultation with the New Mexico Oil Conservation Division (NMOCD). In accordance with the rules and regulations of the NMOCD, Plains All American hereby submits our Annual Monitoring reports for the following sites:

Lovington Gathering WTI	AP-96 (1R-838)	Section 06, T17S, R37E, Lea County
Red Byrd #1	1R-0085	Section 01, T20S, R36E, Lea County
DCP Plant to Lea Sta. 6" #2	1R-2136	Section 31, T20S, R37E, Lea County
DCP Plant to Lea Sta. 6" Sec.31	1R-2166	Section 31, T20S, R37E, Lea County
14" Vac to Jal Legacy	1R-2162	Section 25, T22S, R37E, Lea County
Ballard Grayburg 5-Inch	2R-0053	Section 10, T18S, R29E, Eddy County

Basin Environmental Service Technologies, LLC (Basin) prepared these documents and has vouched for their accuracy and completeness, and on behalf of Plains All American, I have personally reviewed the documents and interviewed Basin personnel in order to verify the accuracy and completeness of these documents. It is based upon these inquiries and reviews that Plains All American submits the enclosed Annual Monitoring Reports for the above facilities.

If you have any questions or require further information, please contact me at (575) 441-1099.

Sincerely,

Jason Henry
Remediation Coordinator
Plains All American

CC: Geoff Leking, NMOCD, Hobbs, NM
Enclosures

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FIGURES

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APPENDICES

1.0 INTRODUCTION

Basin Environmental Service Technologies, LLC (Basin), on behalf of Plains Pipeline, LP (Plains), is pleased to submit this *Annual Monitoring Report* in compliance with the New Mexico Oil Conservation Division (NMOCD) letter of May 1998, requiring submittal of an Annual Monitoring Report by April 1st of each year. 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 calendar year 2011 only. For reference, a "Site Location Map" is provided as Figure 1.

Groundwater monitoring was conducted during each quarter of 2011 to assess the levels and extent of dissolved phase constituents and Phase-Separated Hydrocarbon (PSH). The groundwater monitoring events consisted of measuring static water levels in the monitor wells, checking for the presence of PSH, and purging and sampling of each well exhibiting sufficient recharge. Monitor wells containing a thickness of PSH greater than 0.01 feet were not sampled.

2.0 SITE DESCRIPTION & BACKGROUND INFORMATION

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

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

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

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

Laboratory analytical results of groundwater sampling at monitor well MW-7 indicated additional monitor wells were required to fully delineate the down-gradient boundary of the dissolved-phase plume. On February 7, 2007, monitor well MW-8 was installed down-gradient of monitor well MW-7. Laboratory analytical results of soil samples collected during the installation of monitor well MW-8 indicated benzene and BTEX concentrations were less than the appropriate laboratory MDL and the NMOCD regulatory standard of 10 mg/Kg and 50 mg/Kg for benzene and BTEX, respectively. Laboratory analytical results indicate TPH concentrations were less than the laboratory MDL and NMOCD regulatory standard of 100 mg/Kg for soil samples collected at ten (10) and twenty-five (25) feet bgs. Soil samples collected at fifty (50) and seventy-five (75) feet bgs exhibited a TPH concentration of 14 mg/Kg (below NMOCD standards) and 101 mg/Kg, respectively.

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

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

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

3.0 FIELD ACTIVITIES

3.1 Groundwater Recovery Efforts

Basin began manual, bi-weekly recovery of hydrocarbon-impacted groundwater from monitor well MW-9 in November 2009 to control the down-gradient migration of the dissolved-phase plume. Bi-weekly recovery from monitor well MW-10 commenced in April 2011 at the behest of

the NMOCD. All recovered fluids are disposed of at an NMOCD- approved disposal facility near Lovington, New Mexico.

3.2 Groundwater Monitoring

The on-site monitor wells were gauged and sampled on March 22 (1Q2011), May 27 (2Q2011), August 24 (3Q2011), and November 9, 2011 (4Q2011). During these quarterly sampling events, the monitoring wells were purged of a minimum of three (3) well volumes of water or until the wells were dry using a PVC bailer or electrical Grundfos pump. 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 Monument, New Mexico.

Diminished well volume and recharge in monitor well MW-2 attributable to the use of a large-capacity irrigation well (Goff Dairy Well) on property adjacent to the release site precluded sample collection from the monitor well during the 2Q2011 and 4Q2011 quarterly monitoring events. Monitor well MW-2 was sampled during a follow-up site visit on September 30, 2011, to satisfy the 2Q2011 quarterly monitoring requirement.

Per NMOCD request, monthly monitoring events were conducted at MW-10 and five (5) locations (Goff Dairy Well, Goff Dairy - Ctr. Pivot Well, Goff Dairy - Ctr. Pivot Beginning, Goff Dairy - Ctr. Pivot End, and JW Well) on property adjacent to the release site (Goff Dairy #9 Pivot) on May 27, July 7, July 11, July 14, August 24, October 31, November 9, and December 14, 2011. Monthly monitoring of monitor well MW-9 commenced on December 14, 2011.

Crop harvesting and a consequent reduction in water usage on the Goff Dairy #9 Pivot precluded sample collection during the month of September. Arrangements were made with the landowner to conduct a sampling event as soon as possible following the close of the quarter. The third monthly sampling event occurred on October 10, 2011.

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

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

Locations of the groundwater monitoring wells and the inferred groundwater gradient, which was constructed from groundwater elevation measurements collected during the 4Q2011 sampling event, are depicted in Figure 2D, "Inferred Groundwater Gradient Map – 4Q2011". The groundwater gradient map indicates a general gradient of approximately 0.0063 feet/foot to the southeast, as measured between monitor wells MW-1 and MW-10. The corrected groundwater

elevation ranged between 3,715.23 and 3,719.80 feet above mean sea level in monitor wells MW-10 and MW-5, respectively. Groundwater elevation data is provided as Table 1, "Groundwater Elevation Data - 4Q2011".

No PSH was detected in any of the on-site monitor wells during the 2011 reporting period.

4.0 LABORATORY RESULTS

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

4.1 Quarterly Monitoring Data

Data collected during the quarterly groundwater monitoring events are summarized below. Groundwater contaminant concentrations for the quarterly monitoring events are depicted in Figures 3A through 3D.

- **Monitor Well MW-1:**
    - Benzene and BTEX constituent concentrations were both less than the appropriate laboratory MDL and less than New Mexico Water Quality Control Commission (NMWQCC) regulatory standards in all submitted groundwater samples.
- **Monitor Well MW-2:**
    - Benzene concentrations ranged from 0.00222 mg/L in 2Q2011 to 0.179 mg/L in 3Q2011. Toluene concentrations were less than the laboratory MDL all submitted groundwater samples. Ethylbenzene concentrations ranged from less than the laboratory MDL in 1Q2011 and 2Q2011 to 0.00275 mg/L in 3Q2011. Total xylene concentrations ranged from 0.00297 mg/L in 2Q2011 to 0.0616 mg/L in 1Q2011. Diminished well volume and recharge precluded sample collection in 4Q2011. Benzene concentrations exceeded the NMWQCC regulatory standard of 0.010 mg/L in 1Q2011 and 3Q2011. Toluene, ethylbenzene, and total xylene concentrations were less than NMWQCC regulatory standards in all submitted groundwater samples.

- **Monitor Well MW-3:**

    - Benzene concentrations ranged from 0.00211 mg/L in 4Q2011 to 0.0262 mg/L in 3Q2011. Toluene concentrations ranged from less than the laboratory MDL in 2Q2011 and 4Q2011 to 0.00333 mg/L in 3Q2011. Ethylbenzene concentrations ranged were less than the laboratory MDL in all submitted groundwater samples. Total xylene concentrations ranged from 0.00345 mg/L in 4Q2011 to 0.0119 mg/L in 1Q2011. Benzene concentrations exceeded the NMWQCC regulatory standard of 0.010 mg/L in 2Q2011 and 3Q2011. Toluene, ethylbenzene, and total xylene concentrations were less than NMWQCC regulatory standards in all submitted groundwater samples.

- **Monitor Well MW-4:**

    - Benzene concentrations ranged from less than the laboratory MDL in 1Q2011, 2Q2011, and 4Q2011 to 0.00119 mg/L in 3Q2011. Toluene, ethylbenzene, and total xylene concentrations were less than the appropriate laboratory MDL in all submitted groundwater samples. The fluoride concentration in the groundwater sample collected from monitor well MW-4 during 2Q2011 was 4.76 mg/L. The chromium concentration in the groundwater sample collected from monitor well MW-4 during 2Q2011 was both less than the laboratory MDL and less than the NMWQQ regulatory standard of 0.05 mg/L. Benzene, toluene, ethylbenzene, and total xylene concentrations were less than NMWQCC regulatory standards in all submitted groundwater samples. The fluoride concentration exceeded the NMWQCC regulatory standard of 1.6 mg/L.

- **Monitor Well MW-5:**

    - Benzene and BTEX constituent concentrations were both less than the appropriate laboratory MDL and less than NMWQCC regulatory standards in all submitted groundwater samples.

- **Monitor Well MW-6:**

    - Benzene concentrations ranged from less than the laboratory MDL in 1Q2011 and 2Q2011 to 0.105 mg/L in 3Q2011. Toluene and ethylbenzene concentrations were less than the appropriate laboratory MDL in all submitted groundwater samples. Total xylene concentrations ranged from less than the laboratory MDL in 1Q2011 and 2Q2011 to 0.0628 mg/L in 3Q2011. Benzene concentrations exceeded the NMWQCC regulatory standard of 0.010 mg/L in 3Q2011. Toluene, ethylbenzene, and total xylene concentrations were less than NMWQCC regulatory standards in all submitted groundwater samples.

- **Monitor Well MW-7:**

    - Benzene concentrations ranged from less than the laboratory MDL in 1Q2011, 2Q2011, and 4Q2011 to 0.00192 mg/L in 3Q2011. Toluene, ethylbenzene, and total xylene concentrations were less than the appropriate laboratory MDL in all submitted groundwater samples. Benzene, toluene, ethylbenzene, and total xylene concentrations were less than NMWQCC regulatory standards in all submitted groundwater samples.

- **Monitor Well MW-8:**

    - Benzene, toluene, and ethylbenzene concentrations were less than the appropriate laboratory MDL in all submitted groundwater samples. Total xylene concentrations ranged from less than the laboratory MDL in 3Q2011 and 4Q2011 to 0.00260 mg/L in 2Q2011. Benzene, toluene, ethylbenzene, and total xylene concentrations were less than NMWQCC regulatory standards in all submitted groundwater samples.

- **Monitor Well MW-9:**

    - Benzene concentrations ranged from less than the laboratory MDL in 2Q2011 and 4Q2011 to 0.00406 mg/L in 2Q2011. Toluene and ethylbenzene concentrations were less than the appropriate laboratory MDL in all submitted groundwater samples. Total xylene concentrations ranged from less than the laboratory MDL in 4Q2011 to 0.0349 mg/L in 4Q2011. Benzene, toluene, ethylbenzene, and total xylene concentrations were less than NMWQCC regulatory standards in all submitted groundwater samples.

- **Monitor Well MW-10:**

    - Benzene concentrations ranged from less than the laboratory MDL in 4Q2011 to 1.52 mg/L in 2Q2011. Toluene concentrations were less than the appropriate laboratory MDL in all submitted groundwater samples. Ethylbenzene concentrations ranged from less than the laboratory MDL in 1Q2011 and 4Q2011 to 0.00158 mg/L in 3Q2011. Total xylene concentrations ranged from less than the laboratory MDL in 4Q2011 to 0.0203 mg/L in 3Q2011. Benzene concentrations exceeded the NMWQCC regulatory standard of 0.010 mg/L in 1Q2011, 2Q2011, and 3Q2011. Toluene, ethylbenzene, and total xylene concentrations were less than NMWQCC regulatory standards in all submitted groundwater samples.

4.2 Monthly Monitoring Data

Data collected during the July 7, July 11, July 14, August 24, October 31, November 9, and December 14, 2011 monthly monitoring events is summarized below. Groundwater contaminant concentrations for the monthly monitoring events are depicted in Figures 3E through 3H.

- **Monitor Well MW-9:**

    - Monthly monitoring of monitor well MW-9 commenced on December 14, 2011. Benzene, toluene, ethylbenzene, and total xylene concentrations were both less than the appropriate laboratory MDL and less than NMWQCC regulatory standards in all submitted groundwater samples.

- **Monitor Well MW-10:**

    - Benzene concentrations ranged from 0.00846 mg/L on December 14, 2011, to 3.00 mg/L on July 11, 2011. Toluene concentrations ranged from less than the laboratory MDL on October 10 and October 31, 2011, to 0.00265 mg/L on July 11, 2011. Ethylbenzene concentrations ranged from less than the laboratory MDL on October 10, 2011, to 0.00365 mg/L on July 11, 2011. Total xylene concentrations ranged from 0.0261 mg/L on December 14, 2011, to 0.121 mg/L on October 10, 2011. Benzene concentrations exceeded NMWQCC regulatory standards on July 11, October 10, and October 31, 2011. Toluene, ethylbenzene, and total xylene concentrations were less than NMWQCC regulatory standards in all submitted groundwater samples.

- **Goff Dairy Well:**

    - Benzene concentrations ranged from less than the laboratory MDL on August 24, October 10, October 31, November 9, and December 14, 2011, to 0.00265 mg/L on July 11, 2011. Toluene and total xylene concentrations were less than the laboratory MDL in all submitted groundwater samples. Ethylbenzene concentrations ranged from less than the laboratory MDL on May 27, August 24, October 10, October 31, and November 9, 2011, to 0.00111 mg/L on December 14, 2011. Benzene, toluene, ethylbenzene, and total xylene concentrations were less than NMWQCC regulatory standards in all submitted groundwater samples.

- **Goff Dairy - Ctr. Pivot Well:**

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

- **Goff Dairy - Ctr. Pivot Beginning:**

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

- **Goff Dairy - Ctr. Pivot End:**

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

- **JW Well:**

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

4.3 Yearly Monitoring Data

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

ANTICIPATED ACTIONS

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

The *July - September 2011 Quarterly Monitoring Report,* dated July 2011, and correspondence from an NMOCD representative, dated August 1, 2011, recommended bi-weekly recovery of hydrocarbon-impacted groundwater from monitor wells MW-9 and MW-10 to control the down-gradient migration of the dissolved-phase plume. Based on the reduction in plume concentrations, Plains recommends the bi-weekly recovery events from MW-9 and MW-10 be reduced to weekly.

Quarterly monitoring reports will be submitted within thirty (30) days of the end of each calendar quarter, unless or until directed otherwise by the NMOCD. A cumulative *Annual Monitoring Report* for the 2012 reporting period will be submitted to the NMOCD by April 1, 2013.

LIMITATIONS

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

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

DISTRIBUTION

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Figures

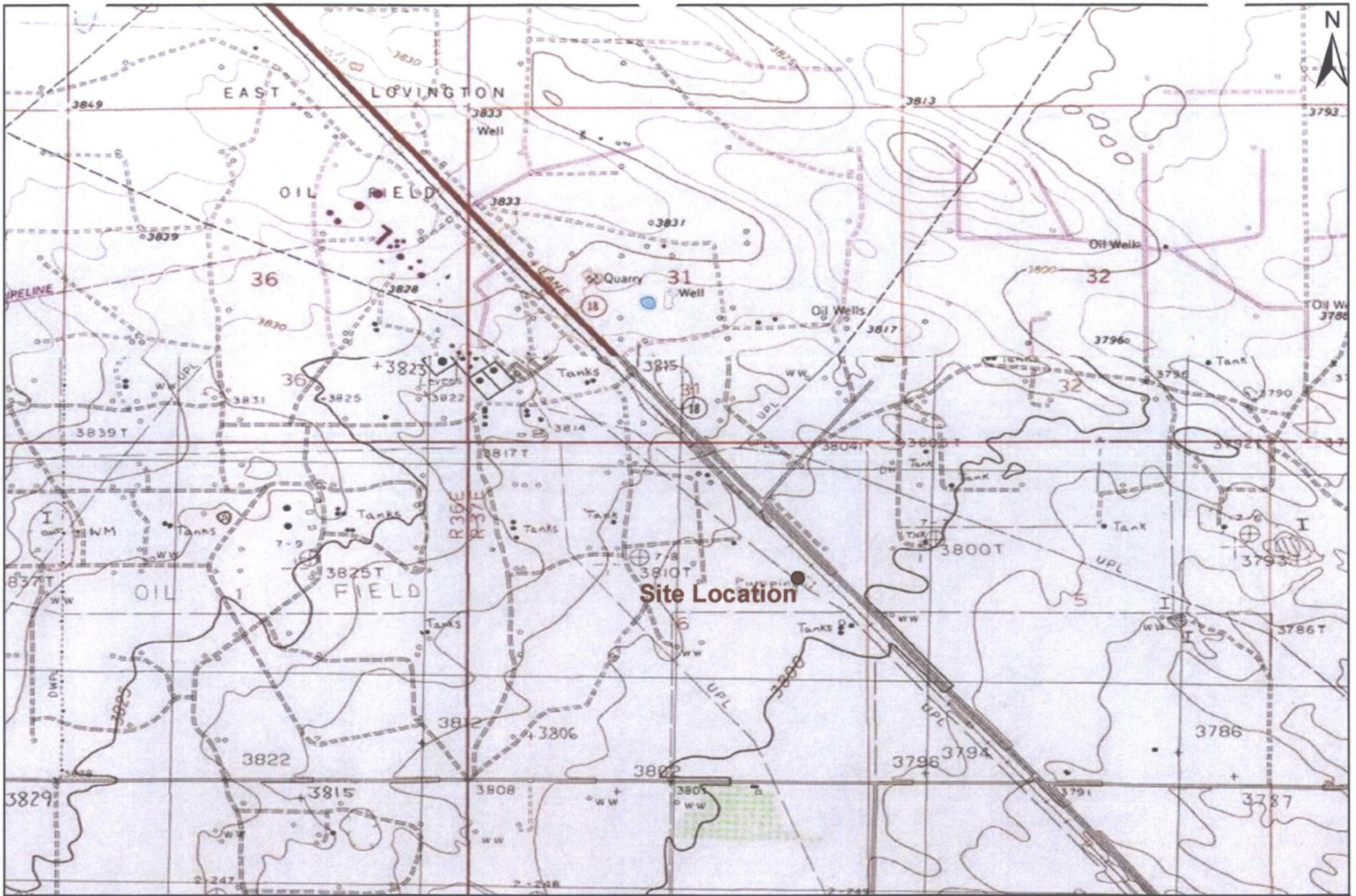
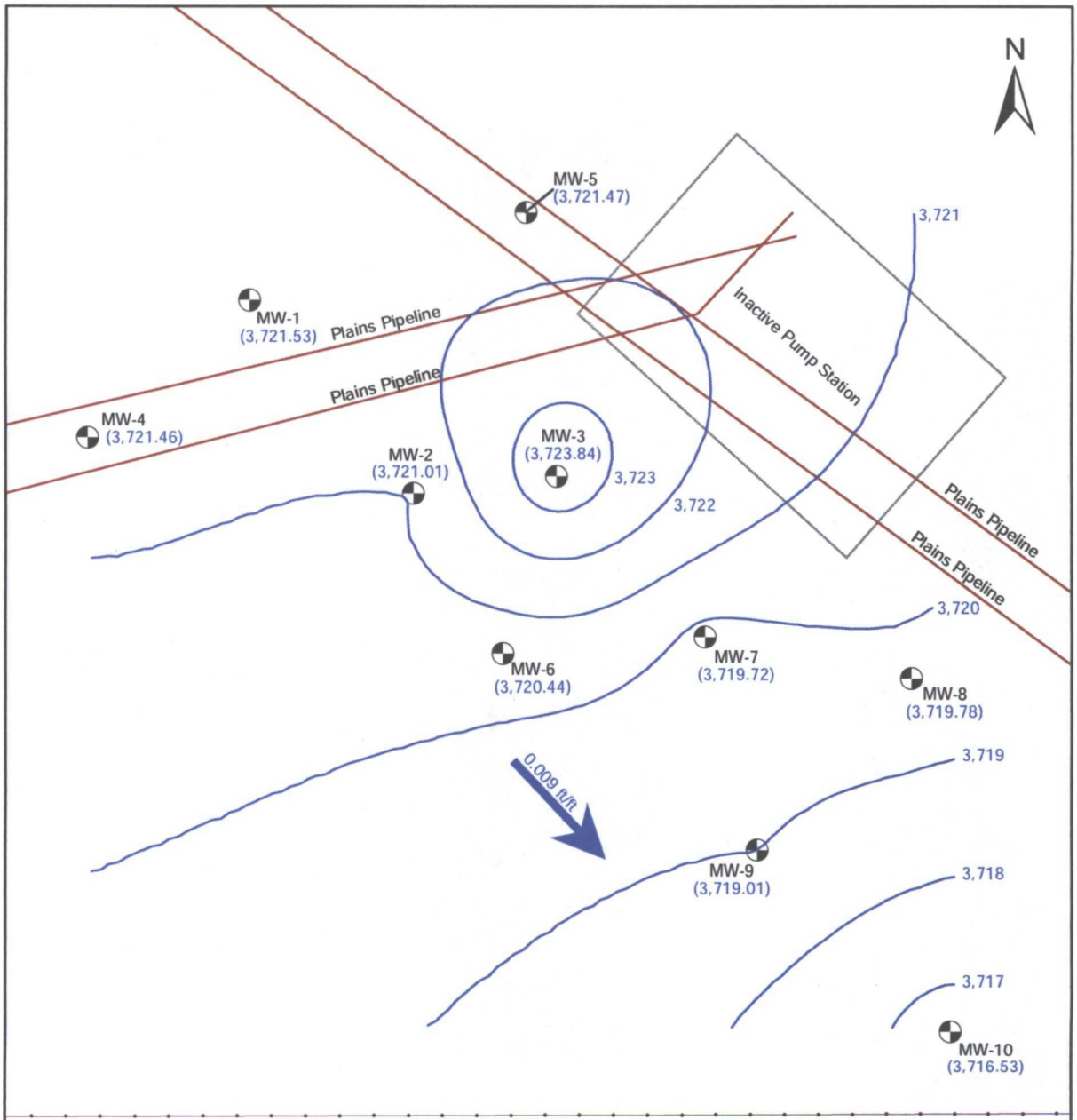


Figure 1
Site Location Map
Plains Marketing, LP
Lovington Gathering WTI
SRS # 2006-142
Lea County, New Mexico

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

30 15 0 30 60 90 Feet

Goff Dairy Well

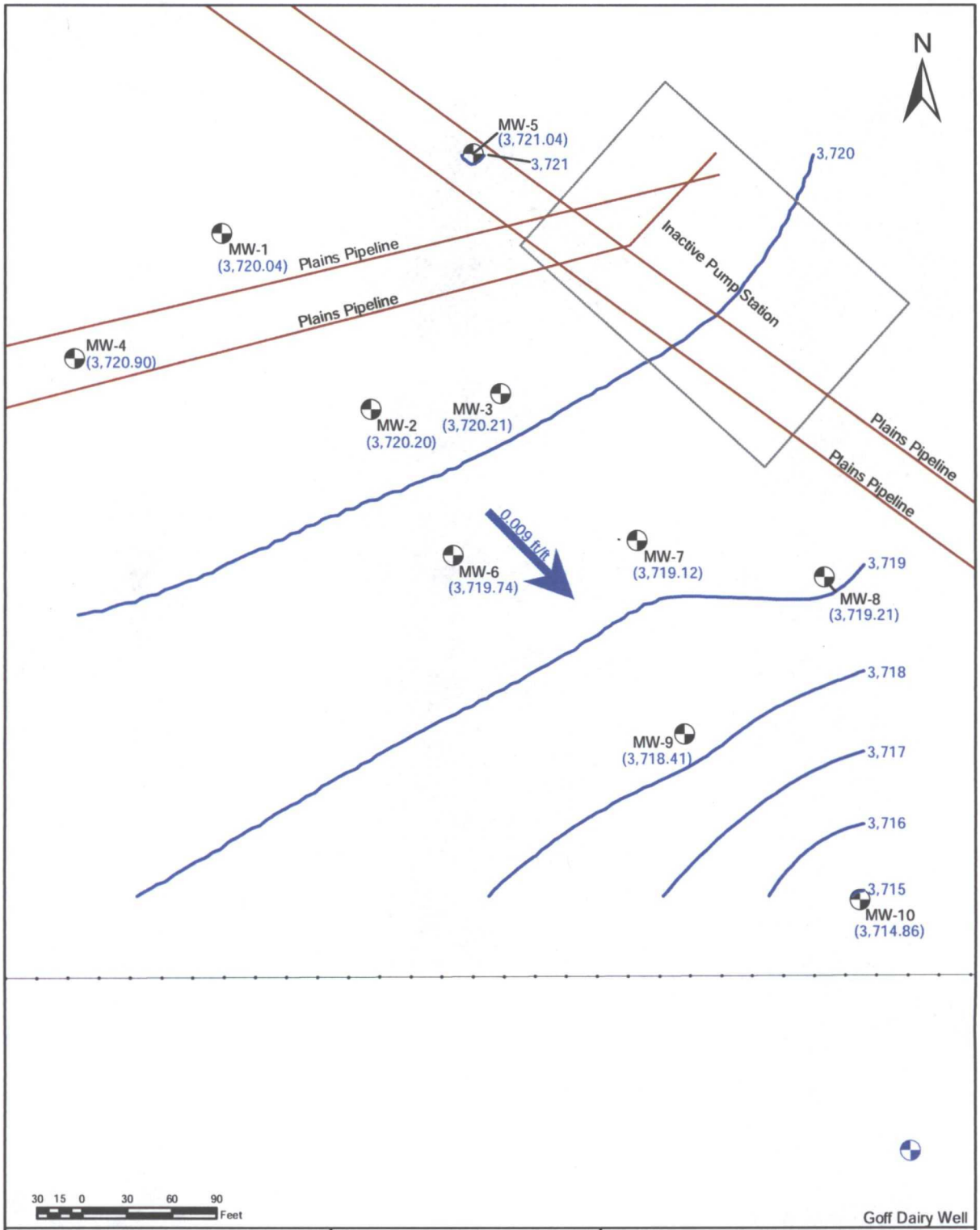
Legend:

