AP - 96

ANNUAL MONITORING REPORT

YEAR(S): 2009

PLAINS
ALL AMERICAN

March 30, 2010

RECEIVED

APR - 1 2010

Environmental Bureau
Oil Conservation Division

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

Re: Plains All American – 2009 Annual Monitoring Reports
4 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	1RP-838	AP-96	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
Ballard Grayburg 5-Inch	2R-0053		Section 10, T18S, R29E, Eddy County

Basin Environmental Consulting, 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

Jason Henry
Remediation Coordinator
Plains All American

CC: Larry Johnson, NMOCD, Hobbs, NM
Enclosures

Basin Environmental Consulting, LLC

2800 Plains Highway
P. O. Box 381
Lovington, New Mexico 88260
cdstanley@basin-consulting.com
Office: (575) 396-2378 Fax: (575) 396-1429

Effective Solutions

2009
ANNUAL MONITORING REPORT

LOVINGTON GATHERING WTI
SE ¼ NE ¼ SECTION 6, TOWNSHIP 17 SOUTH, RANGE 37 EAST
LATITUDE 32°, 51', 56.0" NORTH, LONGITUDE 103°, 17', 07.2" WEST
LEA COUNTY, NEW MEXICO
PLAINS SRS NUMBER: 2006-0142
NMOCD REF: 1RP-838 / AP-96

PREPARED FOR:

PLAINS

PLAINS MARKETING, L.P.
333 CLAY STREET, SUITE 1600
HOUSTON, TEXAS 77002

PREPARED BY:

BASIN ENVIRONMENTAL CONSULTING, LLC
P. O. Box 381
Lovington, New Mexico 88260

March 2010

Curt D. Stanley
Project Manager

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INTRODUCTION

Basin Environmental Consulting, LLC (Basin), on behalf of Plains Marketing, L.P., (Plains), prepared this annual report in compliance with the New Mexico Oil Conservation Division (NMOCD) letter of May 1998, requiring submittal of an annual report by April 1 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 the quarterly groundwater monitoring events conducted in calendar year 2009 only. Site activities and remedial work are summarized in several letters and reports previously submitted to the NMOCD. For reference, the Site Location Map is provided as Figure 1.

At the request of the NMOCD, initial groundwater monitoring was conducted during the 4th quarter of 2006 to assess any potential groundwater impact from dissolved phase benzene, toluene, ethylbenzene, and xylene (BTEX) constituents. The groundwater monitoring event consisted of measuring static water levels in the monitoring wells, checking of the presence of phase-separated hydrocarbons (PSH) on the water column, and purging and sampling of each well exhibiting sufficient recharge. Based on the results of the initial monitoring and sampling event, Plains placed this site on a quarterly groundwater monitoring program.

SITE DESCRIPTION AND BACKGROUND INFORMATION

The legal description of the site is SE¼, NE¼ Section 6, Township 17 South, Range 37 East. The site latitude is 32°, 51', 56.0" North and the site longitude is 103°, 17', 07.2" West. On April 21, 2006, Basin responded to the 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 Plains pipeline and eight (8) barrels were recovered resulting in a net loss of four (4) barrels of crude oil. The excavated area was fenced 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 surface stained area covering approximately thirty (30) feet in length by twenty-seven (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 6-mil poly-liner for future remedial action. Utilizing olfactory, visual and photo ionization detector (PID) technology it was determined Volatile Organic Compounds (VOCs) 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 monitoring 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. The analytical results of the selected soil samples did not indicate BTEX or total petroleum hydrocarbon (TPH) concentrations above the 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.

The 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. The analytical results of soil samples collected during the installation of monitor well MW-8 indicated benzene and BTEX concentrations were less than the laboratory MDL and the NMOCD regulatory standard of 10 mg/Kg and 50 mg/Kg for benzene and BTEX, respectively. The 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 standard) 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. The 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 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. The analytical results of the soil samples collected during the installation of monitor well MW-10 indicated benzene, BTEX and TPH concentrations were less than the NMOCD regulatory standard in the seven (7) laboratory submitted soil samples.

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

FIELD ACTIVITIES

No PSH was detected in any of the site monitor wells during the 2009 reporting period.

The site monitoring wells were gauged and sampled March 3, June 18, September 1 and December 18, 2009. During these 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 at an NMOCD approved disposal in Monument, New Mexico.