- Pipeline
- Fence
- (3,720) Groundwater Elevation (ft)
- 0.009 ft/ft Groundwater Gradient & Magnitude
- Monitor Well
- Irrigation Well

Figure 2A
Inferred Groundwater Gradient Map
1Q2011
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
March 16, 2012	Scale: 1" = 100'



Legend:

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

Figure 2B
Inferred Groundwater Gradient Map
2Q2011
Plains Marketing, LP
Lovington Gathering WTI
SRS # 2006-142
Lea County, New Mexico

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

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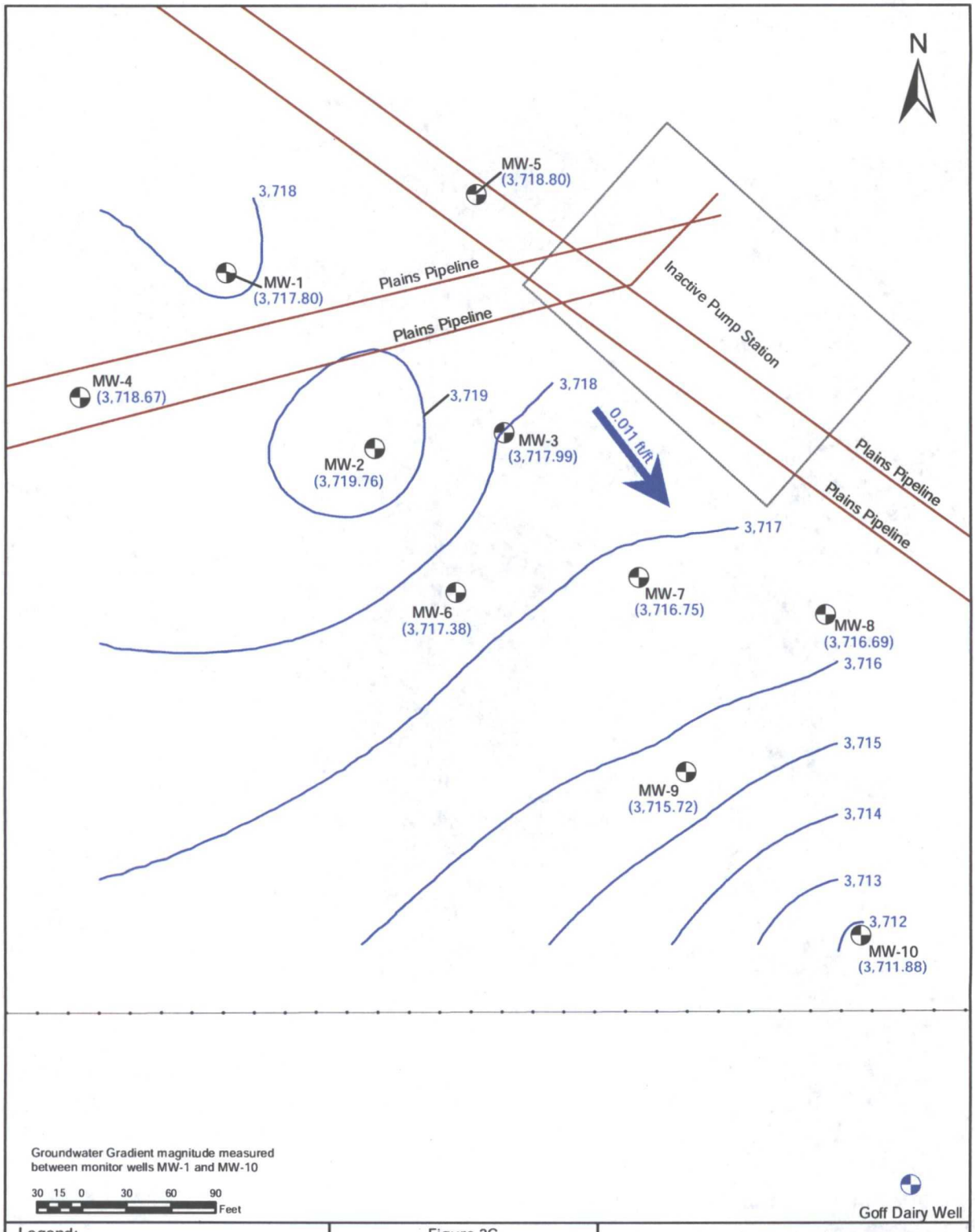

Legend:

- Pipeline
- Fence
- (3,720) Groundwater Elevation (ft)
- 0.009 ft/ft Groundwater Gradient & Magnitude
- Monitor Well
- Irrigation Well

Figure 2C
Inferred Groundwater Gradient Map
3Q2011
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
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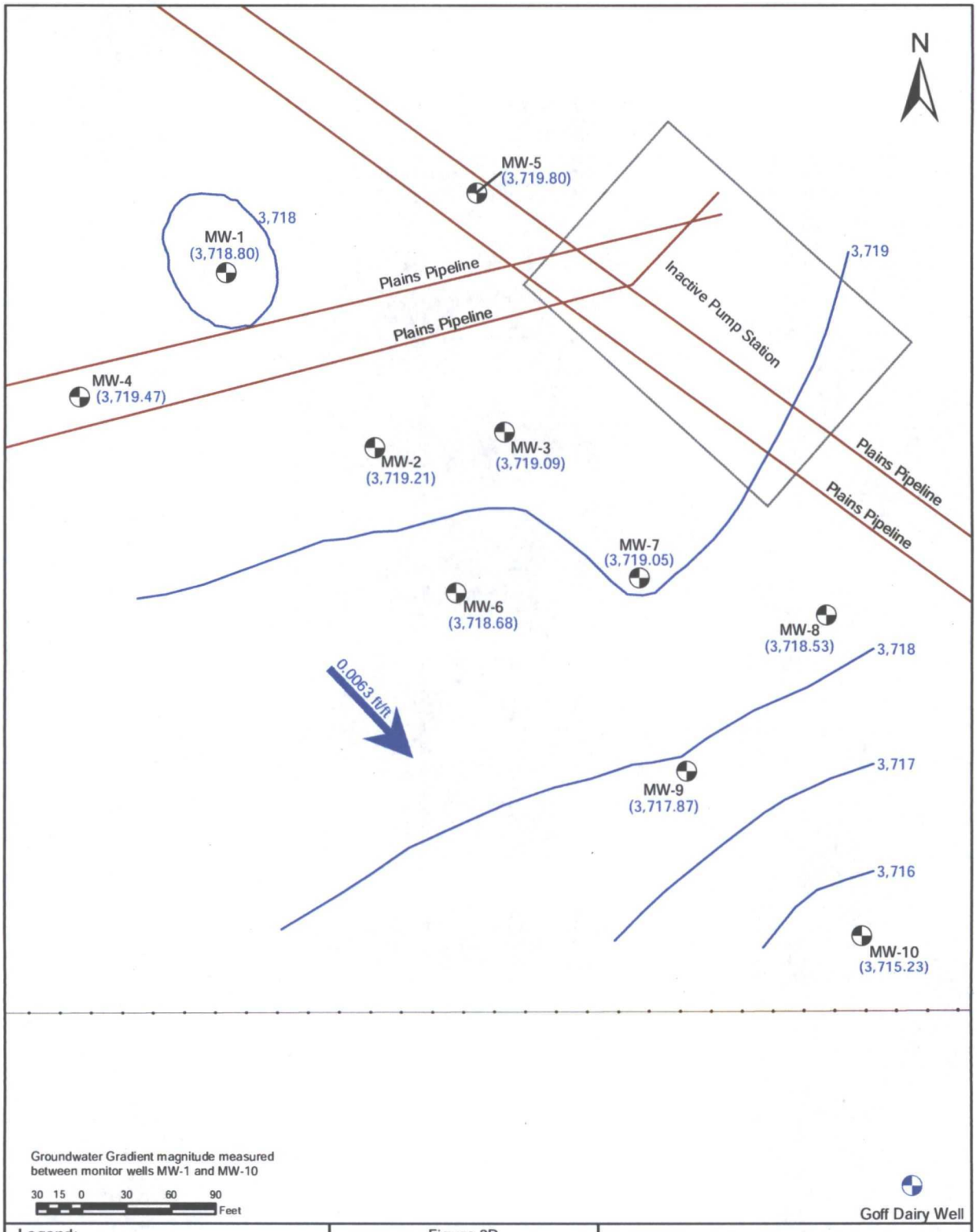


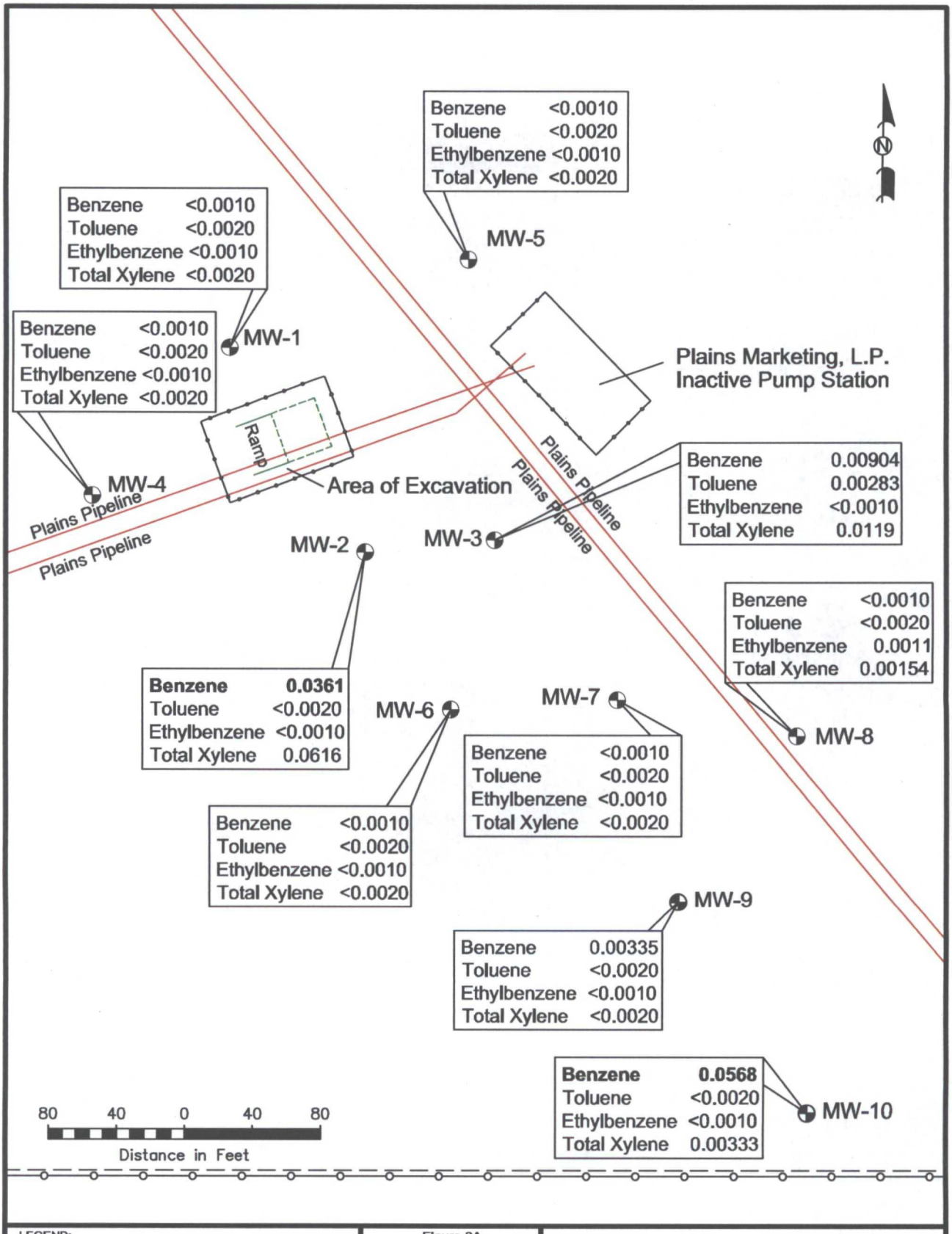
Legend:

- Pipeline
- Fence
- (3,720) Groundwater Elevation (ft)
- 0.0063 ft/ft Groundwater Gradient & Magnitude
- Monitor Well
- Irrigation Well

Figure 2D
Inferred Groundwater Gradient Map
4Q2011
Plains Marketing, LP
Lovington Gathering WTI
SRS # 2006-142
Lea County, New Mexico

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

Drawn By: BJA	Checked By: BRB
January 27, 2012	Scale: 1" = 100'



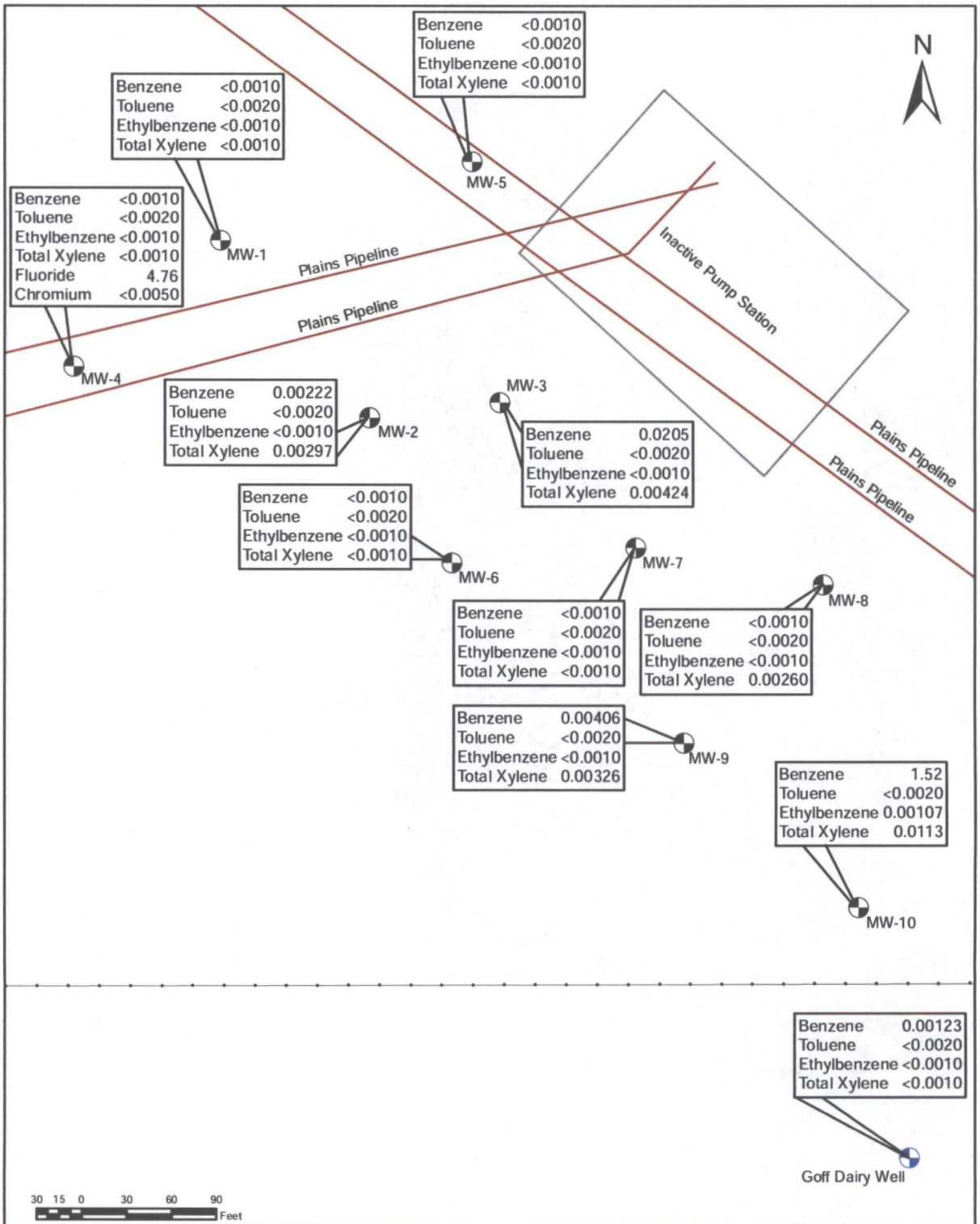
LEGEND:

- Monitor Well Location
- Excavation Extents
- Fence
- Pipeline
- <0.001 Constituent Concentration (mg/L)

Figure 3A
Groundwater Concentration
03/22/2011
Plains Marketing, L.P.
Lovington Gathering - WT
Lea County, NM
1RP-838

Basin Environmental Service Technologies, LLC

Scale: 1" = 80'	Drawn By: BJA	Prepared By: BJA
April 18, 2011	SE1/4 NE1/4 Sec 16 T17S R37E	
	Lat. N32° 51' 56" Long. W103° 17' 07.2"	



Legend:

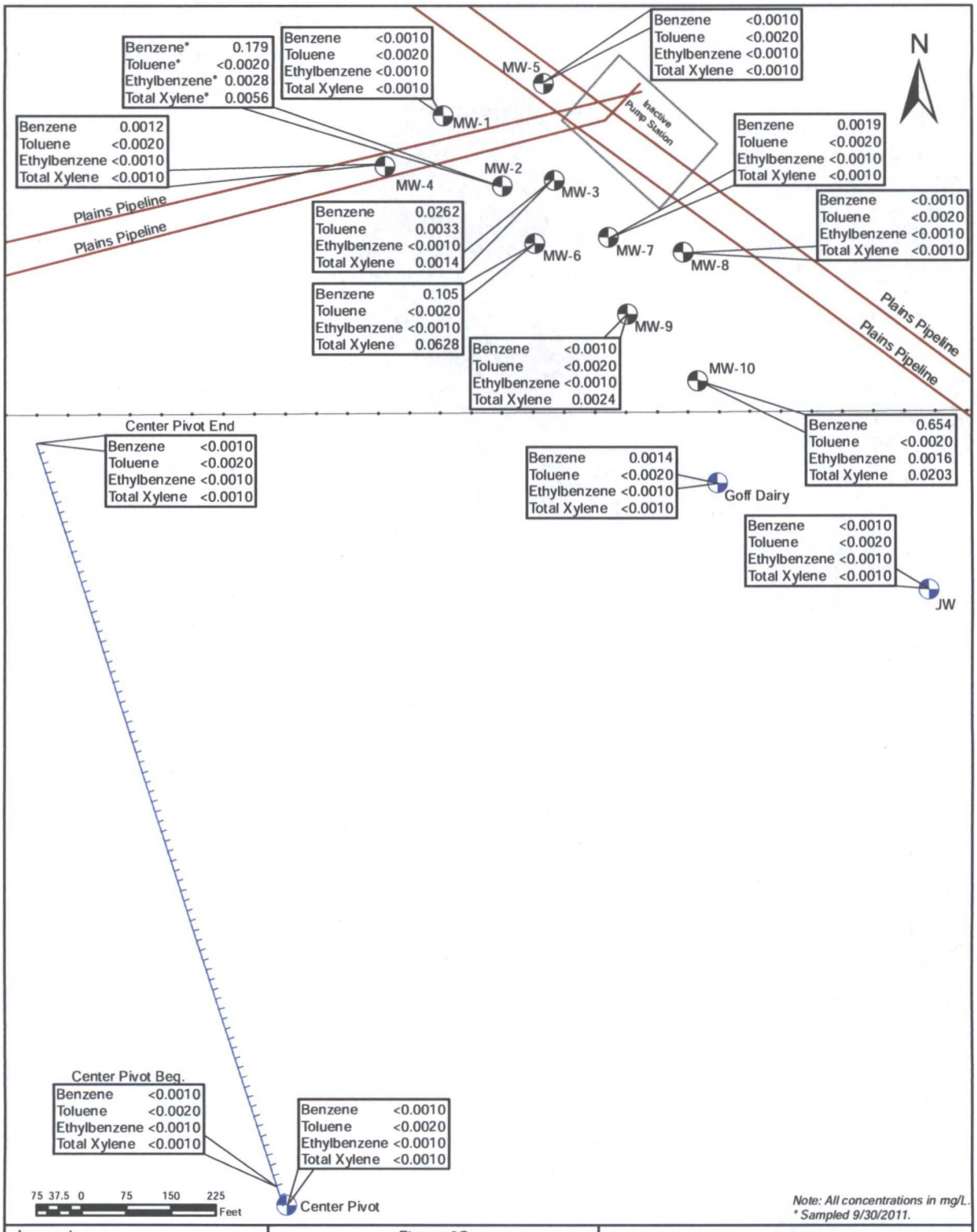
- Pipeline
- Fence
- Monitor Well
- Irrigation Well

Note: All concentrations in mg/L.