Locations of the groundwater monitoring wells and the inferred groundwater elevations were constructed from the measurements collected during the 2009 quarterly sampling events, are depicted on Figures 2A through 2D. The 2009 groundwater elevation data is provided as Table 1.

The Groundwater Gradient Map, Figure 2D, indicates a general gradient of approximately 0.0011 feet/foot to the south-southeast as measured between groundwater monitor wells MW-1 and MW-9. The corrected groundwater elevation ranged between 3,725.06 and 3,720.41 feet above mean sea level, in monitor well MW-1 on March 3, 2009 and in monitor well MW-9 on September 1, 2009, respectively.

LABORATORY RESULTS

Groundwater samples were collected from the groundwater monitoring wells (MW-1 through MW-10) during the quarterly monitoring events were delivered to Xenco Laboratories, formerly Environmental Laboratory of Texas, Odessa, Texas for determination of benzene, toluene, ethylbenzene and xylenes (BTEX) constituent concentrations by EPA Method SW846-8021b. Pursuant to an NMOCD request, the groundwater monitoring wells were sampled annually for concentrations of Poly Aromatic Hydrocarbons (PAH) utilizing EPA Method SW 8270C. A summary of BTEX constituent concentrations and PAH constituent concentrations for 2009 are presented in Table 2 and Table 3, respectively. The laboratory reports are provided as Appendix A.

Monitor well MW-1 is sampled on a quarterly schedule and analytical results indicate concentrations of benzene, toluene, ethylbenzene, and total xylene were less than the laboratory MDL and NMOCD regulatory standard during all four (4) quarters of the 2009 reporting period. Analytical results indicate PAH constituent concentrations were less than the laboratory MDL for each constituent during the 4th quarter of the reporting period.

Monitor well MW-2 is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from 0.0097 mg/L during the 2nd quarter to 0.084 mg/L during the 3rd quarter of 2009. Benzene concentrations were above the NMOCD regulatory standard during the 1st, 3rd and 4th quarters of the reporting period. Toluene and ethylbenzene concentrations were less than the NMOCD regulatory standard for all four (4) quarters of the reporting period. Total xylene concentrations ranged from less than the laboratory MDL during the 2nd quarter to 0.0095 mg/L during the 4th quarter of 2009. Total xylene concentrations were less than the NMOCD regulatory standard during all four (4) quarters of the reporting period. Analytical results indicate PAH constituent concentrations were less than the laboratory MDL for each constituent during the 4th quarter of the reporting period.

Monitor well MW-3 is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from less than the laboratory MDL during the 4th quarter to 1.367 mg/L during the 1st quarter of 2009. Benzene concentrations were above NMOCD regulatory standards

during the 1st quarter of the reporting period. Toluene concentrations ranged from less than the laboratory MDL during the 2nd and 4th quarters to 0.0305 mg/L during the 1st quarter of 2009. Toluene concentrations were less than NMOCD regulatory standard during all four (4) quarters of the reporting period. Ethylbenzene concentrations ranged from less than the laboratory MDL during the 2nd, 3rd and 4th quarters to 0.0251 mg/L during the 1st quarter of 2009. Ethylbenzene concentrations were less than the NMOCD regulatory standard for all four (4) quarters of the reporting period. Total xylene concentrations ranged from less than the laboratory MDL during the 2nd and 4th quarters to 0.0331 mg/L during the 1st quarter of 2009. Total xylene concentrations were less than the NMOCD regulatory standard for all four (4) quarters of the reporting period. Analytical results indicate PAH constituent concentrations were less than the laboratory MDL for each constituent during the 4th quarter of the reporting period.

Monitor well MW-4 is sampled on a quarterly schedule and analytical results indicate concentrations of benzene, toluene, ethylbenzene and total xylene were less than the laboratory MDL and NMOCD regulatory standard during all four (4) quarters of the 2009 reporting period. Analytical results indicate PAH constituent concentrations were less than the laboratory MDL for each constituent during the 4th quarter of the reporting period.

Monitor well MW-5 is sampled on a quarterly schedule and analytical results indicate BTEX constituent concentrations were less than the laboratory MDL and NMOCD regulatory standard for each BTEX constituent during all four (4) quarters of the 2009 reporting period. Analytical results indicate PAH constituent concentrations were less than the laboratory MDL for each constituent during the 4th quarter of the reporting period.