Figure 3B
Groundwater Concentration Map - 2Q2011
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 5, 2011	Scale: 1" = 100'



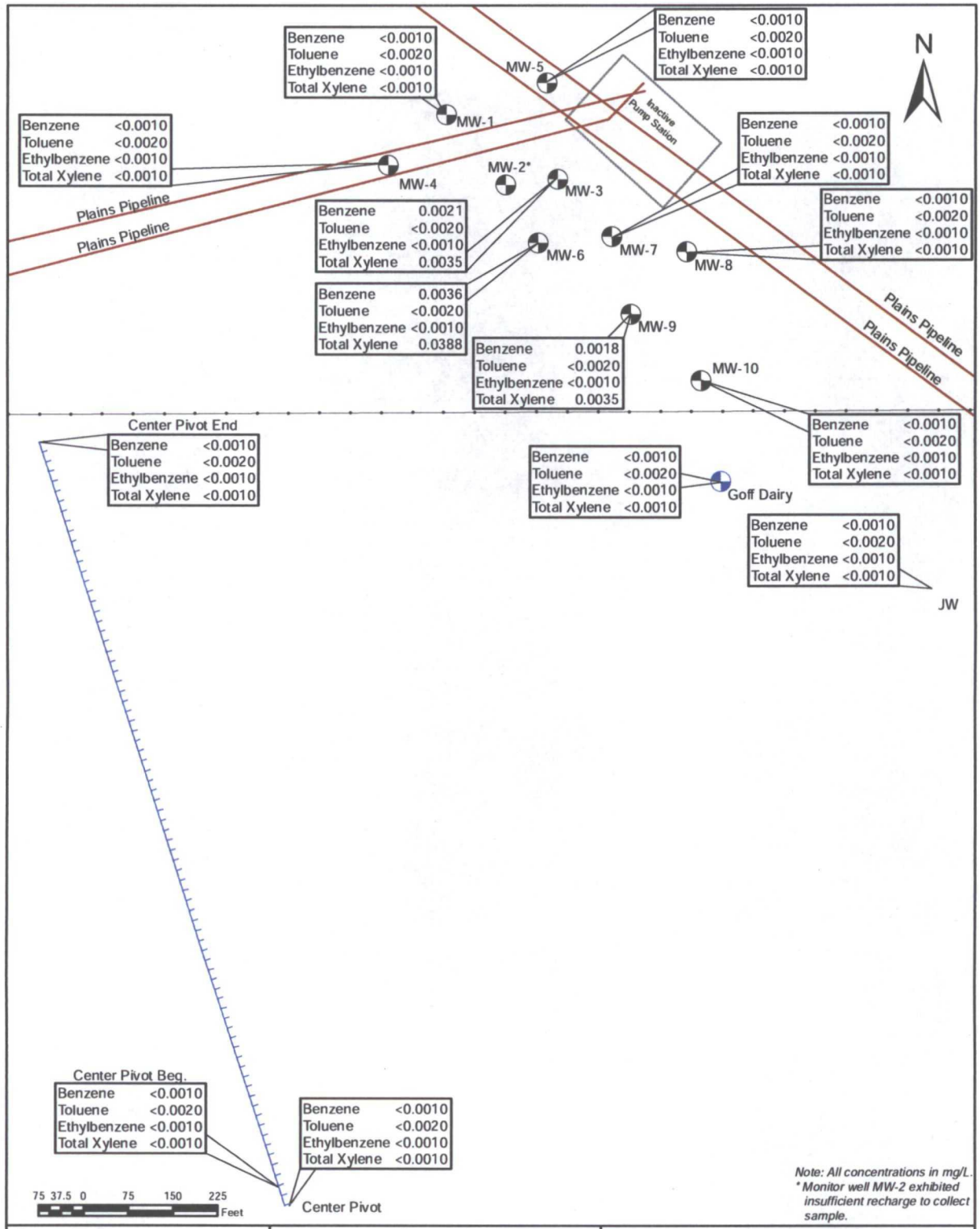
Legend:

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

Figure 3C
Groundwater Concentration Map
3Q2011
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
October 17, 2011	Scale: 1" = 250'



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

Figure 3D
Groundwater Concentration Map
4Q2011
Plains Marketing, LP
Lovington Gathering WTI
SRS # 2006-142
Lea County, New Mexico

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

Drawn By: BJA	Checked By: BRB
January 27, 2012	Scale: 1" = 250'

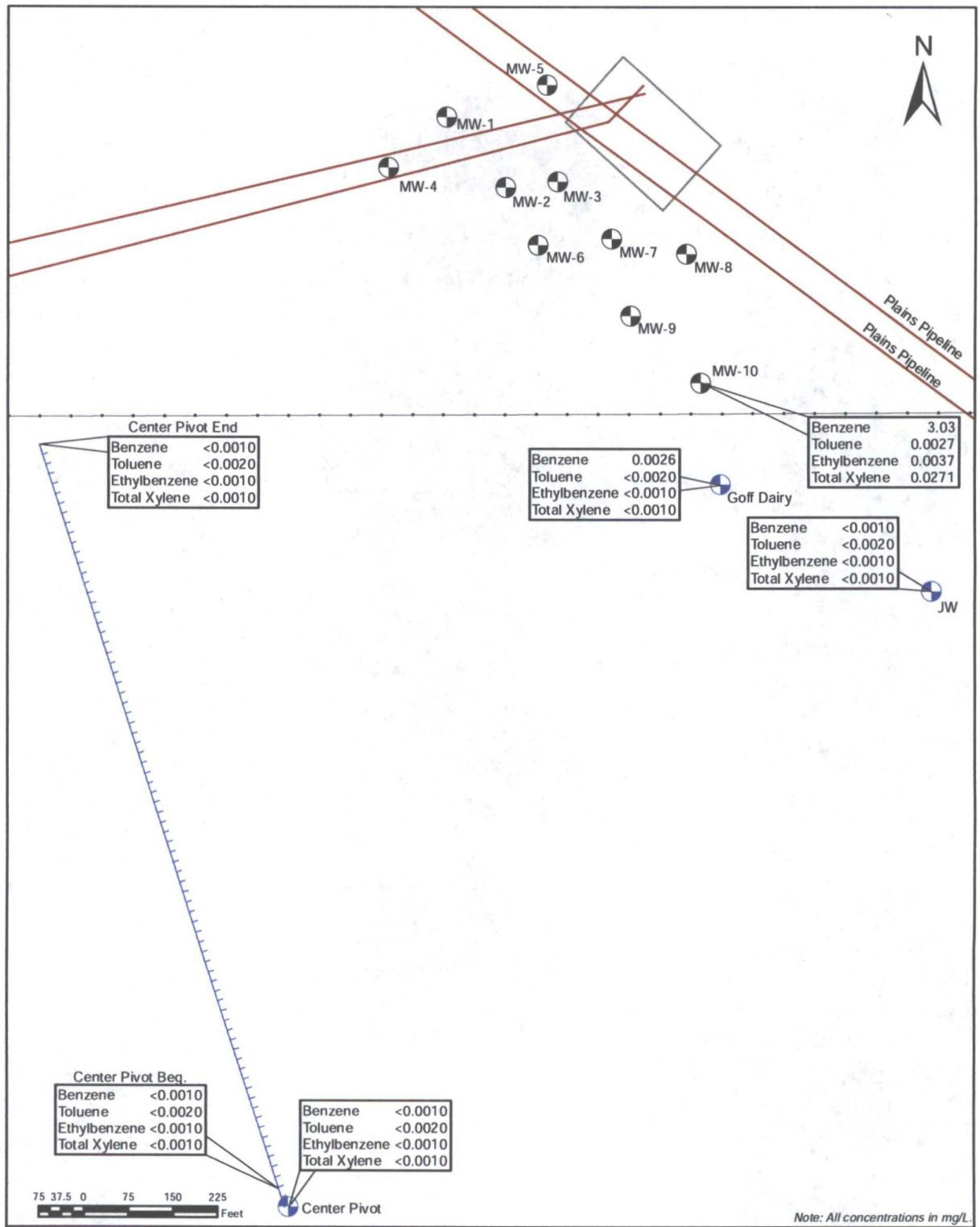


Figure 3E
Groundwater Concentration Map
July 2011
Plains Marketing, LP
Lovington Gathering WTI
SRS # 2006-142
Lea County, New Mexico

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

Drawn By: BJA	Checked By: BRB
October 26, 2011	Scale: 1" = 250'

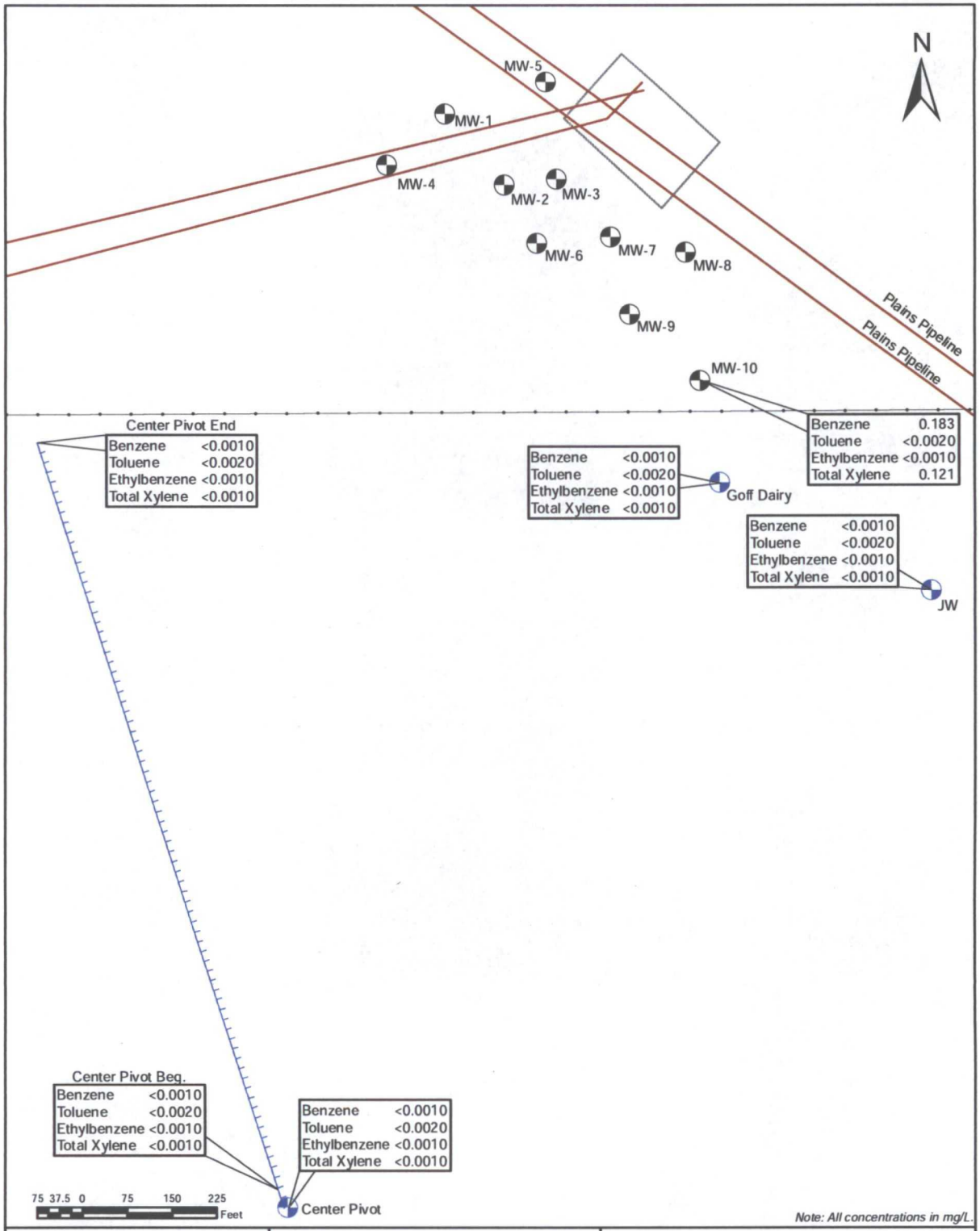
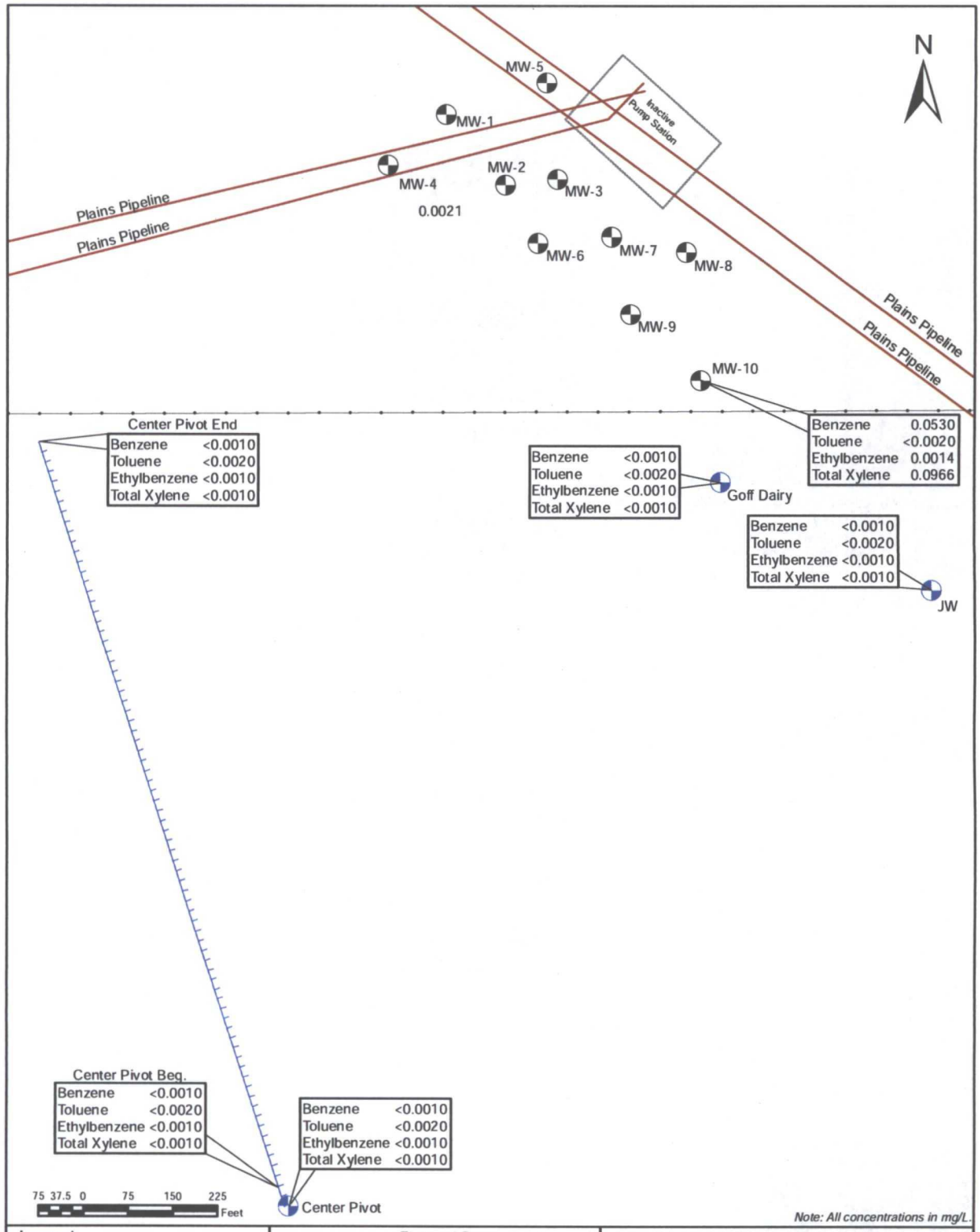


Figure 3F
Groundwater Concentration Map
October 2011
Plains Marketing, LP
Lovington Gathering WTI
SRS # 2006-142
Lea County, New Mexico

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

Drawn By: BJA	Checked By: BRB
October 26, 2011	Scale: 1" = 250'

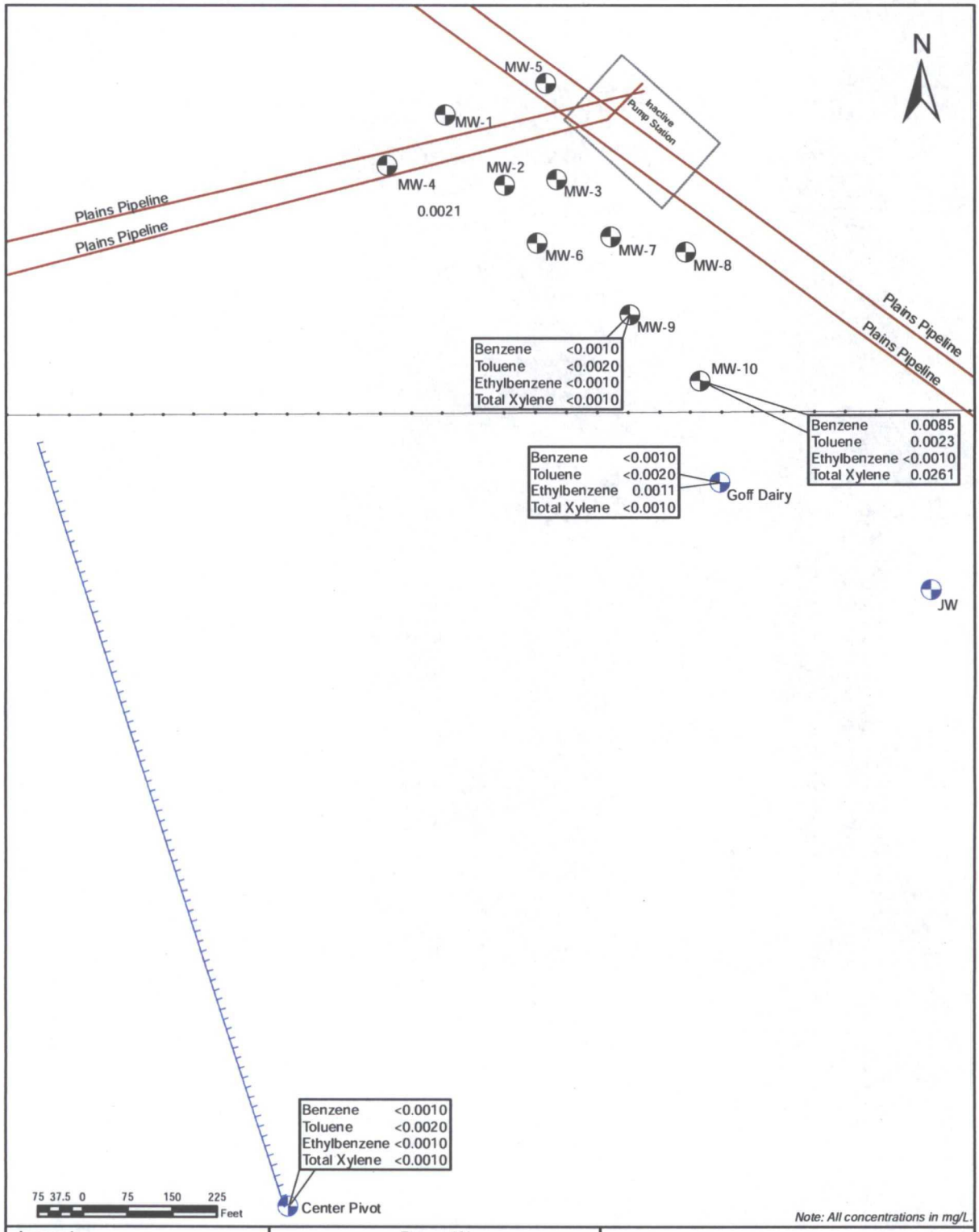


Legend:
- Pipeline
- Fence
- Center Pivot
- Monitor Well
- Irrigation Well

Figure 3G
Groundwater Concentration Map
(October 2011 - 4Q2011)
Plains Marketing, LP
Lovington Gathering WTI
SRS # 2006-142
Lea County, New Mexico

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

Drawn By: BJA	Checked By: BRB
January 27, 2012	Scale: 1" = 250'



Note: All concentrations in mg/L.

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

Figure 3H
Groundwater Concentration Map
(December 2011)
Plains Marketing, LP
Lovington Gathering WTI
SRS # 2006-142
Lea County, New Mexico

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

Drawn By: BJA	Checked By: BRB
January 27, 2012	Scale: 1" = 250'

Tables

TABLE 1

2011 GROUNDWATER ELEVATION DATA

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

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW-1	03/22/11	3,806.60	-	85.07	-	3,721.53
	05/27/11	3,806.60	-	86.56	-	3,720.04
	08/24/11	3,806.60	-	88.80	-	3,717.80
	11/09/11	3,806.60	-	87.80	-	3,718.80
MW-2	03/22/11	3,806.31	-	85.30	-	3,721.01
	05/27/11	3,807.31	-	87.11	-	3,720.20
	08/24/11	3,806.31	-	87.55	-	3,718.76
	11/09/11	3,807.31	-	88.10	-	3,719.21
MW-3	03/22/11	3,806.19	-	82.35	-	3,723.84
	05/27/11	3,807.19	-	86.98	-	3,720.21
	08/24/11	3,806.19	-	89.20	-	3,716.99
	11/09/11	3,807.19	-	88.10	-	3,719.09
MW-4	03/22/11	3,806.67	-	85.21	-	3,721.46
	05/27/11	3,807.67	-	86.77	-	3,720.90
	08/24/11	3,806.67	-	89.00	-	3,717.67
	11/09/11	3,807.67	-	88.20	-	3,719.47
MW-5	03/22/11	3,806.30	-	84.83	-	3,721.47
	05/27/11	3,807.30	-	86.26	-	3,721.04
	08/24/11	3,806.30	-	88.50	-	3,717.80
	11/09/11	3,807.30	-	87.50	-	3,719.80
MW-6	03/22/11	3,806.08	-	85.64	-	3,720.44
	05/27/11	3,807.08	-	87.34	-	3,719.74
	08/24/11	3,806.08	-	89.70	-	3,716.38
	11/09/11	3,807.08	-	88.40	-	3,718.68
MW-7	03/22/11	3,806.05	-	86.33	-	3,719.72
	05/27/11	3,807.05	-	87.93	-	3,719.12
	08/24/11	3,806.05	-	90.30	-	3,715.75
	11/09/11	3,807.05	-	88.00	-	3,719.05

TABLE 1

2011 GROUNDWATER ELEVATION DATA

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

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW-8	03/22/11	3,805.89	-	86.11	-	3,719.78
	05/27/11	3,806.89	-	87.68	-	3,719.21
	08/24/11	3,805.89	-	90.20	-	3,715.69
	11/09/11	3,806.89	-	88.36	-	3,718.53
MW-9	03/22/11	3,806.02	-	87.01	-	3,719.01
	05/27/11	3,807.02	-	88.61	-	3,718.41
	08/24/11	3,806.02	-	91.30	-	3,714.72
	11/09/11	3,807.02	-	89.15	-	3,717.87
MW-10	03/22/11	3,806.08	-	89.55	-	3,716.53
	05/27/11	3,806.08	-	91.22	-	3,714.86
	08/24/11	3,806.08	-	94.20	-	3,711.88
	11/09/11	3,806.08	-	90.85	-	3,715.23

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-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	-	-
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	-	-
NMOCD CRITERIA		0.01	0.75	0.75	TOTAL XYLENES 0.62				1.6	0.05

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	12/2/2008	**0.050**	0.002	<0.0010	0.007	0.001	0.008	0.060	-	-
"	3/3/2009	**0.036**	<0.0020	<0.0010	0.0026	<0.0010	0.0026	0.038	-	-
"	6/18/2009	0.0097	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.010	-	-
"	9/1/2009	**0.084**	<0.0020	<0.0010	0.0083	<0.0010	0.0083	0.093	-	-
"	12/18/2009	**0.0129**	<0.0020	<0.0010	0.0095	<0.0010	0.0095	0.022	-	-
"	3/4/2010	0.0026	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0026	-	-
"	5/25/2010	0.0023	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0023	-	-
"	8/30/2010	**0.0406**	<0.0020	<0.0010	0.0132	<0.0010	0.0132	0.0538	-	-
"	11/11/2010	0.0087	<0.0020	<0.0010	0.091	<0.0010	0.091	0.0997	-	-
"	3/22/2011	**0.0361**	<0.0020	<0.0010	0.0605	0.0011	0.0616	0.0977	-	-
"	5/27/2011	0.00222	<0.0020	<0.0010	0.00297	<0.0010	0.00297	0.00519	-	-
"	9/30/2011	**0.179**	<0.0020	0.00275	0.00345	0.00212	0.00557	0.187	-	-
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	-	-
NMOCD CRITERIA		0.01	0.75	0.75	TOTAL XYLENES 0.62				1.6	0.05

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	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	-	-
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	-	-
MW-5	12/28/2006	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
"	3/16/2007	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
"	5/30/2007	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
"	9/25/2007	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	11/30/2007	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	3/11/2008	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	6/14/2008	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	9/17/2008	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
NMOCD CRITERIA		**0.01**	**0.75**	**0.75**	**TOTAL XYLENES 0.62**				**1.6**	**0.05**

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	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	-	-
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	-	-
NMOCD CRITERIA		**0.01**	**0.75**	**0.75**	**TOTAL XYLENES 0.62**				**1.6**	**0.05**

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	-	-
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	-	-
MW-8	3/16/2007	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
"	5/31/2007	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
"	9/25/2007	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	11/30/2007	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	3/11/2008	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	6/14/2008	0.008	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.008	-	-
"	9/17/2008	**0.568**	<0.0100	<0.005	<0.0100	<0.005	<0.0100	0.568	-	-
NMOCD CRITERIA		**0.01**	**0.75**	**0.75**	**TOTAL XYLENES 0.62**				**1.6**	**0.05**

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	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	-	-
MW-9	9/25/2007	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	11/30/2007	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	3/11/2008	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	6/14/2008	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	9/17/2008	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	12/2/2008	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	3/3/2009	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	6/18/2009	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	9/1/2009	**0.9717**	0.0641	<0.0100	0.0867	0.0422	0.1289	**1.1647**	-	-
"	9/10/2009	**1.838**	<0.0200	<0.0100	0.0537	<0.0100	0.0537	**1.8917**	-	-
"	10/5/2009	**0.985**	<0.0020	<0.0010	0.0442	<0.0010	0.0442	**1.0292**	-	-
"	12/18/2009	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
"	3/4/2010	**0.0192**	<0.0020	<0.0010	0.0027	<0.0010	0.0027	0.0219	-	-
"	5/25/2010	**0.0421**	<0.0020	<0.0010	0.0063	<0.0010	0.0063	0.0484	-	-
"	8/30/2010	**0.1259**	<0.0020	<0.0010	0.0344	<0.0010	0.0344	0.1603	-	-
"	11/11/2010	**0.0265**	<0.0020	<0.0010	0.0097	<0.0010	0.0097	0.0362	-	-
"	3/22/2011	0.00335	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.00335	-	-
"	5/27/2011	0.00406	<0.0020	<0.0010	0.00326	<0.0010	0.00326	0.00732	-	-
"	8/24/2011	<0.0010	<0.0020	<0.0010	0.00237	<0.0010	0.00237	0.00237	-	-
"	11/9/2011	0.00179	<0.0020	<0.0010	0.00349	<0.0010	0.00349	0.00528	-	-
"	12/14/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020		
NMOCD CRITERIA		0.01	0.75	0.75	TOTAL XYLENES 0.62				1.6	0.05

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-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	-	-
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	-	-
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	-	-
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	-	-
NMOCD CRITERIA		**0.01**	**0.75**	**0.75**	**TOTAL XYLENES 0.62**				**1.6**	**0.05**

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	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	-	-
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	-	-
NMOCD CRITERIA		0.01	0.75	0.75	TOTAL XYLENES 0.62				1.6	0.05

TABLE 3

CONCENTRATIONS OF SEMI-VOLATILE COMPOUNDS IN GROUNDWATER

PLAINS PIPELINE, L.P.