Monitor well MW-6 is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from less than the laboratory MDL during the 1st and 3rd quarters to 0.013 mg/L during the 4th quarter of 2009. Benzene concentrations were above NMOCD regulatory standard during the 4th quarter of the reporting period. Toluene, ethylbenzene and xylene concentrations were less than the laboratory MDL and NMOCD regulatory standard for all four (4) quarters of the 2009 reporting period. Analytical results indicate PAH constituent concentrations were less than the laboratory MDL for each constituent during the 4th quarter of the reporting period.

Monitor well MW-7 is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from less than the laboratory MDL during the 4th quarter to 0.0775 mg/L during the 1st quarter of 2009. Benzene concentrations were above NMOCD regulatory standard during the 1st, 2nd, and 3rd quarters of the reporting period. Toluene and ethylbenzene concentrations were less than the laboratory MDL and NMOCD regulatory standard for all four (4) quarters of the 2009 reporting period. Total xylene concentrations ranged from less than the laboratory MDL the 3rd and 4th quarters to 0.329 mg/L during the 2nd quarter of 2009. Total xylene concentrations were less than the NMOCD regulatory standard for all four (4) quarters of the 2009 reporting period. Analytical results indicate PAH constituent concentrations were less than the laboratory MDL for each constituent during the 4th quarter of the reporting period.

On December 7 through 10, 2009, monitor well MW-7 was reinstalled as a four (4) inch monitor well and deepened to a total depth of one-hundred five (105) feet bgs. This activity was

undertaken to increase the available volume of water within the monitor well casing. Additional details will be discussed below in the "Anticipated Actions" section of this Annual Report.

Monitor well MW-8 is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from less than the laboratory MDL during the 4th quarter to 0.0284 mg/L during the 1st quarter of 2009. Benzene concentrations were above the NMOCD regulatory standard during the 1st and 3rd quarters of the reporting period. Toluene concentrations were less than the laboratory MDL and NMOCD regulatory standard during all four (4) quarters of the 2009 reporting period. Ethylbenzene concentrations ranged from less than the laboratory MDL during the 1st and 4th quarters to 0.0016 mg/L during the 2nd quarter of 2009. Ethylbenzene concentrations were less than the NMOCD regulatory standard for all four (4) quarters of the reporting period. Total xylene concentrations ranged less than the laboratory MDL during the 4th quarter to 0.0141 mg/L during the 3rd quarter of 2009. Total xylene concentrations were less than the NMOCD regulatory standard for all four (4) quarters of the reporting period. Analytical results indicate PAH constituent concentrations were less than the laboratory MDL for each constituent during the 4th quarter of the reporting period.

Monitor well MW-9 is sampled on a quarterly schedule and analytical results indicate benzene concentrations ranged from less than the laboratory MDL during the 1st, 2nd and 4th quarters to 0.9717 mg/L during the 3rd quarter of 2009. Benzene concentrations were above the NMOCD regulatory standard during the 3rd quarter of the reporting period Toluene concentrations ranged from less than the laboratory MDL during the 1st, 2nd and 4th quarters to 0.0641 mg/L during the 3rd quarter of 2009. Toluene concentrations were less than NMOCD regulatory standard during all four (4) quarters of the reporting period. Ethylbenzene concentrations were less than the laboratory MDL and NMOCD regulatory standard for all four (4) quarters of the reporting period. Total xylene concentrations ranged from less than the laboratory MDL during the 1st, 2nd and 4th quarters to 0.0422 mg/L during the 3rd quarter of 2009. Total xylene concentrations were less than the NMOCD regulatory standard during all four (4) quarters of the reporting period. Analytical results indicate PAH constituent concentrations were less than the laboratory MDL for each constituent during the 4th quarter of the reporting period.

On December 7 through 10, 2009, monitor well MW-9 was reinstalled as a four (4) inch monitor well and deepened to a total depth of one-hundred five (105) feet bgs. This activity was undertaken to increase the available volume of water within the monitor well casing. Additional details will be discussed below in the "Anticipated Actions" section of this Annual Report.

Monitor well MW-10 was installed on October 28, 2009 and will be sampled on a quarterly schedule. The analytical results indicate benzene, toluene, ethylbenzene and total xylene concentrations were less than the laboratory MDL during the initial groundwater chemistry sampling event, conducted on November 2, 2009. A monitor well log is provided as Appendix B.

The analytical results for volatile organic compounds using EPA method 8260, indicated all reported constituent concentrations were less than the appropriate laboratory MDL. A summary of Concentrations of Volatile Organic Compounds in Water is provided as Table 4.