LOVINGTON GATHERING WTI

LEA COUNTY, NEW MEXICO

NMOCD REFERENCE NUMBER 1RP-838

SAMPLE LOCATION	SAMPLE DATE	EPA SW846 8270C, 3510																	
		Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
MW-10	12/15/2011	<0.0102	<0.0102	<0.0102	<0.0102	<0.0102	<0.0102	<0.0102	<0.0102	<0.0102	<0.0102	<0.0102	<0.0102	<0.0102	<0.0051	<0.0102	<0.0102	<0.0102	<0.0102

All concentrations reported in mg/L

Appendices

Appendix A
Laboratory Analytical Reports

Analytical Report 410609

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

28-MAR-11

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

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

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

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

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

28-MAR-11

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

Reference: XENCO Report No: **410609**
Lovington Gathering WTI
Project Address: Lea County, NM

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 410609. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 410609 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

XENCO Laboratories

Sample Cross Reference 410609

PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-1	W	Mar-22-11 09:50		410609-001
MW-2	W	Mar-22-11 09:35		410609-002
MW-3	W	Mar-22-11 09:30		410609-003
MW-4	W	Mar-22-11 10:00		410609-004
MW-5	W	Mar-22-11 09:45		410609-005
MW-6	W	Mar-22-11 09:40		410609-006
MW-7	W	Mar-22-11 09:00		410609-007
MW-8	W	Mar-22-11 09:05		410609-008
MW-9	W	Mar-22-11 10:30		410609-009
MW-10	W	Mar-22-11 08:30		410609-010

CASE NARRATIVE

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

Project ID:	*2006-142*	*Report Date:*	*28-MAR-11*
Work Order Number:	*410609*	*Date Received:*	*03/22/2011*

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Certificate of Analy Summary 410609

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI

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

Date Received in Lab: Tue Mar-22-11 02:42 pm
Report Date: 28-MAR-11
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	410609-001		410609-002		410609-003		410609-004		410609-005		410609-006	
	Field Id:	MW-1		MW-2		MW-3		MW-4		MW-5		MW-6	
	Depth:												
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	Sampled:	Mar-22-11 09:50		Mar-22-11 09:35		Mar-22-11 09:30		Mar-22-11 10:00		Mar-22-11 09:45		Mar-22-11 09:40	
BTEX by EPA 8021B	***Extracted:***	Mar-24-11 14:00		Mar-24-11 14:00		Mar-24-11 14:00		Mar-24-11 14:00		Mar-24-11 14:00		Mar-24-11 14:00	
	Analyzed:	Mar-25-11 13:57		Mar-25-11 14:19		Mar-25-11 14:42		Mar-25-11 15:05		Mar-25-11 15:29		Mar-25-11 15:51	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		ND	0.0010	0.0361	0.0010	0.00904	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Toluene		ND	0.0020	ND	0.0020	0.00283	0.0020	ND	0.0020	ND	0.0020	ND	0.0020
Ethylbenzene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
m_p-Xylenes		ND	0.0020	0.0605	0.0020	0.00815	0.0020	ND	0.0020	ND	0.0020	ND	0.0020
o-Xylene		ND	0.0010	0.00110	0.0010	0.00375	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Total Xylenes		ND	0.0010	0.0616	0.0010	0.0119	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Total BTEX		ND	0.0010	0.0977	0.0010	0.0238	0.0010	ND	0.0010	ND	0.0010	ND	0.0010

Brent Barron, II
Odessa Laboratory Manager

Final 1.000

Certificate of Analysis Summary 410609

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI

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

Date Received in Lab: Tue Mar-22-11 02:42 pm
Report Date: 28-MAR-11
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	410609-007		410609-008		410609-009		410609-010			
	Field Id:	MW-7		MW-8		MW-9		MW-10			
	Depth:										
	Matrix:	WATER		WATER		WATER		WATER			
	Sampled:	Mar-22-11 09:00		Mar-22-11 09:05		Mar-22-11 10:30		Mar-22-11 08:30			
BTEX by EPA 8021B	*Extracted:*	Mar-24-11 14:00		Mar-24-11 14:00		Mar-24-11 14:00		Mar-24-11 14:00			
	Analyzed:	Mar-25-11 16:16		Mar-25-11 16:39		Mar-25-11 17:01		Mar-25-11 17:24			
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL		
Benzene		ND	0.0010	ND	0.0010	0.00335	0.0010	0.0568	0.0010		
Toluene		ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020		
Ethylbenzene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010		
m_p-Xylenes		ND	0.0020	ND	0.0020	ND	0.0020	0.00333	0.0020		
o-Xylene		ND	0.0010	0.00154	0.0010	ND	0.0010	ND	0.0010		
Total Xylenes		ND	0.0010	0.00154	0.0010	ND	0.0010	0.00333	0.0010		
Total BTEX		ND	0.0010	0.00154	0.0010	0.00335	0.0010	0.0601	0.0010		

Brent Barron, II
Odessa Laboratory Manager

XENCO Laboratories

Flagging Criteria

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

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

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

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit

PQL Practical Quantitation Limit

* Outside XENCO's scope of NELAC Accreditation.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 410609, **Project ID:** 2006-142

Lab Batch #: 849442 **Sample:** 599029-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/25/11 12:03

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY 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	0.0320	0.0300	107	80-120	

Lab Batch #: 849442 **Sample:** 599029-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/25/11 12:26

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY 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	0.0323	0.0300	108	80-120	

Lab Batch #: 849442 **Sample:** 599029-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/25/11 13:34

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

Lab Batch #: 849442 **Sample:** 410609-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/25/11 13:57

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0288	0.0300	96	80-120	
4-Bromofluorobenzene	0.0295	0.0300	98	80-120	

Lab Batch #: 849442 **Sample:** 410609-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/25/11 14:19

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0288	0.0300	96	80-120	
4-Bromofluorobenzene	0.0309	0.0300	103	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 410609, **Project ID:** 2006-142

Lab Batch #: 849442 **Sample:** 410609-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/25/11 14:42

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0282	0.0300	94	80-120	
4-Bromofluorobenzene	0.0297	0.0300	99	80-120	

Lab Batch #: 849442 **Sample:** 410609-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/25/11 15:05

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
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	0.0300	0.0300	100	80-120	

Lab Batch #: 849442 **Sample:** 410609-005 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/25/11 15:29

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
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	0.0267	0.0300	89	80-120	

Lab Batch #: 849442 **Sample:** 410609-006 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/25/11 15:51

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
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	0.0291	0.0300	97	80-120	

Lab Batch #: 849442 **Sample:** 410609-007 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/25/11 16:16

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0290	0.0300	97	80-120	

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 410609,

Project ID: 2006-142

Lab Batch #: 849442 **Sample:** 410609-008 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/25/11 16:39

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0273	0.0300	91	80-120	
4-Bromofluorobenzene	0.0294	0.0300	98	80-120	

Lab Batch #: 849442 **Sample:** 410609-009 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/25/11 17:01

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
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	0.0289	0.0300	96	80-120	

Lab Batch #: 849442 **Sample:** 410609-010 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/25/11 17:24

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
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	0.0270	0.0300	90	80-120	

Lab Batch #: 849442 **Sample:** 410609-006 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/25/11 17:47

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
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	0.0324	0.0300	108	80-120	

Lab Batch #: 849442 **Sample:** 410609-006 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/25/11 18:09

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
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	0.0308	0.0300	103	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BSD Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 410609 **Project ID:** 2006-142

Analyst: ASA **Date Prepared:** 03/24/2011 **Date Analyzed:** 03/25/2011

Lab Batch ID: 849442 **Sample:** 599029-1-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	0.102	102	0.100	0.109	109	7	70-125	25	
Toluene	<0.00200	0.100	0.102	102	0.100	0.109	109	7	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0986	99	0.100	0.106	106	7	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.192	96	0.200	0.207	104	8	70-131	25	
o-Xylene	<0.00100	0.100	0.105	105	0.100	0.111	111	6	71-133	25	

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

Final 1.000

XENCO Laboratories

Form 3 - MS / MSD Recoveries

Project Name: Lovington Gathering WTI

Work Order # : 410609 **Project ID:** 2006-142

Lab Batch ID: 849442 **QC- Sample ID:** 410609-006 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 03/25/2011 **Date Prepared:** 03/24/2011 **Analyst:** ASA

Reporting Units: mg/L

BTEX by EPA 8021B	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.106	106	0.100	0.107	107	1	70-125	25	
Toluene	<0.00200	0.100	0.105	105	0.100	0.104	104	1	70-125	25	
Ethylbenzene	<0.00100	0.100	0.101	101	0.100	0.100	100	1	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.192	96	0.200	0.187	94	3	70-131	25	
o-Xylene	<0.00100	0.100	0.105	105	0.100	0.103	103	2	71-133	25	

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

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

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

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Ben J. Arguijo

Company Name: Basin Environmental Service Technologies, LLC

Company Address: P. O. Box 301

City/State/Zip: Lovington, NM 88260

Telephone No: (575)396-2378 Fax No: (575) 396-1429

Sampler Signature:

e-mail: bjarguijo@basinenv.com

Project Name: Lovington Gathering WTI

Project #: 2006-142

Project Loc: Lea County, NM

PO #: PAA- J. Henry

Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)

ORDER #: 410609

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl 40,1100	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260 (TCLP: / TOTAL: X)	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
01	MW-1			3/22/2011	0950		3	X		X						GW								X				X
02	MW-2			3/22/2011	0935		3	X		X						GW								X				X
03	MW-3			3/22/2011	0930		3	X		X						GW								X				X
04	MW-4			3/22/2011	1000		3	X		X						GW								X				X
05	MW-5			3/22/2011	0945		3	X		X						GW								X				X
06	MW-6			3/22/2011	0940		3	X		X						GW								X				X
07	MW-7			3/22/2011	0900		3	X		X						GW								X				X
08	MW-8			3/22/2011	0905		3	X		X						GW								X				X
09	MW-9			3/22/2011	1030		3	X		X						GW								X				X
10	MW-10			3/22/2011	0830		3	X		X						GW								X				X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
	3/22/11	1055	DLA	3-22-11	10:55
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
DLA	3-22-11	2:42	Andrea Cam	3-22-11	14:42

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep.?	Y	N
by Courier? UPS DHL FedEx Lone Star		

Temperature Upon Receipt: 3.6 °C

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

Prelogin / Nonconformance Report - Sample Log-In

Client: Basin Env. / Plains

Date/Time: 3.22.11 14:42

Lab ID #: 410609

Initials: AE

Sample Receipt Checklist

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

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	3.6 °C	lbs	°C	lbs	°C	lbs	°C	lbs	°C

Nonconformance Documentation

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

Regarding: _____

_____

Corrective Action Taken: _____

_____

_____

_____

Check all that apply:
- ☐ Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.
- ☐ Initial and Backup Temperature confirm out of temperature conditions
- ☐ Client understands and would like to proceed with analysis

Analytical Report 418116

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

06-JUN-11

Collected By: Client

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

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

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

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

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

XENCO Laboratories

06-JUN-11

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

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

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 418116. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 418116 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

XENCO Laboratories

Sample Cross Reference 418116

PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

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

CASE NARRATIVE

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

Project ID:	*2006-142*	*Report Date:*	*06-JUN-11*
Work Order Number:	*418116*	*Date Received:*	*05/27/2011*

Sample receipt non conformances and comments:
None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

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

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

E300MI

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

Batch: LBA-858485 BTEX by EPA 8021
SW8021BM

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

Certificate of Analysis Summary 418116

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI

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

Date Received in Lab: Fri May-27-11 04:42 pm
Report Date: 06-JUN-11
Project Manager: Brent Barron, II

Analysis Requested		418116-001		418116-002		418116-003		418116-004		418116-005		418116-006	
	Field Id:	MW-1		MW-2		MW-3		MW-4		MW-5		MW-6	
	Depth:												
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	Sampled:	May-27-11 08:40		May-27-11 08:35		May-27-11 08:25		May-27-11 08:50		May-27-11 08:20		May-27-11 09:00	
BTEX by EPA 8021	*Extracted:*	Jun-01-11 11:34		Jun-01-11 11:34		Jun-01-11 11:34		Jun-01-11 11:34		Jun-01-11 11:34		Jun-01-11 11:34	
	Analyzed:	Jun-02-11 13:57		Jun-02-11 14:20		Jun-02-11 14:43		Jun-02-11 15:06		Jun-02-11 15:29		Jun-02-11 15:52	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		ND	0.0010	0.00222	0.0010	0.0205	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Toluene		ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020
Ethylbenzene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
m_p-Xylenes		ND	0.0020	0.00297	0.0020	0.00308	0.0020	ND	0.0020	ND	0.0020	ND	0.0020
o-Xylene		ND	0.0010	ND	0.0010	0.00116	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Xylenes, Total		ND	0.0010	0.00297	0.0010	0.00424	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Total BTEX		ND	0.0010	0.00519	0.0010	0.0247	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Inorganic Anions In Water by E300	*Extracted:*												
	Analyzed:							Jun-01-11 10:44					
	Units/RL:							mg/L	RL				
Fluoride								4.76	2.00				
Chloride								24.3	5.00				
Metals, Total by SW846 6010C SUB: E87429	*Extracted:*							Jun-02-11 11:44					
	Analyzed:							Jun-05-11 13:49					
	Units/RL:							mg/L	RL				
Chromium								ND	0.0500				

Brent Barron, II
Odessa Laboratory Manager

Final 1.000

Certificate of Analysis Summary 418116

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI

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

Date Received in Lab: Fri May-27-11 04:42 pm
Report Date: 06-JUN-11
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	418116-007		418116-008		418116-009		418116-010			
	Field Id:	MW-7		MW-8		MW-9		MW-10			
	Depth:										
	Matrix:	WATER		WATER		WATER		WATER			
	Sampled:	May-27-11 09:10		May-27-11 09:20		May-27-11 09:25		May-27-11 09:35			
BTEX by EPA 8021	*Extracted:*	Jun-02-11 12:15		Jun-02-11 12:15		Jun-02-11 12:15		Jun-02-11 12:15			
	Analyzed:	Jun-02-11 19:19		Jun-02-11 19:41		Jun-02-11 20:04		Jun-02-11 20:27			
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL		
Benzene		ND	0.0010	ND	0.0010	0.00406	0.0010	1.52 D	0.0250		
Toluene		ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020		
Ethylbenzene		ND	0.0010	ND	0.0010	ND	0.0010	0.00107	0.0010		
m_p-Xylenes		ND	0.0020	ND	0.0020	0.00326	0.0020	0.0113	0.0020		
o-Xylene		ND	0.0010	0.00260	0.0010	ND	0.0010	ND	0.0010		
Xylenes, Total		ND	0.0010	0.00260	0.0010	0.00326	0.0010	0.0113	0.0010		
Total BTEX		ND	0.0010	0.00260	0.0010	0.00732	0.0010	1.53 D	0.0010		

Brent Barron, II
Odessa Laboratory Manager

XENCO Laboratories

Flagging Criteria

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

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

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

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit

PQL Practical Quantitation Limit

LOD Limit of Detection

LOQ Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 418116, **Project ID:** 2006-142

Lab Batch #: 858471 **Sample:** 604212-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/01/11 12:10

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0310	0.0300	103	80-120	
4-Bromofluorobenzene	0.0333	0.0300	111	80-120	

Lab Batch #: 858471 **Sample:** 604212-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/01/11 12:33

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0321	0.0300	107	80-120	
4-Bromofluorobenzene	0.0337	0.0300	112	80-120	

Lab Batch #: 858471 **Sample:** 604212-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/01/11 13:42

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0285	0.0300	95	80-120	
4-Bromofluorobenzene	0.0311	0.0300	104	80-120	

Lab Batch #: 858471 **Sample:** 418009-008 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/01/11 17:52

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0314	0.0300	105	80-120	

Lab Batch #: 858471 **Sample:** 418116-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/02/11 13:57

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0289	0.0300	96	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 418116,

Project ID: 2006-142

Lab Batch #: 858471 **Sample:** 418116-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/02/11 14:20

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
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	0.0302	0.0300	101	80-120	

Lab Batch #: 858471 **Sample:** 418116-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/02/11 14:43

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
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	0.0307	0.0300	102	80-120	

Lab Batch #: 858471 **Sample:** 418116-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/02/11 15:06

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0283	0.0300	94	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

Lab Batch #: 858471 **Sample:** 418116-005 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/02/11 15:29

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0327	0.0300	109	80-120	
4-Bromofluorobenzene	0.0320	0.0300	107	80-120	

Lab Batch #: 858471 **Sample:** 418116-006 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/02/11 15:52

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0322	0.0300	107	80-120	
4-Bromofluorobenzene	0.0327	0.0300	109	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 418116, **Project ID:** 2006-142

Lab Batch #: 858485 **Sample:** 604236-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/02/11 17:25

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0327	0.0300	109	80-120	

Lab Batch #: 858485 **Sample:** 604236-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/02/11 17:48

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0324	0.0300	108	80-120	

Lab Batch #: 858485 **Sample:** 604236-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/02/11 18:56

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0288	0.0300	96	80-120	
4-Bromofluorobenzene	0.0294	0.0300	98	80-120	

Lab Batch #: 858485 **Sample:** 418116-007 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/02/11 19:19

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0316	0.0300	105	80-120	

Lab Batch #: 858485 **Sample:** 418116-008 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/02/11 19:41

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0276	0.0300	92	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 418116, **Project ID:** 2006-142

Lab Batch #: 858485 **Sample:** 418116-009 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/02/11 20:04

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
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	0.0319	0.0300	106	80-120	

Lab Batch #: 858485 **Sample:** 418116-010 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/02/11 20:27

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0496	0.0300	165	80-120	**
4-Bromofluorobenzene	0.0320	0.0300	107	80-120	

Lab Batch #: 858485 **Sample:** 418116-007 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/02/11 23:05

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0321	0.0300	107	80-120	
4-Bromofluorobenzene	0.0339	0.0300	113	80-120	

Lab Batch #: 858485 **Sample:** 418116-007 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/02/11 23:28

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
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	0.0324	0.0300	108	80-120	

Lab Batch #: 858712 **Sample:** 604361-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/03/11 22:11

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0311	0.0300	104	80-120	
4-Bromofluorobenzene	0.0331	0.0300	110	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 418116,

Project ID: 2006-142

Lab Batch #: 858712 **Sample:** 604361-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/03/11 22:34

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0318	0.0300	106	80-120	

Lab Batch #: 858712 **Sample:** 604361-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/03/11 23:42

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0292	0.0300	97	80-120	
4-Bromofluorobenzene	0.0304	0.0300	101	80-120	

Lab Batch #: 858712 **Sample:** 418116-010 / DL **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/04/11 06:52

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0309	0.0300	103	80-120	
4-Bromofluorobenzene	0.0347	0.0300	116	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BSD Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 418116 **Project ID:** 2006-142

Analyst: ASA **Date Prepared:** 06/01/2011 **Date Analyzed:** 06/01/2011

Lab Batch ID: 858471 **Sample:** 604212-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.101	101	0.100	0.103	103	2	70-125	25	
Toluene	<0.00200	0.100	0.104	104	0.100	0.106	106	2	70-125	25	
Ethylbenzene	<0.00100	0.100	0.102	102	0.100	0.105	105	3	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.219	110	0.200	0.224	112	2	70-131	25	
o-Xylene	<0.00100	0.100	0.118	118	0.100	0.121	121	3	71-133	25	

Analyst: ASA **Date Prepared:** 06/02/2011 **Date Analyzed:** 06/02/2011

Lab Batch ID: 858485 **Sample:** 604236-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0967	97	0.100	0.101	101	4	70-125	25	
Toluene	<0.00200	0.100	0.0979	98	0.100	0.103	103	5	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0946	95	0.100	0.0982	98	4	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.199	100	0.200	0.206	103	3	70-131	25	
o-Xylene	<0.00100	0.100	0.110	110	0.100	0.115	115	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

XENCO Laboratories

BS / BSD Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 418116 **Project ID:** 2006-142

Analyst: ASA **Date Prepared:** 06/03/2011 **Date Analyzed:** 06/03/2011

Lab Batch ID: 858712 **Sample:** 604361-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0917	92	0.100	0.0994	99	8	70-125	25	
Toluene	<0.00200	0.100	0.0925	93	0.100	0.102	102	10	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0911	91	0.100	0.0996	100	9	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.196	98	0.200	0.212	106	8	70-131	25	
o-Xylene	<0.00100	0.100	0.109	109	0.100	0.115	115	5	71-133	25	

Analyst: LATCOR **Date Prepared:** 06/01/2011 **Date Analyzed:** 06/01/2011

Lab Batch ID: 858300 **Sample:** 858300-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

Inorganic Anions In Water by E300	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Fluoride	<0.200	1.30	1.15	88	1.30	1.46	112	24	80-120	20	F

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

BS / BSD Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 418116
Analyst: 4150
Lab Batch ID: 858659
Sample: 604134-1-BKS
Units: mg/L

Date Prepared: 06/02/2011
Batch #: 1

Project ID: 2006-142
Date Analyzed: 06/05/2011
Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Metals, Total by SW846 6010C 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
Chromium	<0.0500	1.00	0.913	91	1.00	0.929	93	2	80-120	20	

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

Final 1.000

XENCO Laboratories

Form 3 - MS Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 418116

Lab Batch #: 858471 **Project ID:** 2006-142

Date Analyzed: 06/01/2011 **Date Prepared:** 06/01/2011 **Analyst:** ASA

QC- Sample ID: 418009-008 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

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	0.00219	0.100	0.0889	87	70-125	
Toluene	<0.00200	0.100	0.0899	90	70-125	
Ethylbenzene	<0.00100	0.100	0.0867	87	71-129	
m_p-Xylenes	<0.00200	0.200	0.182	91	70-131	
o-Xylene	0.00271	0.100	0.0997	97	71-133	

Lab Batch #: 858300

Date Analyzed: 06/01/2011 **Date Prepared:** 06/01/2011 **Analyst:** LATCOR

QC- Sample ID: 418228-001 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Fluoride	41.3	130	112	54	80-120	X

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

BRL - Below Reporting Limit

Form 3 - M MSD Recoveries

Project Name: Lovington Gathering WTI

Work Order # : 418116 **Project ID:** 2006-142

Lab Batch ID: 858485 **QC- Sample ID:** 418116-007 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 06/02/2011 **Date Prepared:** 06/02/2011 **Analyst:** ASA

Reporting Units: mg/L

BTEX by EPA 8021 Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	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	0.0918	92	0.100	0.0892	89	3	70-125	25	
Toluene	<0.00200	0.100	0.0932	93	0.100	0.0916	92	2	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0908	91	0.100	0.0893	89	2	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.192	96	0.200	0.187	94	3	70-131	25	
o-Xylene	<0.00100	0.100	0.109	109	0.100	0.105	105	4	71-133	25	

Lab Batch ID: 858659 **QC- Sample ID:** 418038-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 06/05/2011 **Date Prepared:** 06/02/2011 **Analyst:** 4150

Reporting Units: mg/L

Metals, Total by SW846 6010C Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	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
Chromium	<0.0500	1.00	0.933	93	1.00	0.962	96	3	80-120	20	

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

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

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

Final 1.000

Sample Duplicate Recovery

Project Name: Lovington Gathering WTI

Work Order #: 418116

Lab Batch #: 858300 **Project ID:** 2006-142

Date Analyzed: 06/01/2011 10:44 **Date Prepared:** 06/01/2011 **Analyst:** LATCOR

QC- Sample ID: 418228-001 D **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

Inorganic Anions In Water by E300	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Fluoride	41.3	42.2	2	20	

Lab Batch #: 858659

Date Analyzed: 06/05/2011 13:32 **Date Prepared:** 06/02/2011 **Analyst:** 4150

QC- Sample ID: 418038-001 D **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

Metals, Total by SW846 6010C	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chromium	<0.0500	<0.0500	0	20	

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

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Ben J. Arguijo

Company Name: Basin Environmental Service Technologies, LLC

Company Address: P. O. Box 301

City/State/Zip: Lovington, NM 88260

Telephone No: (575)396-2378 Fax No: (575) 396-1429

Sampler Signature:

e-mail: bjarguijo@basinenv.com

Project Name: Lovington Gathering WTI

Project #: 2006-142

Project Loc: Lea County, NM

PO #: PAA- J. Henry

Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)

ORDER #: 418116

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge / GW = Groundwater S=Soil/Solid / NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M	TCLP: TPH: TX 1005 TX 1006	TCLP: Cations (Ca, Mg, Na, K)	TCLP: Anions (Cl, SO4, Alkalinity)	TCLP: SAR / ESP / CEC	TCLP: Metals: As Ag Ba Cd Cr Pb Hg Se	TCLP: Volatiles	TCLP: Semivolatiles	TOTAL: BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Fluoride	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
001	MW-1			5/27/2011	0840		3	X		X						GW									X					X
002	MW-2			5/27/2011	0835		2	X		X						GW									X					X
003	MW-3			5/27/2011	0825		3	X		X						GW									X					X
004	MW-4			5/27/2011	0850		3	X	X	X						GW						X			X			X		X
005	MW-5			5/27/2011	0820		3	X	X	X						GW									X					X
006	MW-6			5/27/2011	0900		3	X		X						GW									X					X
007	MW-7			5/27/2011	0910		3	X		X						GW									X					X
008	MW-8			5/27/2011	0920		3	X		X						GW									X					X
009	MW-9			5/27/2011	0925		3	X		X						GW									X					X
010	MW-10			5/27/2011	0935		3	X		X						GW									X					X

Special Instructions:

	Date	Time		Date	Time
Relinquished by:	5/27/11	1300	Received by: Shannon Brown	5-27-11	1300
Relinquished by: Shannon Brown	5/27/11	16:42	Received by:		
Relinquished by:			Received by ELOT: Lisa Hunsaker	5-27-11	16:42

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 5.6 °C

XENCO Laboratories

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

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

Prelogin / Nonconformance Report - Sample Log-In

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

Sample Receipt Checklist

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

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	5.6 °C	lbs	°C	lbs	°C	lbs	°C	lbs	°C

Nonconformance Documentation

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

Regarding: _____

Corrective Action Taken: _____

Check all that apply:
- ☐ Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.
- ☐ Initial and Backup Temperature confirm out of temperature conditions
- ☐ Client understands and would like to proceed with analysis

Analytical Report 418093

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

03-JUN-11

Collected By: Client

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

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

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

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

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

XENCO Laboratories

03-JUN-11

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

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

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 418093. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 418093 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

XENCO Laboratories

Sample Cross Reference 418093

PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

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

CASE NARRATIVE

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

Project ID:	*2006-142*	*Report Date:*	*03-JUN-11*
Work Order Number:	*418093*	*Date Received:*	*05/27/2011*

Sample receipt non conformances and comments:
None

Sample receipt non conformances and comments per sample:

None

Certificate of Analy Summary 418093

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI

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

Date Received in Lab: Fri May-27-11 04:42 pm
Report Date: 03-JUN-11
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	418093-001		418093-002					
	Field Id:	Goff Dairy Well		Travel Blank					
	Depth:								
	Matrix:	WATER		WATER					
	Sampled:	May-27-11 10:10		May-27-11 07:15					
BTEX by EPA 8021	*Extracted:*	Jun-01-11 11:34		Jun-01-11 11:34					
	Analyzed:	Jun-01-11 14:50		Jun-01-11 15:12					
	Units/RL:	mg/L	RL	mg/L	RL				
Benzene		0.00123	0.0010	ND	0.0010				
Toluene		ND	0.0020	ND	0.0020				
Ethylbenzene		ND	0.0010	ND	0.0010				
m_p-Xylenes		ND	0.0020	ND	0.0020				
o-Xylene		ND	0.0010	ND	0.0010				
Xylenes, Total		ND	0.0010	ND	0.0010				
Total BTEX		0.00123	0.0010	ND	0.0010				

Brent Barron, II
Odessa Laboratory Manager

Final 1.000

XENCO Laboratories

Flagging Criteria

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

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

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

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit

PQL Practical Quantitation Limit

LOD Limit of Detection

LOQ Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 418093,

Project ID: 2006-142

Lab Batch #: 858471 **Sample:** 604212-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/01/11 12:10

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0310	0.0300	103	80-120	
4-Bromofluorobenzene	0.0333	0.0300	111	80-120	

Lab Batch #: 858471 **Sample:** 604212-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/01/11 12:33

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0321	0.0300	107	80-120	
4-Bromofluorobenzene	0.0337	0.0300	112	80-120	

Lab Batch #: 858471 **Sample:** 604212-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/01/11 13:42

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0285	0.0300	95	80-120	
4-Bromofluorobenzene	0.0311	0.0300	104	80-120	

Lab Batch #: 858471 **Sample:** 418093-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/01/11 14:50

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0283	0.0300	94	80-120	
4-Bromofluorobenzene	0.0328	0.0300	109	80-120	

Lab Batch #: 858471 **Sample:** 418093-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/01/11 15:12

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0288	0.0300	96	80-120	
4-Bromofluorobenzene	0.0300	0.0300	100	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 418093,

Project ID: 2006-142

Lab Batch #: 858471 **Sample:** 418009-008 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/01/11 17:52

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021 **Analytes**	**Amount Found [A]**	**True Amount [B]**	**Recovery %R [D]**	**Control Limits %R**	**Flags**
1,4-Difluorobenzene	0.0302	0.0300	101	80-120	
4-Bromofluorobenzene	0.0314	0.0300	105	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Xenco Laboratories

BS / BSD Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 418093 **Project ID:** 2006-142

Analyst: ASA **Date Prepared:** 06/01/2011 **Date Analyzed:** 06/01/2011

Lab Batch ID: 858471 **Sample:** 604212-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.101	101	0.100	0.103	103	2	70-125	25	
Toluene	<0.00200	0.100	0.104	104	0.100	0.106	106	2	70-125	25	
Ethylbenzene	<0.00100	0.100	0.102	102	0.100	0.105	105	3	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.219	110	0.200	0.224	112	2	70-131	25	
o-Xylene	<0.00100	0.100	0.118	118	0.100	0.121	121	3	71-133	25	

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

Final 1.000

Form 3 - MS Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 418093
Lab Batch #: 858471
Project ID: 2006-142
Date Analyzed: 06/01/2011
Date Prepared: 06/01/2011
Analyst: ASA
QC- Sample ID: 418009-008 S
Batch #: 1
Matrix: Water
Reporting Units: mg/L

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	0.00219	0.100	0.0889	87	70-125	
Toluene	<0.00200	0.100	0.0899	90	70-125	
Ethylbenzene	<0.00100	0.100	0.0867	87	71-129	
m_p-Xylenes	<0.00200	0.200	0.182	91	70-131	
o-Xylene	0.00271	0.100	0.0997	97	71-133	

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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Ben J. Arguijo
Company Name: Basin Environmental Service Technologies, LLC
Company Address: P. O. Box 301
City/State/Zip: Lovington, NM 88260
Telephone No: (575)396-2378 Fax No: (575) 396-1429
Sampler Signature:
e-mail: bjarguijo@basinenv.com

Project Name: Lovington Gathering WTI
Project #: 2006-142
Project Loc: Lea County, NM
PO #: PAA- J. Henry
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 418093

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Fluoride	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
001	Goff Dairy Well			5/27/2011	1010		3	X		X						GW								X					X
002	Travel Blank			5/27/2011	0715		3	X		X						DI H_2O								X					X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
	5/27/11	1300	Shannon Brown	5-27-11	1300
Shannon Brown	5-27-11	16:42			
			Received by ELOT: Lisa Murdock	5-27-11	16:42

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 5.6 °C

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XENCO Laboratories

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

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

Prelogin / Nonconformance Report - Sample Log-In

Client: Plains
Date/Time: 5-27-11 16:42
Lab ID # : 418093
Initials: LM

Sample Receipt Checklist

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

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	5.6 °C	lbs	°C	lbs	°C	lbs	°C	lbs	°C

Nonconformance Documentation

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

Regarding: _____

Corrective Action Taken: _____

Check all that apply:
- ☐ Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.
- ☐ Initial and Backup Temperature confirm out of temperature conditions
- ☐ Client understands and would like to proceed with analysis

Analytical Report 422513

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

15-JUL-11

Collected By: Client

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

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

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

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

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

15-JUL-11

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

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

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 422513. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 422513 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

XENCO Laboratories

Sample Cross Reference 422513

PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

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

CASE NARRATIVE

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

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

Sample receipt non conformances and comments:
None

Sample receipt non conformances and comments per sample:

None

Certificate of Analy. Summary 422513

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI

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

Date Received in Lab: Fri Jul-08-11 04:05 pm
Report Date: 15-JUL-11
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	422513-001		422513-002		422513-003				
	Field Id:	Goff Dairy- Ctr. Pivot End		Goff Dairy- Ctr. Pivot Beg.		Goff Dairy- Ctr. Pivot Well				
	Depth:									
	Matrix:	WATER		WATER		WATER				
	Sampled:	Jul-07-11 14:00		Jul-07-11 14:15		Jul-07-11 14:20				
BTEX by EPA 8021	*Extracted:*	Jul-14-11 17:30		Jul-12-11 14:00		Jul-12-11 14:00				
	Analyzed:	Jul-15-11 08:58		Jul-13-11 05:34		Jul-13-11 05:11				
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL			
Benzene		ND	0.0010	ND	0.0010	ND	0.0010			
Toluene		ND	0.0020	ND	0.0020	ND	0.0020			
Ethylbenzene		ND	0.0010	ND	0.0010	ND	0.0010			
m_p-Xylenes		ND	0.0020	ND	0.0020	ND	0.0020			
o-Xylene		ND	0.0010	ND	0.0010	ND	0.0010			
Xylenes, Total		ND	0.0010	ND	0.0010	ND	0.0010			
Total BTEX		ND	0.0010	ND	0.0010	ND	0.0010			

Brent Barron, II
Odessa Laboratory Manager

Final 1.000

XENCO Laboratories

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 quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

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

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

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

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 422513, **Project ID:** 2006-142

Lab Batch #: 863907 **Sample:** 607896-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/13/11 03:17

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0318	0.0300	106	80-120	

Lab Batch #: 863907 **Sample:** 607896-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/13/11 03:40

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0303	0.0300	101	80-120	

Lab Batch #: 863907 **Sample:** 607896-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/13/11 04:48

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0261	0.0300	87	80-120	
4-Bromofluorobenzene	0.0264	0.0300	88	80-120	

Lab Batch #: 863907 **Sample:** 422513-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/13/11 05:11

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0294	0.0300	98	80-120	
4-Bromofluorobenzene	0.0276	0.0300	92	80-120	

Lab Batch #: 863907 **Sample:** 422513-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/13/11 05:34

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0287	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.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 422513, **Project ID:** 2006-142

Lab Batch #: 863907 **Sample:** 422513-003 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/13/11 08:57

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

Lab Batch #: 863907 **Sample:** 422513-003 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/13/11 09:19

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0304	0.0300	101	80-120	

Lab Batch #: 863963 **Sample:** 607965-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/15/11 06:43

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0307	0.0300	102	80-120	
4-Bromofluorobenzene	0.0314	0.0300	105	80-120	

Lab Batch #: 863963 **Sample:** 607965-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/15/11 07:06

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0312	0.0300	104	80-120	

Lab Batch #: 863963 **Sample:** 607965-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/15/11 08:14

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

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 422513,

Project ID: 2006-142

Lab Batch #: 863963 **Sample:** 422513-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/15/11 08:58

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0277	0.0300	92	80-120	
4-Bromofluorobenzene	0.0282	0.0300	94	80-120	

Lab Batch #: 863963 **Sample:** 422758-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/15/11 10:06

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0310	0.0300	103	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BSD Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 422513 **Project ID:** 2006-142

Analyst: ASA **Date Prepared:** 07/12/2011 **Date Analyzed:** 07/13/2011

Lab Batch ID: 863907 **Sample:** 607896-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.111	111	0.100	0.108	108	3	70-125	25	
Toluene	<0.00200	0.100	0.102	102	0.100	0.0992	99	3	70-125	25	
Ethylbenzene	<0.00100	0.100	0.109	109	0.100	0.107	107	2	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.212	106	0.200	0.207	104	2	70-131	25	
o-Xylene	<0.00100	0.100	0.106	106	0.100	0.103	103	3	71-133	25	

Analyst: BRB **Date Prepared:** 07/14/2011 **Date Analyzed:** 07/15/2011

Lab Batch ID: 863963 **Sample:** 607965-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.107	107	0.100	0.106	106	1	70-125	25	
Toluene	<0.00200	0.100	0.102	102	0.100	0.0991	99	3	70-125	25	
Ethylbenzene	<0.00100	0.100	0.109	109	0.100	0.107	107	2	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.212	106	0.200	0.209	105	1	70-131	25	
o-Xylene	<0.00100	0.100	0.105	105	0.100	0.104	104	1	71-133	25	

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

XENCO Laboratories

Form 3 - MS Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 422513
Lab Batch #: 863963
Date Analyzed: 07/15/2011
QC- Sample ID: 422758-001 S
Reporting Units: mg/L

Project ID: 2006-142
Date Prepared: 07/14/2011
Analyst: BRB
Batch #: 1
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	0.101	101	70-125	
Toluene	<0.00200	0.100	0.0926	93	70-125	
Ethylbenzene	<0.00100	0.100	0.101	101	71-129	
m_p-Xylenes	<0.00200	0.200	0.198	99	70-131	
o-Xylene	<0.00100	0.100	0.0982	98	71-133	

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

BRL - Below Reporting Limit

XENCO Laboratories

Form 3 - MS / MSD Recoveries

Project Name: Lovington Gathering WTI

Work Order # : 422513 **Project ID:** 2006-142

Lab Batch ID: 863907 **QC- Sample ID:** 422513-003 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 07/13/2011 **Date Prepared:** 07/12/2011 **Analyst:** ASA

Reporting Units: mg/L

BTEX by EPA 8021 Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	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	0.103	103	4	70-125	25	
Toluene	<0.00200	0.100	0.0969	97	0.100	0.0938	94	3	70-125	25	
Ethylbenzene	<0.00100	0.100	0.102	102	0.100	0.0997	100	2	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.192	96	0.200	0.184	92	4	70-131	25	
o-Xylene	<0.00100	0.100	0.0991	99	0.100	0.0957	96	3	71-133	25	

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

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

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

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Ben J. Arguijo

Company Name: Basin Environmental Service Technologies, LLC

Company Address: P. O. Box 301

City/State/Zip: Lovington, NM 88260

Telephone No: (575)396-2378 Fax No: (575) 396-1429

Sampler Signature:

e-mail: bjarguijo@basinenv.com

Project Name: Lovington Gathering WTI

Project #: 2006-142

Project Loc: Lea County, NM

PO #: PAA- J. Henry

Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)

ORDER #: 422513

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
001	Goff Dairy - Ctr. Pivot End			7/7/2011	1400		3	X		X						GW									X				X
002	Goff Dairy - Ctr. Pivot Beg.			7/7/2011	1415		3	X		X						GW									X				X
003	Goff Dairy - Ctr. Pivot Well			7/7/2011	1420		3	X		X						GW									X				X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
	7/8/11	1200	Destin Crockett	7/8/11	1200
Destin Crockett	7/8/11	4:05		7/8/11	4:05
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Lisa Murdock	7-8-11	4:05

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

VOAS

Temperature Upon Receipt: 4.6 °C

Final 1.000

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

Prelogin / Nonconformance Report - Sample Log-In

Client: Plains

Date/Time: 7-8-11 4:05

Lab ID # : 422513

Initials: ZM

Sample Receipt Checklist

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

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	4.6 °C	lbs	°C	lbs	°C	lbs	°C	lbs	°C

Nonconformance Documentation

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

Regarding: _____

_____

Corrective Action Taken: _____

_____

_____

_____

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

☐ Initial and Backup Temperature confirm out of temperature conditions

☐ Client understands and would like to proceed with analysis

Analytical Report 422757

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

15-JUL-11

Collected By: Client

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

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

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

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

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

15-JUL-11

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

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

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 422757. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 422757 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

XENCO Laboratories

Sample Cross Reference 422757

PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

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

CASE NARRATIVE

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

Project ID:	*2006-142*	*Report Date:*	*15-JUL-11*
Work Order Number:	*422757*	*Date Received:*	*07/12/2011*

Sample receipt non conformances and comments:
None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-863907 BTEX by EPA 8021
SW8021BM

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

Certificate of Analysis Summary 422757

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI

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

Date Received in Lab: Tue Jul-12-11 01:00 pm
Report Date: 15-JUL-11
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	422757-001		422757-002					
	Field Id:	Goff Dairy Well		MW-10					
	Depth:								
	Matrix:	WATER		WATER					
	Sampled:	Jul-11-11 14:45		Jul-11-11 15:00					
BTEX by EPA 8021	*Extracted:*	Jul-12-11 15:20		Jul-12-11 15:20					
	Analyzed:	Jul-13-11 11:11		Jul-13-11 11:34					
	Units/RL:	mg/L	RL	mg/L	RL				
Benzene		0.00262	0.0010	3.00 D	0.0250				
Toluene		ND	0.0020	0.00265	0.0020				
Ethylbenzene		ND	0.0010	0.00365	0.0010				
m_p-Xylenes		ND	0.0020	0.0248	0.0020				
o-Xylene		ND	0.0010	0.00232	0.0010				
Xylenes, Total		ND	0.0010	0.0271	0.0010				
Total BTEX		0.00262	0.0010	3.03 D	0.0010				

Brent Barron, II
Odessa Laboratory Manager

Final 1.000

XENCO Laboratories

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 quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

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

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

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

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 422757,

Project ID: 2006-142

Lab Batch #: 863907 **Sample:** 607896-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/13/11 03:17

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0318	0.0300	106	80-120	

Lab Batch #: 863907 **Sample:** 607896-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/13/11 03:40

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0303	0.0300	101	80-120	

Lab Batch #: 863907 **Sample:** 607896-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/13/11 04:48

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0261	0.0300	87	80-120	
4-Bromofluorobenzene	0.0264	0.0300	88	80-120	

Lab Batch #: 863907 **Sample:** 422513-003 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/13/11 08:57

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

Lab Batch #: 863907 **Sample:** 422513-003 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/13/11 09:19

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0304	0.0300	101	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 422757,

Project ID: 2006-142

Lab Batch #: 863907 **Sample:** 422757-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/13/11 11:11

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0269	0.0300	90	80-120	
4-Bromofluorobenzene	0.0260	0.0300	87	80-120	

Lab Batch #: 863907 **Sample:** 422757-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/13/11 11:34

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.109	0.0300	363	80-120	**
4-Bromofluorobenzene	0.0354	0.0300	118	80-120	

Lab Batch #: 863963 **Sample:** 607965-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/15/11 06:43

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0307	0.0300	102	80-120	
4-Bromofluorobenzene	0.0314	0.0300	105	80-120	

Lab Batch #: 863963 **Sample:** 607965-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/15/11 07:06

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0312	0.0300	104	80-120	

Lab Batch #: 863963 **Sample:** 607965-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/15/11 08:14

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

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 422757,

Project ID: 2006-142

Lab Batch #: 863963 **Sample:** 422757-002 / DL **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/15/11 09:21

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

Lab Batch #: 863963 **Sample:** 422758-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/15/11 10:06

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0310	0.0300	103	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

BS / BSD Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 422757 **Project ID:** 2006-142

Analyst: ASA **Date Prepared:** 07/12/2011 **Date Analyzed:** 07/13/2011

Lab Batch ID: 863907 **Sample:** 607896-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.111	111	0.100	0.108	108	3	70-125	25	
Toluene	<0.00200	0.100	0.102	102	0.100	0.0992	99	3	70-125	25	
Ethylbenzene	<0.00100	0.100	0.109	109	0.100	0.107	107	2	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.212	106	0.200	0.207	104	2	70-131	25	
o-Xylene	<0.00100	0.100	0.106	106	0.100	0.103	103	3	71-133	25	

Analyst: BRB **Date Prepared:** 07/14/2011 **Date Analyzed:** 07/15/2011

Lab Batch ID: 863963 **Sample:** 607965-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.107	107	0.100	0.106	106	1	70-125	25	
Toluene	<0.00200	0.100	0.102	102	0.100	0.0991	99	3	70-125	25	
Ethylbenzene	<0.00100	0.100	0.109	109	0.100	0.107	107	2	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.212	106	0.200	0.209	105	1	70-131	25	
o-Xylene	<0.00100	0.100	0.105	105	0.100	0.104	104	1	71-133	25	

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

XENCO Laboratories

Form 3 - MS Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 422757
Lab Batch #: 863963
Project ID: 2006-142
Date Analyzed: 07/15/2011
Date Prepared: 07/14/2011
Analyst: BRB
QC- Sample ID: 422758-001 S
Batch #: 1
Matrix: Water
Reporting Units: mg/L

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	0.101	101	70-125	
Toluene	<0.00200	0.100	0.0926	93	70-125	
Ethylbenzene	<0.00100	0.100	0.101	101	71-129	
m_p-Xylenes	<0.00200	0.200	0.198	99	70-131	
o-Xylene	<0.00100	0.100	0.0982	98	71-133	

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

BRL - Below Reporting Limit

XENCO Laboratories

Form 3 - MS / MSD Recoveries

Project Name: Lovington Gathering WTI

Work Order # : 422757 **Project ID:** 2006-142

Lab Batch ID: 863907 **QC- Sample ID:** 422513-003 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 07/13/2011 **Date Prepared:** 07/12/2011 **Analyst:** ASA

Reporting Units: mg/L

BTEX by EPA 8021 Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	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	0.103	103	4	70-125	25	
Toluene	<0.00200	0.100	0.0969	97	0.100	0.0938	94	3	70-125	25	
Ethylbenzene	<0.00100	0.100	0.102	102	0.100	0.0997	100	2	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.192	96	0.200	0.184	92	4	70-131	25	
o-Xylene	<0.00100	0.100	0.0991	99	0.100	0.0957	96	3	71-133	25	

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

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

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

Final 1.000

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

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

Project Manager: Ben J. Arguijo
Company Name: Basin Environmental Service Technologies, LLC
Company Address: P. O. Box 301
City/State/Zip: Lovington, NM 88260
Telephone No: (575)396-2378 Fax No: (575) 396-1429
Sampler Signature:
e-mail: bjarguijo@basinenv.com

Project Name: Lovington Gathering WTI
Project #: 2006-142
Project Loc: Lea County, NM
PO #: PAA- J. Henry
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 422757

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO3	HCl 40ml vol	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge / GW = Groundwater S=Soil/Solid / NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: BTEX 8021B/5030 or BTEX 8260 X	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
01	Goff Dairy Well			7/11/2011	1445		3	X		X						GW								X				X
02	MW-10			7/11/2011	1500		3	X		X						GW								X				X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
	7/11/11	1700	Dakotah Ward	7/12/11	1700
Dakotah Ward	7/12/11	13:00			
			Received by ELOT: Andrea Elam	7-12-11	13:00

Laboratory Comments:

Sample Containers Intact?	N
VOCs Free of Headspace?	N
Labels on container(s)	N
Custody seals on container(s)	N
Custody seals on cooler(s)	N
Sample Hand Delivered	N
by Sampler/Client Rep.	
by Courier? UPS DHL FedEx Lone Star	

Temperature Upon Receipt: 2.6 °C

Final 1.000

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

Prelogin / Nonconformance Report - Sample Log-In

Client: Basin Env. / Plains

Date/Time: 7.12.11 13:00

Lab ID # : 422757

Initials: AE

Sample Receipt Checklist

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

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	2.6 °C	lbs	°C	lbs	°C	lbs	°C	lbs	°C

Nonconformance Documentation

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

Regarding: _____

_____

Corrective Action Taken: _____

_____

_____

_____

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

☐ Initial and Backup Temperature confirm out of temperature conditions

☐ Client understands and would like to proceed with analysis

Analytical Report 423313

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

18-JUL-11

Collected By: Client

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

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

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

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

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

XENCO Laboratories

18-JUL-11

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

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

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 423313. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 423313 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

XENCO Laboratories

Sample Cross Reference 423313

PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

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

CASE NARRATIVE

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

Project ID:	*2006-142*	*Report Date:*	*18-JUL-11*
Work Order Number:	*423313*	*Date Received:*	*07/15/2011*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Certificate of Analy. Summary 423313

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI

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

Date Received in Lab: Fri Jul-15-11 02:57 pm
Report Date: 18-JUL-11
Project Manager: Brent Barron, II

Analysis Requested							
	Lab Id:	423313-001					
	Field Id:	JW Well					
	Depth:						
	Matrix:	WATER					
	Sampled:	Jul-14-11 14:20					
BTEX by EPA 8021	*Extracted:*	Jul-15-11 17:30					
	Analyzed:	Jul-15-11 20:52					
	Units/RL:	mg/L	RL				
Benzene		ND	0.0010				
Toluene		ND	0.0020				
Ethylbenzene		ND	0.0010				
m_p-Xylenes		ND	0.0020				
o-Xylene		ND	0.0010				
Xylenes, Total		ND	0.0010				
Total BTEX		ND	0.0010				

Brent Barron, II
Odessa Laboratory Manager

Final 1.000

XENCO Laboratories

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 quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

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

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

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

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 423313, **Project ID:** 2006-142

Lab Batch #: 864101 **Sample:** 608031-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/15/11 18:59

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
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	0.0295	0.0300	98	80-120	

Lab Batch #: 864101 **Sample:** 608031-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/15/11 19:22

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
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	0.0280	0.0300	93	80-120	

Lab Batch #: 864101 **Sample:** 608031-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/15/11 20:29

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0288	0.0300	96	80-120	
4-Bromofluorobenzene	0.0256	0.0300	85	80-120	

Lab Batch #: 864101 **Sample:** 423313-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/15/11 20:52

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
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	0.0269	0.0300	90	80-120	

Lab Batch #: 864101 **Sample:** 423313-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/15/11 23:30

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
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	0.0304	0.0300	101	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 423313,

Project ID: 2006-142

Lab Batch #: 864101 **Sample:** 423313-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 07/15/11 23:52

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

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BSD Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 423313 **Project ID:** 2006-142

Analyst: ASA **Date Prepared:** 07/15/2011 **Date Analyzed:** 07/15/2011

Lab Batch ID: 864101 **Sample:** 608031-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.102	102	0.100	0.101	101	1	70-125	25	
Toluene	<0.00200	0.100	0.0933	93	0.100	0.0932	93	0	70-125	25	
Ethylbenzene	<0.00100	0.100	0.103	103	0.100	0.101	101	2	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.201	101	0.200	0.195	98	3	70-131	25	
o-Xylene	<0.00100	0.100	0.100	100	0.100	0.0942	94	6	71-133	25	

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

Final 1.000

XENCO Laboratories

Form 3 - MS / MSD Recoveries

Project Name: Lovington Gathering WTI

Work Order # : 423313 **Project ID:** 2006-142

Lab Batch ID: 864101 **QC- Sample ID:** 423313-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 07/15/2011 **Date Prepared:** 07/15/2011 **Analyst:** ASA

Reporting Units: mg/L

BTEX by EPA 8021 Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	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	0.103	103	0.100	0.110	110	7	70-125	25	
Toluene	<0.00200	0.100	0.0953	95	0.100	0.100	100	5	70-125	25	
Ethylbenzene	<0.00100	0.100	0.102	102	0.100	0.107	107	5	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.192	96	0.200	0.204	102	6	70-131	25	
o-Xylene	<0.00100	0.100	0.0946	95	0.100	0.104	104	9	71-133	25	

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

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

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

Final 1.000

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Ben J. Arguijo

Company Name: Basin Environmental Service Technologies, LLC

Company Address: P. O. Box 301

City/State/Zip: Lovington, NM 88260

Telephone No: (575)396-2378 Fax No: (575) 396-1429

Sampler Signature:

e-mail: bjarguijo@basinenv.com

Project Name: Lovington Gathering WTI

Project #: 2006-142

Project Loc: Lea County, NM

PO #: PAA- J. Henry

Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)

ORDER #: 423313

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1	8015M	8015B	TPH: TX 1005	TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: BTEX 8021B/5030 or	BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) (24, 48, 72 hrs)	Standard TAT 4 DAY
001	JW Well			7/14/2011	1420		3	X		X						GW												X				X	

Special Instructions:
24-hour RUSH.

Relinquished by:	Date	Time	Received by:	Date	Time
	7/14/11	15:00	Jason Henry	07/14/2011	15:00
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by: Jason Henry	Date 07/15/2011	Time 14:57	Received by ELOT: Lisa Hunduck	Date 7-15-11	Time 14:57

Laboratory Comments:

Sample Containers Intact?	Y	N NA
VOCs Free of Headspace?	Y	N NA
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N

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

Temperature Upon Receipt: 14.6 °C

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

Prelogin / Nonconformance Report - Sample Log-In

Client: Plains

Date/Time: 7-15-11 14:57

Lab ID # : 423313

Initials: LM

Sample Receipt Checklist

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

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	14.6 °C MJH	lbs	°C	lbs	°C	lbs	°C	lbs	°C

Nonconformance Documentation

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

Regarding: _____

Corrective Action Taken: _____

Check all that apply:
- ☐ Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.
- ☐ Initial and Backup Temperature confirm out of temperature conditions
- ☐ Client understands and would like to proceed with analysis

Analytical Report 426487

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

01-SEP-11

Collected By: Client

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

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

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

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

XENCO Laboratories

01-SEP-11

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

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

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 426487. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 426487 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron II

Odessa Laboratory Manager

XENCO Laboratories

Sample Cross Reference 426487

PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

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

CASE NARRATIVE

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

Project ID:	*2006-142*	*Report Date:*	*01-SEP-11*
Work Order Number:	*426487*	*Date Received:*	*08/25/2011*

Sample receipt non conformances and comments:
None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-868690 BTEX by EPA 8021
SW8021BM

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

Certificate of Analysis Summary 426487

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI

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

Date Received in Lab: Thu Aug-25-11 11:10 am
Report Date: 01-SEP-11
Project Manager: Brent Barron II

Analysis Requested	*Lab Id:*	426487-001		426487-002		426487-003		426487-004		426487-005		426487-006	
	Field Id:	MW-1		MW-3		MW-4		MW-5		MW-6		MW-7	
	Depth:												
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	Sampled:	Aug-24-11 09:20		Aug-24-11 12:40		Aug-24-11 10:00		Aug-24-11 10:30		Aug-24-11 13:20		Aug-24-11 17:30	
BTEX by EPA 8021	*Extracted:*	Aug-26-11 16:00		Aug-26-11 16:00		Aug-26-11 16:00		Aug-26-11 16:00		Aug-26-11 16:00		Aug-26-11 16:00	
	Analyzed:	Aug-27-11 21:13		Aug-27-11 21:35		Aug-27-11 21:58		Aug-28-11 03:16		Aug-27-11 23:52		Aug-28-11 00:14	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		ND	0.00100	0.0262	0.00100	0.00119	0.00100	ND	0.00100	0.105	0.00100	0.00192	0.00100
Toluene		ND	0.00200	0.00333	0.00200	ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200
Ethylbenzene		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100
m_p-Xylenes		ND	0.00200	0.00827	0.00200	ND	0.00200	ND	0.00200	0.0597	0.00200	ND	0.00200
o-Xylene		ND	0.00100	0.00312	0.00100	ND	0.00100	ND	0.00100	0.00309	0.00100	ND	0.00100
Xylenes, Total		ND	0.00100	0.0114	0.00100	ND	0.00100	ND	0.00100	0.0628	0.00100	ND	0.00100
Total BTEX		ND	0.00100	0.0409	0.00100	0.00119	0.00100	ND	0.00100	0.168	0.00100	0.00192	0.00100

Brent Barron II
Odessa Laboratory Manager

Certificate of Analysis Summary 426487

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI

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

Date Received in Lab: Thu Aug-25-11 11:10 am
Report Date: 01-SEP-11
Project Manager: Brent Barron II

Analysis Requested													
	Lab Id:	426487-007		426487-008		426487-009		426487-010		426487-011		426487-012	
	Field Id:	MW-8		MW-9		MW-10		Goff Dairy Well		Goff Dairy - Ctr. Pivot Well		Goff Dairy - Ctr. Pivot Beg.	
	Depth:												
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	Sampled:	Aug-24-11 17:40		Aug-24-11 15:00		Aug-24-11 14:30		Aug-24-11 16:30		Aug-24-11 16:45		Aug-24-11 17:00	
BTEX by EPA 8021	***Extracted:***	Aug-26-11 16:00		Aug-26-11 16:00		Aug-26-11 16:00		Aug-30-11 15:49		Aug-30-11 15:49		Aug-26-11 16:00	
	Analyzed:	Aug-28-11 00:37		Aug-28-11 01:00		Aug-28-11 01:23		Aug-31-11 06:35		Aug-31-11 06:58		Aug-28-11 02:30	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		ND	0.00100	ND	0.00100	0.654 D	0.0100	0.00138	0.00100	ND	0.00100	ND	0.00100
Toluene		ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200
Ethylbenzene		ND	0.00100	ND	0.00100	0.00158	0.00100	ND	0.00100	ND	0.00100	ND	0.00100
m_p-Xylenes		ND	0.00200	0.00237	0.00200	0.0177	0.00200	ND	0.00200	ND	0.00200	ND	0.00200
o-Xylene		ND	0.00100	ND	0.00100	0.00262	0.00100	ND	0.00100	ND	0.00100	ND	0.00100
Xylenes, Total		ND	0.00100	0.00237	0.00100	0.0203	0.00100	ND	0.00100	ND	0.00100	ND	0.00100
Total BTEX		ND	0.00100	0.00237	0.00100	0.676 D	0.00100	0.00138	0.00100	ND	0.00100	ND	0.00100

Brent Barron II
Odessa Laboratory Manager

Certificate of Analysis Summary 426487

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI

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

Date Received in Lab: Thu Aug-25-11 11:10 am
Report Date: 01-SEP-11
Project Manager: Brent Barron II

Analysis Requested								
	Lab Id:	426487-013		426487-014				
	Field Id:	Goff Dairy - Ctr. Pivot End		JW Well				
	Depth:							
	Matrix:	WATER		WATER				
	Sampled:	Aug-24-11 17:25		Aug-24-11 17:15				
BTEX by EPA 8021	***Extracted:***	Aug-26-11 16:00		Aug-30-11 15:49				
	Analyzed:	Aug-28-11 02:53		Aug-31-11 08:52				
	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			
Xylenes, Total		ND	0.00100	ND	0.00100			
Total BTEX		ND	0.00100	ND	0.00100			

Brent Barron II
Odessa Laboratory Manager

Final 1.000

XENCO Laboratories

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 quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

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

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

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

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 426487,

Project ID: 2006-142

Lab Batch #: 868690 **Sample:** 426487-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/27/11 21:13

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0272	0.0300	91	80-120	

Lab Batch #: 868690 **Sample:** 426487-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/27/11 21:35

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0295	0.0300	98	80-120	
4-Bromofluorobenzene	0.0268	0.0300	89	80-120	

Lab Batch #: 868690 **Sample:** 426487-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/27/11 21:58

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

Lab Batch #: 868690 **Sample:** 426487-005 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/27/11 23:52

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0310	0.0300	103	80-120	
4-Bromofluorobenzene	0.0258	0.0300	86	80-120	

Lab Batch #: 868690 **Sample:** 426487-006 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/28/11 00:14

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0266	0.0300	89	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 426487,

Project ID: 2006-142

Lab Batch #: 868690 **Sample:** 426487-007 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/28/11 00:37

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0278	0.0300	93	80-120	
4-Bromofluorobenzene	0.0259	0.0300	86	80-120	

Lab Batch #: 868690 **Sample:** 426487-008 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/28/11 01:00

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0279	0.0300	93	80-120	
4-Bromofluorobenzene	0.0268	0.0300	89	80-120	

Lab Batch #: 868690 **Sample:** 426487-009 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/28/11 01:23

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0220	0.0300	73	80-120	**

Lab Batch #: 868690 **Sample:** 426487-012 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/28/11 02:30

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0283	0.0300	94	80-120	
4-Bromofluorobenzene	0.0272	0.0300	91	80-120	

Lab Batch #: 868690 **Sample:** 426487-013 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/28/11 02:53

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

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 426487,

Project ID: 2006-142

Lab Batch #: 868690 **Sample:** 426487-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/28/11 03:16

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0276	0.0300	92	80-120	
4-Bromofluorobenzene	0.0266	0.0300	89	80-120	

Lab Batch #: 868958 **Sample:** 426487-010 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/31/11 06:35

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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 #: 868958 **Sample:** 426487-011 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/31/11 06:58

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0287	0.0300	96	80-120	
4-Bromofluorobenzene	0.0275	0.0300	92	80-120	

Lab Batch #: 868958 **Sample:** 426487-014 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/31/11 08:52

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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 #: 868958 **Sample:** 426487-009 / DL **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/31/11 09:37

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0289	0.0300	96	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 426487, **Project ID:** 2006-142

Lab Batch #: 868690 **Sample:** 610654-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/27/11 18:10

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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 #: 868958 **Sample:** 610803-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/31/11 03:10

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

Lab Batch #: 868690 **Sample:** 610654-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/27/11 16:39

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0266	0.0300	89	80-120	

Lab Batch #: 868958 **Sample:** 610803-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/31/11 01:39

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0297	0.0300	99	80-120	
4-Bromofluorobenzene	0.0280	0.0300	93	80-120	

Lab Batch #: 868690 **Sample:** 610654-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/27/11 17:02

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0292	0.0300	97	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Final 1.000

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 426487,

Project ID: 2006-142

Lab Batch #: 868958 **Sample:** 610803-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/31/11 02:02

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0268	0.0300	89	80-120	

Lab Batch #: 868690 **Sample:** 426335-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/27/11 22:20

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0309	0.0300	103	80-120	
4-Bromofluorobenzene	0.0305	0.0300	102	80-120	

Lab Batch #: 868958 **Sample:** 426488-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/31/11 07:20

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0298	0.0300	99	80-120	
4-Bromofluorobenzene	0.0283	0.0300	94	80-120	

Lab Batch #: 868690 **Sample:** 426335-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/27/11 22:43

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0277	0.0300	92	80-120	

Lab Batch #: 868958 **Sample:** 426488-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/31/11 07:43

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0306	0.0300	102	80-120	
4-Bromofluorobenzene	0.0284	0.0300	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.

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Ben J. Arguijo
Company Name: Basin Environmental Service Technologies, LLC
Company Address: P. O. Box 301
City/State/Zip: Lovington, NM 88260
Telephone No: (575)396-2378 Fax No: (575) 396-1429
Sampler Signature: Dalcoth Ward e-mail: bjarguijo@basinenv.com

Project Name: Lovington Gathering WTI
Project #: 2006-142
Project Loc: Lea County, NM
PO #: PAA- J. Henry
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 426487

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M	TCLP: TPH: TX 1005 TX 1006	TCLP: Cations (Ca, Mg, Na, K)	TCLP: Anions (Cl, SO4, Alkalinity)	TCLP: SAR / ESP / CEC	TCLP: Metals: As Ag Ba Cd Cr Pb Hg Se	TCLP: Volatiles	TCLP: Semivolatiles	TOTAL: BTEX 8021B/5030 or 8015B BTEX 8260	RCI	N.O.R.M.	Fluoride	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
01	MW-1			8/24/2011	0920		3	X		X						GW									X					X
	~~MW-2~~			~~8/24/2011~~	~~1210~~ 1220		3	X		X						GW									X					X
02	MW-3			8/24/2011	1240		3	X		X						GW									X					X
03	MW-4			8/24/2011	1000		3	X		X						GW									X					X
04	MW-5			8/24/2011	1030		3	X		X						GW									X					X
05	MW-6			8/24/2011	1320		3	X		X						GW									X					X
06	MW-7			8/24/2011	1730		3	X		X						GW									X					X
07	MW-8			8/24/2011	1740		3	X		X						GW									X					X
08	MW-9			8/24/2011	1500		3	X		X						GW									X					X
09	MW-10			8/24/2011	1430		3	X		X						GW									X					X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Dalcoth Ward	8/25/11	0710		8/25/11	0710
Relinquished by:	Date	Time	Received by:	Date	Time
	8/25/11	11:10			
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			E. Hernandez	8/25/11	11:10

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 5.6 °C

Final 1.000

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Ben J. Arguijo
Company Name: Basin Environmental Service Technologies, LLC
Company Address: P. O. Box 301
City/State/Zip: Lovington, NM 88260
Telephone No: (575)396-2378 Fax No: (575) 396-1429
Sampler Signature: Dakotah Ward e-mail: bjarguijo@basinenv.com

Project Name: Lovington Gathering WTI
Project #: 2006-142
Project Loc: Lea County, NM
PO #: PAA- J. Henry
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 426487

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
10	Goff Dairy Well			8/24/2011	1630		3	X		X						GW									X				X
11	Goff Dairy - Ctr. Pivot Well			8/24/2011	1645		3	X		X						GW									X				X
12	Goff Dairy - Ctr. Pivot Beg.			8/24/2011	1700		3	X		X						GW									X				X
13	Goff Dairy - Ctr. Pivot End			8/24/2011	1725		3	X		X						GW									X				X
14	JW Well			8/24/2011	1715		3	X		X						GW									X				X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Dakotah Ward	8/25/11	0710	[signature]	8/25/11	0710
[signature]	8/25/11	11:10	[signature]		
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			M. Hernandez	8/25/11	11:10

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N

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

Temperature Upon Receipt: 5.6 °C

Final 1.000

Prelogin / Nonconformance Report - Sample Log-In

Client: Plains
Date/Time: 8/25/11 11:10
Lab ID # : 426487
Initials: AH

Sample Receipt Checklist

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

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	5.6 °C	lbs	°C	lbs	°C	lbs	°C	lbs	°C

Nonconformance Documentation

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

Regarding: _____

Corrective Action Taken: _____

Check all that apply:
- ☐ Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.
- ☐ Initial and Backup Temperature confirm out of temperature conditions
- ☐ Client understands and would like to proceed with analysis

Analytical Report 428994

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

12-OCT-11

Collected By: Client

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

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

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

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

XENCO Laboratories

12-OCT-11

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

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

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 428994. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 428994 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron II
Odessa Laboratory Manager

Sample Cross Reference 428994

PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

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

CASE NARRATIVE

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

Project ID:	*2006-142*	*Report Date:*	*12-OCT-11*
Work Order Number:	*428994*	*Date Received:*	*10/05/2011*

Sample receipt non conformances and comments:
None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-872166 BTEX by EPA 8021
SW8021BM

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

Certificate of Analysis Summary 428994

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI

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

Date Received in Lab: Wed Oct-05-11 11:18 am
Report Date: 12-OCT-11
Project Manager: Brent Barron II

Analysis Requested							
	Lab Id:	428994-001					
	Field Id:	MW-2					
	Depth:						
	Matrix:	WATER					
	Sampled:	Sep-30-11 09:00					
BTEX by EPA 8021	***Extracted:***	Oct-10-11 15:45					
	Analyzed:	Oct-11-11 05:36					
	Units/RL:	mg/L	RL				
Benzene		0.179	0.00100				
Toluene		ND	0.00200				
Ethylbenzene		0.00275	0.00100				
m_p-Xylenes		0.00345	0.00200				
o-Xylene		0.00212	0.00100				
Xylenes, Total		0.00557	0.00100				
Total BTEX		0.187	0.00100				

Brent Barron II
Odessa Laboratory Manager

Final 1.000

XENCO Laboratories

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 quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

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

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

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

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 428994,

Project ID: 2006-142

Lab Batch #: 872166 **Sample:** 428994-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/11/11 05:36

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0275	0.0300	92	80-120	
4-Bromofluorobenzene	0.0232	0.0300	77	80-120	*

Lab Batch #: 872166 **Sample:** 612517-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/10/11 21:14

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0278	0.0300	93	80-120	
4-Bromofluorobenzene	0.0284	0.0300	95	80-120	

Lab Batch #: 872166 **Sample:** 612517-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/10/11 19:43

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0258	0.0300	86	80-120	
4-Bromofluorobenzene	0.0251	0.0300	84	80-120	

Lab Batch #: 872166 **Sample:** 612517-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/10/11 20:05

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0293	0.0300	98	80-120	

Lab Batch #: 872166 **Sample:** 428960-001 D / MD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/11/11 01:25

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0286	0.0300	95	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

BS / BSD Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 428994 **Project ID:** 2006-142

Analyst: ASA **Date Prepared:** 10/10/2011 **Date Analyzed:** 10/10/2011

Lab Batch ID: 872166 **Sample:** 612517-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0908	91	0.100	0.104	104	14	70-125	25	
Toluene	<0.00200	0.100	0.0931	93	0.100	0.106	106	13	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0977	98	0.100	0.111	111	13	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.195	98	0.200	0.222	111	13	70-131	25	
o-Xylene	<0.00100	0.100	0.0980	98	0.100	0.112	112	13	71-133	25	

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

XENCO Laboratories

Sample Duplicate Recovery

Project Name: Lovington Gathering WTI

Work Order #: 428994

Lab Batch #: 872166 **Project ID:** 2006-142

Date Analyzed: 10/11/2011 01:25 **Date Prepared:** 10/10/2011 **Analyst:** ASA

QC- Sample ID: 428960-001 D **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

BTEX by EPA 8021	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Benzene	<0.00100	<0.00100	0	25	U
Toluene	<0.00200	<0.00200	0	25	U
Ethylbenzene	<0.00100	<0.00100	0	25	U
m_p-Xylenes	<0.00200	<0.00200	0	25	U
o-Xylene	<0.00100	<0.00100	0	25	U

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

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Ben J. Arguijo

Company Name: Basin Environmental Service Technologies, LLC

Company Address: P. O. Box 301

City/State/Zip: Lovington, NM 88260

Telephone No: (575)396-2378 Fax No: (575) 396-1429

Sampler Signature: DaKotah Ward e-mail: bjarguijo@basinenv.com

Project Name: Lovington Gathering WTI

Project #: 2006-142

Project Loc: Lea County, NM

PO #: PAA- J. Henry

Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 428994

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TPH: 418.1 / 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
																	TCLP:												
																	TOTAL:								X				
01	MW-2			9/30/2011	0900		3	X		X						GW								X				X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
DaKotah Ward	10/5/11	0730	Troy Nahm	10/05/11	0730
Relinquished by:	Date	Time	Received by:	Date	Time
Troy Nahm	10/05/11	1118			
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Andrea Elam	10-5-11	11:18

Laboratory Comments:

Sample Containers Intact?	N
VOCs Free of Headspace?	N
Labels on container(s)	N
Custody seals on container(s)	N
Custody seals on cooler(s)	N
Sample Hand Delivered	N
by Sampler/Client Rep.?	
by Courier? UPS DHL FedEx Lone Star	
UPS VOA	
Temperature Upon Receipt:	3.0 °C

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

Prelogin / Nonconformance Report - Sample Log-In

Client: Basin Env. / Plains

Date/Time: 10.5.11 11:18

Lab ID # : 428994

Initials: NC

Sample Receipt Checklist

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

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	3.0 °C	lbs	°C	lbs	°C	lbs	°C	lbs	°C

Nonconformance Documentation

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

Regarding: _____

Corrective Action Taken: _____

Check all that apply:

- ☐ Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.
- ☐ Initial and Backup Temperature confirm out of temperature conditions
- ☐ Client understands and would like to proceed with analysis

Analytical Report 429246

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

18-OCT-11

Collected By: Client

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

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

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

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

XENCO Laboratories

18-OCT-11

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

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

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 429246. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 429246 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron II
Odessa Laboratory Manager

XENCO Laboratories

Sample Cross Reference 429246

PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

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

CASE NARRATIVE

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

Project ID:	*2006-142*	*Report Date:*	*18-OCT-11*
Work Order Number:	*429246*	*Date Received:*	*10/10/2011*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 429246

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI

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

Date Received in Lab: Mon Oct-10-11 02:40 pm
Report Date: 18-OCT-11
Project Manager: Brent Barron II

Analysis Requested	*Lab Id:*	429246-001		429246-002		429246-003		429246-004		429246-005	
	Field Id:	Goff Dairy Well		Goff Dairy - Ctr. Pivot Well		Goff Dairy - Ctr. Pivot Beg.		JW Well		MW-10	
	Depth:										
	Matrix:	GROUND WATER		GROUND WATER		GROUND WATER		GROUND WATER		GROUND WATER	
	Sampled:	Oct-10-11 09:15		Oct-10-11 09:00		Oct-10-11 09:00		Oct-10-11 08:00		Oct-10-11 08:00	
BTEX by EPA 8021B	*Extracted:*	Oct-15-11 09:40		Oct-15-11 09:40		Oct-15-11 09:40		Oct-15-11 09:40		Oct-15-11 09:40	
	Analyzed:	Oct-18-11 02:21		Oct-18-11 02:44		Oct-18-11 03:07		Oct-18-11 03:29		Oct-18-11 08:39	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	0.183	0.0100
Toluene		ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200	ND	0.0200
Ethylbenzene		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.0100
m_p-Xylenes		ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200	0.121	0.0200
o-Xylene		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.0100
Total Xylenes		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	0.121	0.0100
Total BTEX		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	0.304	0.0100

Brent Barron II
Odessa Laboratory Manager

Final 1.000

XENCO Laboratories

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 quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

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

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

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

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 429246,

Project ID: 2006-142

Lab Batch #: 872545 **Sample:** 429246-001 / SMP **Batch:** 1 **Matrix:** Ground Water

Units: mg/L **Date Analyzed:** 10/18/11 02:21

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0261	0.0300	87	80-120	
4-Bromofluorobenzene	0.0274	0.0300	91	80-120	

Lab Batch #: 872545 **Sample:** 429246-002 / SMP **Batch:** 1 **Matrix:** Ground Water

Units: mg/L **Date Analyzed:** 10/18/11 02:44

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
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	0.0315	0.0300	105	80-120	

Lab Batch #: 872545 **Sample:** 429246-003 / SMP **Batch:** 1 **Matrix:** Ground Water

Units: mg/L **Date Analyzed:** 10/18/11 03:07

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
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	0.0288	0.0300	96	80-120	

Lab Batch #: 872545 **Sample:** 429246-004 / SMP **Batch:** 1 **Matrix:** Ground Water

Units: mg/L **Date Analyzed:** 10/18/11 03:29

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
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	0.0292	0.0300	97	80-120	

Lab Batch #: 872545 **Sample:** 429246-005 / SMP **Batch:** 1 **Matrix:** Ground Water

Units: mg/L **Date Analyzed:** 10/18/11 08:39

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0260	0.0300	87	80-120	
4-Bromofluorobenzene	0.0266	0.0300	89	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 429246,

Project ID: 2006-142

Lab Batch #: 872545 **Sample:** 612816-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/17/11 20:17

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
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	0.0281	0.0300	94	80-120	

Lab Batch #: 872545 **Sample:** 612816-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/17/11 18:45

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0305	0.0300	102	80-120	

Lab Batch #: 872545 **Sample:** 612816-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/17/11 19:08

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
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	0.0299	0.0300	100	80-120	

Lab Batch #: 872545 **Sample:** 429338-009 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/18/11 00:27

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
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	0.0313	0.0300	104	80-120	

Lab Batch #: 872545 **Sample:** 429338-009 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/18/11 00:50

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0285	0.0300	95	80-120	
4-Bromofluorobenzene	0.0310	0.0300	103	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BSD Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 429246
Analyst: ASA
Lab Batch ID: 872545 **Sample:** 612816-1-BKS
Units: mg/L

Date Prepared: 10/15/2011 **Batch #:** 1

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

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	0.0890	89	0.100	0.0978	98	9	70-125	25	
Toluene	<0.00200	0.100	0.0909	91	0.100	0.0984	98	8	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0941	94	0.100	0.102	102	8	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.187	94	0.200	0.205	103	9	70-131	25	
o-Xylene	<0.00100	0.100	0.0958	96	0.100	0.104	104	8	71-133	25	

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

Final 1.000

XENCO Laboratories

Form 3 - MS / MSD Recoveries

Project Name: Lovington Gathering WTI

Work Order # : 429246 **Project ID:** 2006-142

Lab Batch ID: 872545 **QC- Sample ID:** 429338-009 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 10/18/2011 **Date Prepared:** 10/15/2011 **Analyst:** ASA

Reporting Units: mg/L

BTEX by EPA 8021B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	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	0.00159	0.100	0.113	111	0.100	0.102	100	10	70-125	25	
Toluene	<0.00200	0.100	0.110	110	0.100	0.102	102	8	70-125	25	
Ethylbenzene	<0.00100	0.100	0.114	114	0.100	0.104	104	9	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.223	112	0.200	0.204	102	9	70-131	25	
o-Xylene	<0.00100	0.100	0.115	115	0.100	0.106	106	8	71-133	25	

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

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

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

Final 1.000

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

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

Project Manager: Ben J. Arguijo
Company Name: Basin Environmental Service Technologies, LLC
Company Address: P. O. Box 301
City/State/Zip: Lovington, NM 88260
Telephone No: (575)396-2378 Fax No: (575) 396-1429
Sampler Signature: Dalcotah Ward e-mail: bjarguijo@basinenv.com

Project Name: Lovington Gathering WTI
Project #: 2006-142
Project Loc: Lea County, NM
PO #: PAA- J. Henry
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only) ORDER #: 429246

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW=Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TOTAL: BTEX 8260	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
01	Goff Dairy Well			10/7/2011	0915		3	X		X						GW	X		X
02	Goff Dairy - Ctr. Pivot Well			10/7/2011	0900		3	X		X						GW	X		X
03	Goff Dairy - Ctr. Pivot Beg.			10/7/2011	0900		3	X		X						GW	X		X
	~~Goff Dairy - Ctr. Pivot End~~			~~10/7/2011~~	~~0900~~		3	~~X~~		~~X~~						GW	X		X
04	JW Well			10/7/2011	0800		3	X		X						GW	X		X
05	MW-10 10/7/11 DTW			10/7/2011	0800		3	X		X						GW	X		X
				10/10/11 DTW															

DTW 10/10/11

Special Instructions:

Laboratory Comments:

Relinquished by:	Dalcotah Ward	Date	10/10/11	Time	1440	Received by:		Date	Time
Relinquished by:		Date		Time		Received by:		Date	Time
Relinquished by:		Date		Time		Received by ELOT:	A. Hernandez	Date 10/10/11	Time 14:40

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 3.0 °C

Final 1.000

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

Prelogin / Nonconformance Report - Sample Log-In

Client: Plains

Date/Time: 10/10/11 14:40

Lab ID #: 479246

Initials: AH

Sample Receipt Checklist

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

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	3.0 °C	lbs	°C	lbs	°C	lbs	°C	lbs	°C

Nonconformance Documentation

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

Regarding: _____

_____

Corrective Action Taken: _____

_____

_____

_____

Check all that apply:
- ☐ Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.
- ☐ Initial and Backup Temperature confirm out of temperature conditions
- ☐ Client understands and would like to proceed with analysis

Analytical Report 429406

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

19-OCT-11

Collected By: Client

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

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

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

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

19-OCT-11

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

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

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 429406. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 429406 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron II
Odessa Laboratory Manager

XENCO Laboratories

Sample Cross Reference 429406

PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

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

CASE NARRATIVE

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

Project ID:	*2006-142*	*Report Date:*	*19-OCT-11*
Work Order Number:	*429406*	*Date Received:*	*10/12/2011*

Sample receipt non conformances and comments:
None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-872647 BTEX by EPA 8021
SW8021BM

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

Certificate of Analysis Summary 429406

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI

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

Date Received in Lab: Wed Oct-12-11 03:10 pm
Report Date: 19-OCT-11
Project Manager: Brent Barron II

Analysis Requested							
	Lab Id:	429406-001					
	Field Id:	Goff Dairy - Ctr. Pivot End					
	Depth:						
	Matrix:	GROUND WATER					
	Sampled:	Oct-10-11 16:00					
BTEX by EPA 8021	***Extracted:***	Oct-18-11 11:37					
	Analyzed:	Oct-18-11 16:30					
	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					
Xylenes, Total		ND 0.00100					
Total BTEX		ND 0.00100					

Brent Barron II
Odessa Laboratory Manager

Final 1.000

XENCO Laboratories

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 quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

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

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

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

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 429406,

Project ID: 2006-142

Lab Batch #: 872647 **Sample:** 429406-001 / SMP **Batch:** 1 **Matrix:** Ground Water

Units: mg/L **Date Analyzed:** 10/18/11 16:30

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0278	0.0300	93	80-120	

Lab Batch #: 872647 **Sample:** 612871-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/18/11 13:43

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0264	0.0300	88	80-120	
4-Bromofluorobenzene	0.0263	0.0300	88	80-120	

Lab Batch #: 872647 **Sample:** 612871-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/18/11 12:13

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0280	0.0300	93	80-120	
4-Bromofluorobenzene	0.0276	0.0300	92	80-120	

Lab Batch #: 872647 **Sample:** 612871-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/18/11 12:35

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0252	0.0300	84	80-120	
4-Bromofluorobenzene	0.0279	0.0300	93	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

BS / BSD Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 429406 **Project ID:** 2006-142

Analyst: ASA **Date Prepared:** 10/18/2011 **Date Analyzed:** 10/18/2011

Lab Batch ID: 872647 **Sample:** 612871-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.123	123	0.100	0.0958	96	25	70-125	25	
Toluene	<0.00200	0.100	0.127	127	0.100	0.0995	100	24	70-125	25	H
Ethylbenzene	<0.00100	0.100	0.136	136	0.100	0.107	107	24	71-129	25	H
m_p-Xylenes	<0.00200	0.200	0.275	138	0.200	0.218	109	23	70-131	25	H
o-Xylene	<0.00100	0.100	0.134	134	0.100	0.108	108	21	71-133	25	H

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

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Ben J. Arguijo

Company Name: Basin Environmental Service Technologies, LLC

Company Address: P. O. Box 301

City/State/Zip: Lovington, NM 88260

Telephone No: (575)396-2378 Fax No: (575) 396-1429

Sampler Signature:

e-mail: bjarguijo@basinenv.com

Project Name: Lovington Gathering WTI

Project #: 2006-142

Project Loc: Lea County, NM

PO #: PAA- J. Henry

Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 429406

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
	Goff Dairy - Ctr. Pivot End			10/10/11	1600		3	X		X						GW									X				X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
	10/10/11	1015	Shannon Bynum	10-12-11	10:15
Shannon Bynum	10-12-11	3:10			
			Received by ELOT:	10/12/11	3:10

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 1.5 °C

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

Prelogin / Nonconformance Report - Sample Log-In

Client: Plains

Date/Time: 10/12/11 B 10

Lab ID #: 429406

Initials: -1 +1

Sample Receipt Checklist

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

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	1.5 °C	lbs	°C	lbs	°C	lbs	°C	lbs	°C

Nonconformance Documentation

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

Regarding: _____

_____

Corrective Action Taken: _____

_____

_____

_____

Check all that apply:
- ☐ Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.
- ☐ Initial and Backup Temperature confirm out of temperature conditions
- ☐ Client understands and would like to proceed with analysis

Analytical Report 430928

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

11-NOV-11

Collected By: Client

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

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

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

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

XENCO Laboratories

11-NOV-11

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

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

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 430928. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 430928 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron II
Odessa Laboratory Manager

XENCO Laboratories

Sample Cross Reference 430928

PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

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

CASE NARRATIVE

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

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

Sample receipt non conformances and comments:
None

Sample receipt non conformances and comments per sample:

None

Certificate of Analy Summary 430928

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI

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

Date Received in Lab: Fri Nov-04-11 08:40 am
Report Date: 11-NOV-11
Project Manager: Brent Barron II

Analysis Requested	*Lab Id:*	430928-001		430928-002		430928-003		430928-004		430928-005		430928-006	
	Field Id:	Goff Dairy - Ctr. Pivot Well		Goff Dairy - Ctr. Pivot Beg.		Goff Dairy - Ctr. Pivot End		MW-10		Goff Diary Well		JW Well	
	Depth:												
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	Sampled:	Oct-31-11 09:00		Oct-31-11 09:05		Oct-31-11 09:10		Oct-31-11 11:00		Oct-31-11 11:05		Oct-31-11 11:10	
BTEX by EPA 8021	*Extracted:*	Nov-10-11 12:55		Nov-10-11 12:55		Nov-10-11 12:55		Nov-10-11 12:55		Nov-10-11 12:55		Nov-10-11 12:55	
	Analyzed:	Nov-10-11 15:53		Nov-10-11 16:16		Nov-10-11 16:39		Nov-10-11 17:02		Nov-10-11 17:25		Nov-10-11 17:48	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		ND	0.00100	ND	0.00100	ND	0.00100	0.0530	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	0.00140	0.00100	ND	0.00100	ND	0.00100
m_p-Xylenes		ND	0.00200	ND	0.00200	ND	0.00200	0.0944	0.00200	ND	0.00200	ND	0.00200
o-Xylene		ND	0.00100	ND	0.00100	ND	0.00100	0.00222	0.00100	ND	0.00100	ND	0.00100
Xylenes, Total		ND	0.00100	ND	0.00100	ND	0.00100	0.0966	0.00100	ND	0.00100	ND	0.00100
Total BTEX		ND	0.00100	ND	0.00100	ND	0.00100	0.151	0.00100	ND	0.00100	ND	0.00100

Brent Barron II
Odessa Laboratory Manager

XENCO Laboratories

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 quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

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

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

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

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation. ^ NELAC or State program does not offer Accreditation at this time.

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 430928,

Project ID: 2006-142

Lab Batch #: 874502 **Sample:** 430928-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/10/11 15:53

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0275	0.0300	92	80-120	
4-Bromofluorobenzene	0.0299	0.0300	100	80-120	

Lab Batch #: 874502 **Sample:** 430928-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/10/11 16:16

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0256	0.0300	85	80-120	
4-Bromofluorobenzene	0.0277	0.0300	92	80-120	

Lab Batch #: 874502 **Sample:** 430928-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/10/11 16:39

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0266	0.0300	89	80-120	
4-Bromofluorobenzene	0.0262	0.0300	87	80-120	

Lab Batch #: 874502 **Sample:** 430928-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/10/11 17:02

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0246	0.0300	82	80-120	
4-Bromofluorobenzene	0.0276	0.0300	92	80-120	

Lab Batch #: 874502 **Sample:** 430928-005 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/10/11 17:25

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0256	0.0300	85	80-120	
4-Bromofluorobenzene	0.0277	0.0300	92	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 430928,

Project ID: 2006-142

Lab Batch #: 874502 **Sample:** 430928-006 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/10/11 17:48

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0270	0.0300	90	80-120	
4-Bromofluorobenzene	0.0279	0.0300	93	80-120	

Lab Batch #: 874502 **Sample:** 613959-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/10/11 15:08

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0276	0.0300	92	80-120	
4-Bromofluorobenzene	0.0283	0.0300	94	80-120	

Lab Batch #: 874502 **Sample:** 613959-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/10/11 13:36

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0285	0.0300	95	80-120	
4-Bromofluorobenzene	0.0295	0.0300	98	80-120	

Lab Batch #: 874502 **Sample:** 613959-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/10/11 13:59

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

Lab Batch #: 874502 **Sample:** 430734-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/10/11 19:18

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	0.0313	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.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 430928, **Project ID:** 2006-142

Lab Batch #: 874502 **Sample:** 430734-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/10/11 19:42

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0288	0.0300	96	80-120	
4-Bromofluorobenzene	0.0316	0.0300	105	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

BS / BSD Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 430928 **Project ID:** 2006-142

Analyst: ASA **Date Prepared:** 11/10/2011 **Date Analyzed:** 11/10/2011

Lab Batch ID: 874502 **Sample:** 613959-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0945	95	0.100	0.0962	96	2	70-125	25	
Toluene	<0.00200	0.100	0.0993	99	0.100	0.101	101	2	70-125	25	
Ethylbenzene	<0.00100	0.100	0.107	107	0.100	0.110	110	3	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.218	109	0.200	0.223	112	2	70-131	25	
o-Xylene	<0.00100	0.100	0.107	107	0.100	0.110	110	3	71-133	25	

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

Form 3 - / MSD Recoveries

Project Name: Lovington Gathering WTI

Work Order # : 430928 **Project ID:** 2006-142

Lab Batch ID: 874502 **QC- Sample ID:** 430734-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 11/10/2011 **Date Prepared:** 11/10/2011 **Analyst:** ASA

Reporting Units: mg/L

BTEX by EPA 8021 Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	0.0662	0.100	0.146	80	0.100	0.153	87	5	70-125	25	
Toluene	0.0690	0.100	0.152	83	0.100	0.159	90	5	70-125	25	
Ethylbenzene	0.00873	0.100	0.101	92	0.100	0.106	97	5	71-129	25	
m_p-Xylenes	0.0105	0.200	0.196	93	0.200	0.205	97	4	70-131	25	
o-Xylene	0.00503	0.100	0.0982	93	0.100	0.102	97	4	71-133	25	

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

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

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

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

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

Project Manager: Ben J. Arguijo
Company Name: Basin Environmental Service Technologies, LLC
Company Address: P. O. Box 301
City/State/Zip: Lovington, NM 88260
Telephone No: (575)396-2378 Fax No: (575) 396-1429
Sampler Signature: Dalcotah Wall e-mail: bjarguijo@basinenv.com

Project Name: Lovington Gathering WTI
Project #: 2006-142
Project Loc: Lea County, NM
PO #: PAA- J. Henry
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only) ORDER #: 430928

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TOTAL: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
01	Goff Dairy - Ctr. Pivot Well			10/31/2011	0900		3	X		X						GW									X				X
02	Goff Dairy - Ctr. Pivot Beg.			10/31/2011	0905		3	X		X						GW									X				X
03	Goff Dairy - Ctr. Pivot End			10/31/2011	0910		3	X		X						GW									X				X
04	MW-10			10/31/2011	1100		3	X		X						GW									X				X
05	Goff Dairy Well			10/31/2011	1105		3	X		X						GW									X				X
06	JW Well			10/31/2011	1110		3	X		X						GW									X				X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Dalcotah Wall	11/3/11	1805	Mike Dias	11/3/11	18:05
Mike Dias	11/3/11	2300	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			L. Hernandez	11/4/11	8:40

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?		
by Courier? UPS DHL FedEx Lone Star		

40 mL vcas
Temperature Upon Receipt: 0.5 °C

via drop box

XENCO Laboratories

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

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

Prelogin / Nonconformance Report - Sample Log-In

Client: Plains
Date/Time: 11/4/11 8:40
Lab ID #: 430928
Initials: JH

Sample Receipt Checklist

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

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	0.5 °C	lbs	°C	lbs	°C	lbs	°C	lbs	°C

Nonconformance Documentation

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

Regarding: _____

Corrective Action Taken: _____

Check all that apply:
- ☐ Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.
- ☐ Initial and Backup Temperature confirm out of temperature conditions
- ☐ Client understands and would like to proceed with analysis

Analytical Report 431401

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

23-NOV-11

Collected By: Client

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

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

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

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

XENCO Laboratories

23-NOV-11

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

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

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 431401. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 431401 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron II
Odessa Laboratory Manager

XENCO Laboratories

Sample Cross Reference 431401

PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

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

CASE NARRATIVE

XENCO Laboratories

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

Project ID:	*2006-142*	*Report Date:*	*23-NOV-11*
Work Order Number:	*431401*	*Date Received:*	*11/11/2011*

Sample receipt non conformances and comments:
None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-875271 BTEX by EPA 8021
SW8021BM

Batch 875271, Benzene recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate.
Samples affected are: 431401-011, -012, -013, -007, -010, -014, -001, -002, -003, -004, -008, -009.
The Laboratory Control Sample for Benzene is within laboratory Control Limits

Certificate of Analy. Summary 431401

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI

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

Date Received in Lab: Fri Nov-11-11 01:15 pm
Report Date: 23-NOV-11
Project Manager: Brent Barron II

Analysis Requested													
	Lab Id:	431401-001		431401-002		431401-003		431401-004		431401-005		431401-006	
	Field Id:	MW-1		MW-3		MW-4		MW-5		MW-6		MW-7	
	Depth:												
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	Sampled:	Nov-09-11 11:45		Nov-09-11 12:50		Nov-09-11 11:25		Nov-09-11 12:35		Nov-09-11 12:55		Nov-09-11 15:05	
BTEX by EPA 8021	*Extracted:*	Nov-18-11 15:00		Nov-18-11 15:00		Nov-18-11 15:00		Nov-18-11 15:00		Nov-22-11 11:00		Nov-22-11 11:00	
	Analyzed:	Nov-20-11 23:52		Nov-21-11 00:15		Nov-21-11 00:38		Nov-21-11 01:01		Nov-22-11 14:22		Nov-22-11 14:45	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		ND	0.00100	0.00211	0.00100	ND	0.00100	ND	0.00100	0.00356	0.00100	ND	0.00100
Toluene		ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200
Ethylbenzene		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100
m_p-Xylenes		ND	0.00200	0.00231	0.00200	ND	0.00200	ND	0.00200	0.0388	0.00200	ND	0.00200
o-Xylene		ND	0.00100	0.00114	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100
Xylenes, Total		ND	0.00100	0.00345	0.00100	ND	0.00100	ND	0.00100	0.0388	0.00100	ND	0.00100
Total BTEX		ND	0.00100	0.00556	0.00100	ND	0.00100	ND	0.00100	0.0424	0.00100	ND	0.00100

Brent Barron II
Odessa Laboratory Manager

Certificate of Analysis Summary 431401

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI

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

Date Received in Lab: Fri Nov-11-11 01:15 pm
Report Date: 23-NOV-11
Project Manager: Brent Barron II

Analysis Requested	*Lab Id:*	431401-007		431401-008		431401-009		431401-010		431401-011		431401-012	
	Field Id:	MW-8		MW-9		MW-10		Goff Dairy-Ctr. Pivot Well		Goff Dairy-Ctr. Pivot Beg.		Goff Dairy-Ctr. Pivot End	
	Depth:												
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	Sampled:	Nov-09-11 13:20		Nov-09-11 16:25		Nov-09-11 13:35		Nov-09-11 14:00		Nov-09-11 14:20		Nov-09-11 14:40	
BTEX by EPA 8021	*Extracted:*	Nov-18-11 15:00		Nov-18-11 15:00		Nov-18-11 15:00		Nov-18-11 15:00		Nov-18-11 15:00		Nov-18-11 15:00	
	Analyzed:	Nov-21-11 03:40		Nov-21-11 04:03		Nov-21-11 04:26		Nov-21-11 04:49		Nov-21-11 05:11		Nov-21-11 05:34	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		ND	0.00100	0.00179	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100
Toluene		ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200
Ethylbenzene		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100
m_p-Xylenes		ND	0.00200	0.00349	0.00200	ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200
o-Xylene		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100
Xylenes, Total		ND	0.00100	0.00349	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100
Total BTEX		ND	0.00100	0.00528	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100

Brent Barron II
Odessa Laboratory Manager

Certificate of Analy. Summary 431401

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI

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

Date Received in Lab: Fri Nov-11-11 01:15 pm
Report Date: 23-NOV-11
Project Manager: Brent Barron II

Analysis Requested	*Lab Id:*	431401-013		431401-014					
	Field Id:	Goff Dairy Well		JW Well					
	Depth:								
	Matrix:	WATER		WATER					
	Sampled:	Nov-09-11 13:45		Nov-09-11 13:50					
BTEX by EPA 8021	*Extracted:*	Nov-18-11 15:00		Nov-18-11 15:00					
	Analyzed:	Nov-21-11 05:56		Nov-21-11 06:19					
	Units/RL:	mg/L	RL	mg/L	RL				
Benzene		ND	0.00100	ND	0.00100				
Toluene		ND	0.00200	ND	0.00200				
Ethylbenzene		ND	0.00100	ND	0.00100				
m_p-Xylenes		ND	0.00200	ND	0.00200				
o-Xylene		ND	0.00100	ND	0.00100				
Xylenes, Total		ND	0.00100	ND	0.00100				
Total BTEX		ND	0.00100	ND	0.00100				

Brent Barron II
Odessa Laboratory Manager

XENCO Laboratories

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 quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

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

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

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

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation. ^ NELAC or State program does not offer Accreditation at this time.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 431401,

Project ID: 2006-142

Lab Batch #: 875271 **Sample:** 431401-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/20/11 23:52

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0263	0.0300	88	80-120	

Lab Batch #: 875271 **Sample:** 431401-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/21/11 00:15

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0264	0.0300	88	80-120	

Lab Batch #: 875271 **Sample:** 431401-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/21/11 00:38

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0250	0.0300	83	80-120	

Lab Batch #: 875271 **Sample:** 431401-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/21/11 01:01

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0278	0.0300	93	80-120	
4-Bromofluorobenzene	0.0268	0.0300	89	80-120	

Lab Batch #: 875271 **Sample:** 431401-007 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/21/11 03:40

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0320	0.0300	107	80-120	
4-Bromofluorobenzene	0.0254	0.0300	85	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

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 : 431401,

Project ID: 2006-142

Lab Batch #: 875271 **Sample:** 431401-008 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/21/11 04:03

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0265	0.0300	88	80-120	
4-Bromofluorobenzene	0.0268	0.0300	89	80-120	

Lab Batch #: 875271 **Sample:** 431401-009 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/21/11 04:26

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0276	0.0300	92	80-120	
4-Bromofluorobenzene	0.0267	0.0300	89	80-120	

Lab Batch #: 875271 **Sample:** 431401-010 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/21/11 04:49

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0276	0.0300	92	80-120	
4-Bromofluorobenzene	0.0253	0.0300	84	80-120	

Lab Batch #: 875271 **Sample:** 431401-011 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/21/11 05:11

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0280	0.0300	93	80-120	
4-Bromofluorobenzene	0.0260	0.0300	87	80-120	

Lab Batch #: 875271 **Sample:** 431401-012 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/21/11 05:34

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

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 431401,

Project ID: 2006-142

Lab Batch #: 875271 **Sample:** 431401-013 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/21/11 05:56

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0282	0.0300	94	80-120	
4-Bromofluorobenzene	0.0264	0.0300	88	80-120	

Lab Batch #: 875271 **Sample:** 431401-014 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/21/11 06:19

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0278	0.0300	93	80-120	
4-Bromofluorobenzene	0.0264	0.0300	88	80-120	

Lab Batch #: 875458 **Sample:** 431401-005 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/22/11 14:22

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0293	0.0300	98	80-120	
4-Bromofluorobenzene	0.0278	0.0300	93	80-120	

Lab Batch #: 875458 **Sample:** 431401-006 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/22/11 14:45

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0283	0.0300	94	80-120	
4-Bromofluorobenzene	0.0278	0.0300	93	80-120	

Lab Batch #: 875271 **Sample:** 614388-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/20/11 21:13

SURROGATE RECOVERY STUDY					
BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0273	0.0300	91	80-120	
4-Bromofluorobenzene	0.0256	0.0300	85	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 431401, **Project ID:** 2006-142

Lab Batch #: 875458 **Sample:** 614496-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/22/11 13:36

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0282	0.0300	94	80-120	

Lab Batch #: 875271 **Sample:** 614388-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/20/11 19:42

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0288	0.0300	96	80-120	
4-Bromofluorobenzene	0.0285	0.0300	95	80-120	

Lab Batch #: 875458 **Sample:** 614496-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/22/11 12:03

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0278	0.0300	93	80-120	
4-Bromofluorobenzene	0.0277	0.0300	92	80-120	

Lab Batch #: 875271 **Sample:** 614388-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/20/11 20:05

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0304	0.0300	101	80-120	

Lab Batch #: 875458 **Sample:** 614496-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/22/11 12:26

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0288	0.0300	96	80-120	
4-Bromofluorobenzene	0.0297	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.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 431401,

Project ID: 2006-142

Lab Batch #: 875271 **Sample:** 431400-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/21/11 01:23

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0292	0.0300	97	80-120	
4-Bromofluorobenzene	0.0320	0.0300	107	80-120	

Lab Batch #: 875458 **Sample:** 431537-004 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/22/11 17:48

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0284	0.0300	95	80-120	

Lab Batch #: 875271 **Sample:** 431400-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/21/11 01:46

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0287	0.0300	96	80-120	
4-Bromofluorobenzene	0.0286	0.0300	95	80-120	

Lab Batch #: 875458 **Sample:** 431537-004 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/22/11 18:11

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0294	0.0300	98	80-120	
4-Bromofluorobenzene	0.0296	0.0300	99	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BSD Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 431401 **Project ID:** 2006-142

Analyst: ASA **Date Prepared:** 11/18/2011 **Date Analyzed:** 11/20/2011

Lab Batch ID: 875271 **Sample:** 614388-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.104	104	0.100	0.111	111	7	70-125	25	
Toluene	<0.00200	0.100	0.103	103	0.100	0.112	112	8	70-125	25	
Ethylbenzene	<0.00100	0.100	0.106	106	0.100	0.115	115	8	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.204	102	0.200	0.222	111	8	70-131	25	
o-Xylene	<0.00100	0.100	0.105	105	0.100	0.114	114	8	71-133	25	

Analyst: ASA **Date Prepared:** 11/22/2011 **Date Analyzed:** 11/22/2011

Lab Batch ID: 875458 **Sample:** 614496-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

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

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

Form 3 - MS MSD Recoveries

Project Name: Lovington Gathering WTI

Work Order # : 431401 **Project ID:** 2006-142

Lab Batch ID: 875271 **QC- Sample ID:** 431400-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 11/21/2011 **Date Prepared:** 11/18/2011 **Analyst:** ASA

Reporting Units: mg/L

BTEX by EPA 8021 Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	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	0.0541	0.100	0.190	136	0.100	0.188	134	1	70-125	25	X
Toluene	0.0197	0.100	0.144	124	0.100	0.144	124	0	70-125	25	
Ethylbenzene	0.0110	0.100	0.133	122	0.100	0.136	125	2	71-129	25	
m_p-Xylenes	0.0128	0.200	0.241	114	0.200	0.250	119	4	70-131	25	
o-Xylene	0.00594	0.100	0.126	120	0.100	0.127	121	1	71-133	25	

Lab Batch ID: 875458 **QC- Sample ID:** 431537-004 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 11/22/2011 **Date Prepared:** 11/22/2011 **Analyst:** ASA

Reporting Units: mg/L

BTEX by EPA 8021 Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	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	0.104	104	3	70-125	25	
Toluene	<0.00200	0.100	0.101	101	0.100	0.104	104	3	70-125	25	
Ethylbenzene	<0.00100	0.100	0.105	105	0.100	0.109	109	4	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.209	105	0.200	0.215	108	3	70-131	25	
o-Xylene	<0.00100	0.100	0.104	104	0.100	0.108	108	4	71-133	25	

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

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

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

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

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

Project Manager: Ben J. Arguijo
Company Name: Basin Environmental Service Technologies, LLC
Company Address: P. O. Box 301
City/State/Zip: Lovington, NM 88260
Telephone No: (575)396-2378 Fax No: (575) 396-1429
Sampler Signature: Dakotah Ward e-mail: bjarguijo@basinenv.com

Project Name: Lovington Gathering WTI
Project #: 2006-142
Project Loc: Lea County, NM
PO #: PAA- J. Henry
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 431401

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TOTAL: TPH: 418.1 8015M	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Fluoride	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
001	MW-1			11/9/2011	11:45		3	X		X						GW								X						X
002	MW-3			11/9/2011	12:50		3	X		X						GW								X						X
003	MW-4			11/9/2011	11:25		3	X		X						GW								X						X
004	MW-5			11/9/2011	12:35		3	X		X						GW								X						X
005	MW-6			11/9/2011	12:55		3	X		X						GW								X						X
006	MW-7			11/9/2011	15:05		3	X		X						GW								X						X
007	MW-8			11/9/2011	1320		3	X		X						GW								X						X
008	MW-9			11/9/2011	16:35		3	X		X						GW								X						X
009	MW-10			11/9/2011	1335		3	X		X						GW								X						X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Dakotah Ward	11/11/11	0740	Shannon Bean	11/11/11	7:40
Relinquished by: Shannon Bean	11/11/11	1:15	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Andrea Elam	11.11.11	13:15

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 5.5 °C

Final 1.000

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Ben J. Arguijo
Company Name: Basin Environmental Service Technologies, LLC
Company Address: P. O. Box 301
City/State/Zip: Lovington, NM 88260
Telephone No: (575)396-2378 Fax No: (575) 396-1429
Sampler Signature: Dakota Ward e-mail: bjarguijo@basinenv.com

Project Name: Lovington Gathering WTI
Project #: 2006-142
Project Loc: Lea County, NM
PO #: PAA- J. Henry
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 431401

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge	GW = Groundwater S=Soil/Solid	NP=Non-Potable Specify Other	Analyze For: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
010	Goff Dairy - Ctr. Pivot Well			11/9/2011	2:00		3	X		X						GW										X				X
011	Goff Dairy - Ctr. Pivot Beg.			11/9/2011	2:30		3	X		X						GW										X				X
012	Goff Dairy - Ctr. Pivot End			11/9/2011	2:40		3	X		X						GW										X				X
013	Goff Dairy Well			11/9/2011	1:45		3	X		X						GW										X				X
014	JW Well			11/9/2011	1:50		3	X		X						GW										X				X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Dakota Ward	11/11/11	0740	Shannon Brown	11/11/11	7:40
Relinquished by: Shannon Brown	11/11/11	1:15	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Andrea Elam	11.11.11	13:15

Laboratory Comments:

Sample Containers Intact?	N
VOCs Free of Headspace?	N
Labels on container(s)	N
Custody seals on container(s)	N
Custody seals on cooler(s)	Y
Sample Hand Delivered	N
by Sampler/Client Rep. ?	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 5.5 °C

Prelogin / Nonconformance Report - Sample Log-In

Client: Basin Env. / Plains
Date/Time: 11·11·11 13:15
Lab ID #: 431401
Initials: AE

Sample Receipt Checklist

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

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	5.5 °C	lbs	°C	lbs	°C	lbs	°C	lbs	°C

Nonconformance Documentation

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

Regarding: _____

Corrective Action Taken: _____

Check all that apply:
- ☐ Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.
- ☐ Initial and Backup Temperature confirm out of temperature conditions
- ☐ Client understands and would like to proceed with analysis

Analytical Report 433392

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

22-DEC-11

Collected By: Client

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

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

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

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

22-DEC-11

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

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

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 433392. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 433392 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron II
Odessa Laboratory Manager

Sample Cross Reference 433392

PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

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

CASE NARRATIVE

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

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

Sample receipt non conformances and comments:
None

Sample receipt non conformances and comments per sample:

None
Analytical non nonformances and comments:
Batch: LBA-877549 BTEX by EPA 8021
SW8021BM

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

Certificate of Analysis Summary 433392

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI

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

Date Received in Lab: Wed Dec-14-11 04:15 pm
Report Date: 22-DEC-11
Project Manager: Brent Barron II

Analysis Requested	*Lab Id:*	433392-001		433392-002		433392-003		433392-004			
	Field Id:	MW-9		MW-10		Goff Dairy - Ctr. Pivot Well		Goff Dairy Well			
	Depth:										
	Matrix:	WATER		WATER		WATER		WATER			
	Sampled:	Dec-14-11 08:58		Dec-14-11 09:25		Dec-14-11 11:20		Dec-14-11 12:45			
BTEX by EPA 8021	*Extracted:*	Dec-20-11 12:02		Dec-20-11 12:02		Dec-20-11 12:02		Dec-20-11 12:02			
	Analyzed:	Dec-20-11 15:46		Dec-20-11 16:08		Dec-20-11 16:31		Dec-20-11 16:56			
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL		
Benzene		ND	0.00100	0.00846	0.00100	ND	0.00100	ND	0.00100		
Toluene		ND	0.00200	0.00226	0.00200	ND	0.00200	ND	0.00200		
Ethylbenzene		ND	0.00100	ND	0.00100	ND	0.00100	0.00111	0.00100		
m_p-Xylenes		ND	0.00200	0.0261	0.00200	ND	0.00200	ND	0.00200		
o-Xylene		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100		
Xylenes, Total		ND	0.00100	0.0261	0.00100	ND	0.00100	ND	0.00100		
Total BTEX		ND	0.00100	0.0368	0.00100	ND	0.00100	0.00111	0.00100		

Brent Barron II
Odessa Laboratory Manager

XENCO Laboratories

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 quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

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

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

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

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation. ^ NELAC or State program does not offer Accreditation at this time.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 433392,

Project ID: 2006-142

Lab Batch #: 877549 **Sample:** 433392-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/20/11 15:46

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0258	0.0300	86	80-120	
4-Bromofluorobenzene	0.0241	0.0300	80	80-120	

Lab Batch #: 877549 **Sample:** 433392-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/20/11 16:08

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0255	0.0300	85	80-120	
4-Bromofluorobenzene	0.0241	0.0300	80	80-120	

Lab Batch #: 877549 **Sample:** 433392-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/20/11 16:31

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0216	0.0300	72	80-120	*

Lab Batch #: 877549 **Sample:** 433392-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/20/11 16:56

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0247	0.0300	82	80-120	
4-Bromofluorobenzene	0.0235	0.0300	78	80-120	*

Lab Batch #: 877549 **Sample:** 615713-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/20/11 14:45

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0247	0.0300	82	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 433392,

Project ID: 2006-142

Lab Batch #: 877549 **Sample:** 615713-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/20/11 13:13

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0283	0.0300	94	80-120	

Lab Batch #: 877549 **Sample:** 615713-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/20/11 13:36

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0317	0.0300	106	80-120	
4-Bromofluorobenzene	0.0292	0.0300	97	80-120	

Lab Batch #: 877549 **Sample:** 433392-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/20/11 19:36

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY 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	0.0275	0.0300	92	80-120	

Lab Batch #: 877549 **Sample:** 433392-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/20/11 19:58

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

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BSD Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 433392 **Project ID:** 2006-142

Analyst: ASA **Date Prepared:** 12/20/2011 **Date Analyzed:** 12/20/2011

Lab Batch ID: 877549 **Sample:** 615713-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.101	101	0.100	0.104	104	3	70-125	25	
Toluene	<0.00200	0.100	0.103	103	0.100	0.107	107	4	70-125	25	
Ethylbenzene	<0.00100	0.100	0.110	110	0.100	0.115	115	4	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.228	114	0.200	0.237	119	4	70-131	25	
o-Xylene	<0.00100	0.100	0.109	109	0.100	0.112	112	3	71-133	25	

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

Final 1.000

Form 3 - MS / MSD Recoveries

Project Name: Lovington Gathering WTI

Work Order # : 433392 **Project ID:** 2006-142

Lab Batch ID: 877549 **QC- Sample ID:** 433392-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 12/20/2011 **Date Prepared:** 12/20/2011 **Analyst:** ASA

Reporting Units: mg/L

BTEX by EPA 8021 Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	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	0.0966	97	0.100	0.103	103	6	70-125	25	
Toluene	<0.00200	0.100	0.102	102	0.100	0.106	106	4	70-125	25	
Ethylbenzene	<0.00100	0.100	0.104	104	0.100	0.109	109	5	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.203	102	0.200	0.213	107	5	70-131	25	
o-Xylene	<0.00100	0.100	0.0981	98	0.100	0.103	103	5	71-133	25	

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

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

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

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Ben J. Arguijo

Company Name: Basin Environmental Service Technologies, LLC

Company Address: P. O. Box 301

City/State/Zip: Lovington, NM 88260

Telephone No: (575)396-2378 Fax No: (575) 396-1429

Sampler Signature: Miguel Rivera

e-mail: bjarguijo@basinenv.com

Project Name: Lovington Gathering WTI

Project #: 2006-142

Project Loc: Lea County, NM

PO #: PAA- J. Henry

Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 433392

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge / GW = Groundwater S=Soil/Solid / NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
01	MW-9			12/14/2011	07:58		3	X		X						GW								X					X
02	MW-10			12/14/2011	01:05		3	X		X						GW								X					X
03	Goff Dairy - Ctr. Pivot Well			12/14/2011	11:00		3	X		X						GW								X					X
04	Goff Dairy Well			12/14/2011	12:45		3	X		X						GW								X					X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Miguel Rivera	12/14/11	1330	Miguel Rivera	12/14/11	1330
Miguel Rivera	12.14.11	16:15			
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Andrea Elam	12.14.11	16:15

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep.?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 5.0 °C

Final 1.000

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

Prelogin / Nonconformance Report - Sample Log-In

Client: Basin / Plains

Date/Time: 12.14.11 16:15

Lab ID # : 433372

Initials: AE

Sample Receipt Checklist

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

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	5.0 °C	lbs	°C	lbs	°C	lbs	°C	lbs	°C

Nonconformance Documentation

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

Regarding: _____

Corrective Action Taken: _____

Check all that apply:
- ☐ Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.
- ☐ Initial and Backup Temperature confirm out of temperature conditions
- ☐ Client understands and would like to proceed with analysis

CUSTODY SEAL

DATE 12-14-11

SIGNATURE [signature]

QEC

Quality Environmental Containers

800-255-3950 • 304-255-3900

Analytical Report 433651

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

27-DEC-11

Collected By: Client

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

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

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

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

XENCO Laboratories

27-DEC-11

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

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

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 433651. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 433651 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron II
Odessa Laboratory Manager

XENCO Laboratories

Sample Cross Reference 433651

PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

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

CASE NARRATIVE

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

Project ID:	*2006-142*	*Report Date:*	*27-DEC-11*
Work Order Number:	*433651*	*Date Received:*	*12/19/2011*

Sample receipt non conformances and comments:
None

Sample receipt non conformances and comments per sample:

None
Analytical non nonformances and comments:
Batch: LBA-877812 SVOA PAHs List by SW-846 8270C
SW8270C

Batch 877812, Nitrobenzene-d5 recovered above QC limits Data confirmed by re-analysis. Samples affected are: 615639-1-BKS.
Terphenyl-D14 recovered above QC limits Data confirmed by re-analysis. Samples affected are: 615639-1-BLK,433651-001.

SW8270C

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

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

Certificate of Analy Summary 433651

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI

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

Date Received in Lab: Mon Dec-19-11 10:50 am
Report Date: 27-DEC-11
Project Manager: Brent Barron II

Analysis Requested							
	Lab Id:	433651-001					
	Field Id:	MW-10					
	Depth:						
	Matrix:	WATER					
	Sampled:	Dec-15-11 14:45					
SVOA PAHs List **SUB: TX104704215**	***Extracted:***	Dec-20-11 15:24					
	Analyzed:	Dec-23-11 13:05					
	Units/RL:	mg/L RL					
Acenaphthene		ND 0.0102					
Acenaphthylene		ND 0.0102					
Anthracene		ND 0.0102					
Benzo(a)anthracene		ND 0.0102					
Benzo(a)pyrene		ND 0.0102					
Benzo(b)fluoranthene		ND 0.0102					
Benzo(k)fluoranthene		ND 0.0102					
Benzo(g,h,i)perylene		ND 0.0102					
Chrysene		ND 0.0102					
Dibenz(a,h)anthracene		ND 0.0102					
Fluoranthene		ND 0.0102					
Fluorene		ND 0.0102					
Indeno(1,2,3-c,d)Pyrene		ND 0.0102					
1-Methylnaphthalene		ND 0.00510					
2-Methylnaphthalene		ND 0.0102					
Naphthalene		ND 0.0102					
Phenanthrene		ND 0.0102					
Pyrene		ND 0.0102					

Brent Barron II
Odessa Laboratory Manager

XENCO Laboratories

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 quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

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

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

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

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation. ^ NELAC or State program does not offer Accreditation at this time.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 433651,

Project ID: 2006-142

Lab Batch #: 877812 **Sample:** 433651-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/23/11 13:05

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.0520	0.0510	102	44-117	
2-Fluorophenol	0.0230	0.0510	45	30-100	
Nitrobenzene-d5	0.0527	0.0510	103	46-111	
Phenol-d6	0.0126	0.0510	25	15-94	
Terphenyl-D14	0.0653	0.0510	128	46-126	**
2,4,6-Tribromophenol	0.0535	0.0510	105	48-117	

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

Units: mg/L **Date Analyzed:** 12/23/11 08:25

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.0538	0.0500	108	44-117	
2-Fluorophenol	0.0460	0.0500	92	30-100	
Nitrobenzene-d5	0.0539	0.0500	108	46-111	
Phenol-d6	0.0424	0.0500	85	15-94	
Terphenyl-D14	0.0654	0.0500	131	46-126	**
2,4,6-Tribromophenol	0.0445	0.0500	89	48-117	

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

Units: mg/L **Date Analyzed:** 12/23/11 08:48

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.0572	0.0500	114	44-117	
2-Fluorophenol	0.0476	0.0500	95	30-100	
Nitrobenzene-d5	0.0558	0.0500	112	46-111	**
Phenol-d6	0.0472	0.0500	94	15-94	
Terphenyl-D14	0.0580	0.0500	116	46-126	
2,4,6-Tribromophenol	0.0518	0.0500	104	48-117	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 433651,

Project ID: 2006-142

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

Units: mg/L **Date Analyzed:** 12/23/11 09:12

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.0540	0.0500	108	44-117	
2-Fluorophenol	0.0451	0.0500	90	30-100	
Nitrobenzene-d5	0.0530	0.0500	106	46-111	
Phenol-d6	0.0450	0.0500	90	15-94	
Terphenyl-D14	0.0557	0.0500	111	46-126	
2,4,6-Tribromophenol	0.0495	0.0500	99	48-117	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BSD Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 433651 **Project ID:** 2006-142

Analyst: MCH **Date Prepared:** 12/20/2011 **Date Analyzed:** 12/23/2011

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

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

SVOA PAHs List Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Acenaphthene	<0.0100	0.0500	0.0548	110	0.0500	0.0537	107	2	27-132	31	
Acenaphthylene	<0.0100	0.0500	0.0549	110	0.0500	0.0533	107	3	46-108	25	H
Anthracene	<0.0100	0.0500	0.0504	101	0.0500	0.0494	99	2	47-145	25	
Benzo(a)anthracene	<0.0100	0.0500	0.0515	103	0.0500	0.0506	101	2	33-143	25	
Benzo(a)pyrene	<0.0100	0.0500	0.0510	102	0.0500	0.0510	102	0	65-135	25	
Benzo(b)fluoranthene	<0.0100	0.0500	0.0506	101	0.0500	0.0479	96	5	24-159	25	
Benzo(k)fluoranthene	<0.0100	0.0500	0.0478	96	0.0500	0.0494	99	3	25-125	25	
Benzo(g,h,i)perylene	<0.0100	0.0500	0.0472	94	0.0500	0.0464	93	2	65-135	25	
Chrysene	<0.0100	0.0500	0.0542	108	0.0500	0.0530	106	2	65-135	25	
Dibenz(a,h)anthracene	<0.0100	0.0500	0.0538	108	0.0500	0.0533	107	1	50-125	25	
Fluoranthene	<0.0100	0.0500	0.0523	105	0.0500	0.0513	103	2	47-125	25	
Fluorene	<0.0100	0.0500	0.0540	108	0.0500	0.0525	105	3	48-139	25	
Indeno(1,2,3-c,d)Pyrene	<0.0100	0.0500	0.0541	108	0.0500	0.0535	107	1	27-160	25	
Naphthalene	<0.0100	0.0500	0.0504	101	0.0500	0.0490	98	3	26-175	25	
Phenanthrene	<0.0100	0.0500	0.0476	95	0.0500	0.0464	93	3	65-135	25	
Pyrene	<0.0100	0.0500	0.0524	105	0.0500	0.0513	103	2	23-152	31	

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

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Ben J. Arguijo

Company Name: Basin Environmental Service Technologies, LLC

Company Address: P. O. Box 301

City/State/Zip: Lovington, NM 88260

Telephone No: (575)396-2378 Fax No: (575) 396-1429

Sampler Signature:

e-mail: bjarguijo@basinenv.com

Project Name: Lovington Gathering WTI

Project #: 2006-142

Project Loc: Lea County, NM

PO #: PAA- J. Henry

Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)

ORDER #: 433651

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge; GW = Groundwater S=Soil/Solid; NP=Non-Potable Specify Other	Analyze For: TCLP: TOTAL: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260 X	RCI	PAH X	Fluoride	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
01	MW-10			12/15/2011	1445		1	X								GW													

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
	12/19/11	10:50			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Andrea Elam	12-19-11	10:50

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	NA
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Lamber

Temperature Upon Receipt: 0 °C

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

Prelogin / Nonconformance Report - Sample Log-In

Client: Basin / Plains

Date/Time: 12 19 11 10.30

Lab ID #: 433651

Initials: AE

Sample Receipt Checklist

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

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	( ) °C	lbs	°C	lbs	°C	lbs	°C	lbs	°C

Nonconformance Documentation

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

Regarding: _____

_____

Corrective Action Taken: _____

_____

_____

_____

Check all that apply:
- ☐ Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.
- ☐ Initial and Backup Temperature confirm out of temperature conditions
- ☐ Client understands and would like to proceed with analysis

Appendix B

Release Notification &

Corrective Action (Form C-141)

District I
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? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Pat Caperton	
By Whom? Camille Reynolds	Date and Hour 4-21-2006 @ 15:35	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken Internal corrosion while purging the line resulted in release of sweet crude oil. The line has been purged. The line is an idle 6-inch steel gathering line. The pressure on the line was approximately 50 psi and the gravity of the sweet crude oil was 34. The sweet crude has an H_2S 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 ft^2.

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: Camille Reynolds	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: / Attached ☐
Date: 4/26/2006 Phone:505-441-	