The analytical results for RCRA and NMWQCC metals using EPA SW826-6020A and EPA 7470A, indicated all reported constituent concentrations were less than the appropriate laboratory MDL, with the exception of chromium, which exhibited a concentration of 0.053 mg/L. The chromium concentration is marginally above the NMWQCC drinking water standard (Sections 1-101.UU and 3-103.A.) of 0.05 mg/L. A summary of Concentrations of RCRA and NMWQCC Metals in Groundwater is provided as Table 5.

The analytical results for anions and cations using EPA SW375.4, 325.3 310,160.1 and SW846 6010B, indicated all NMWQCC regulatory constituent concentrations were less than the maximum contaminant level NMWQCC drinking water standards, with the exception fluoride, which exhibited a concentration of 9.27 mg/L. The maximum contaminant level NMWQCC drinking water standard for fluoride is 1.6 mg/L. A summary of Concentrations of Anions/Cations in Groundwater is provided as Table 6.

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.

SUMMARY

Based on the depth of hydrocarbon impact at this site, the NMOCD requested quarterly groundwater sampling events to be conducted at this site. No PSH was detected in any of the site monitor wells during the 2009 reporting period.

Currently, there are ten (10) groundwater monitoring wells (MW-1 through MW-10) on-site. The Groundwater Gradient Map Figure 2D, indicates a general gradient of approximately 0.0011 feet/foot to the south-southeast as measured between groundwater monitor wells MW-1 and MW-9.

Laboratory analytical results obtained during the 4^{th} quarter groundwater sampling event in December 2009 indicated benzene and BTEX constituent concentrations were less than the laboratory MDL for groundwater monitor wells MW-1, MW-3, MW-4, MW-5, MW-7, MW-8, MW-9 and MW-10. Analytical results indicate benzene concentrations were above the NMOCD regulatory standard for groundwater monitor wells MW-2 and MW-6 at concentrations of 0.0129 mg/L and 0.013 mg/L, respectively. However, toluene, ethylbenzene and total xylene concentrations were less than the NMOCD regulatory standard.

On August 18, 2008, a Stage 1 and Stage 2 Abatement Plan was submitted to the NMOCD Santa Fe Office. On December 14, 2009, Plains received an email from the NMOCD Santa Fe Office indicating, the submitted Lovington Gathering WTI Stage 1 and Stage 2 Abatement Plan was administratively complete and approved the proposed Public Notice as submitted. On February 9, 2010, Plains received an email from the NMOCD Santa Fe Office, indicating the NMOCD had conditionally approved the Stage 1 and Stage 2 Abatement Plan (AP-96) in accordance with 19.15.30.16 NMAC. In the conditional approval, the NMOCD required Plains submit an amended Stage 2 Abatement Plan to address dissolved phase issues at the site to the OCD within 90 days (May 9, 2010).

ANTICIPATED ACTIONS

Quarterly monitoring and groundwater sampling will continue in the reporting year 2010.

Plains anticipates, an enhanced dissolved phased hydrocarbon recovery system will be installed at the Lovington Gathering WTI release site in the 1st half of 2010. The system will employ two (2) total fluid remediation pumps installed in monitor wells MW-7 and MW-9. The pumps have the capacity to pump approximately seven-hundred (700) gallons of groundwater per day for combined output of approximately 1,400 gallons (35 water barrels) per day. The recovered water will be collected in a one-thousand (1,000) gallon poly tank located on the site. An automated transfer pump will transport the water approximately ¼ mile to the north of the site to a four (4) inch poly line which terminates at the Three Forks Salt Water Disposal Facility. The four (4) inch poly line transports recovered water from the Plains C.S. Caylor (NMOCD AP-052) release site, located approximately ¼ mile north of the Lovington Gathering WTI release site. Recovered water from the C.S. Caylor and Lovington Gathering WTI release sites will be metered separately and the two (2) systems will operate independently.

Plains anticipates the removal of the groundwater containing dissolved phase hydrocarbons will assist in abating the groundwater issues at the Lovington Gathering WTI release site, as well as maintaining contaminant plume control. The actual volume of groundwater pumped from the release site will be dependent on the groundwater recharge rate of the monitor wells, which may fluctuate seasonally.

LIMITATIONS

Basin has prepared this Annual 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 has relied on oral statements made by certain individuals. Basin has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements 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 also 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. 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 and/or Plains.

DISTRIBUTION

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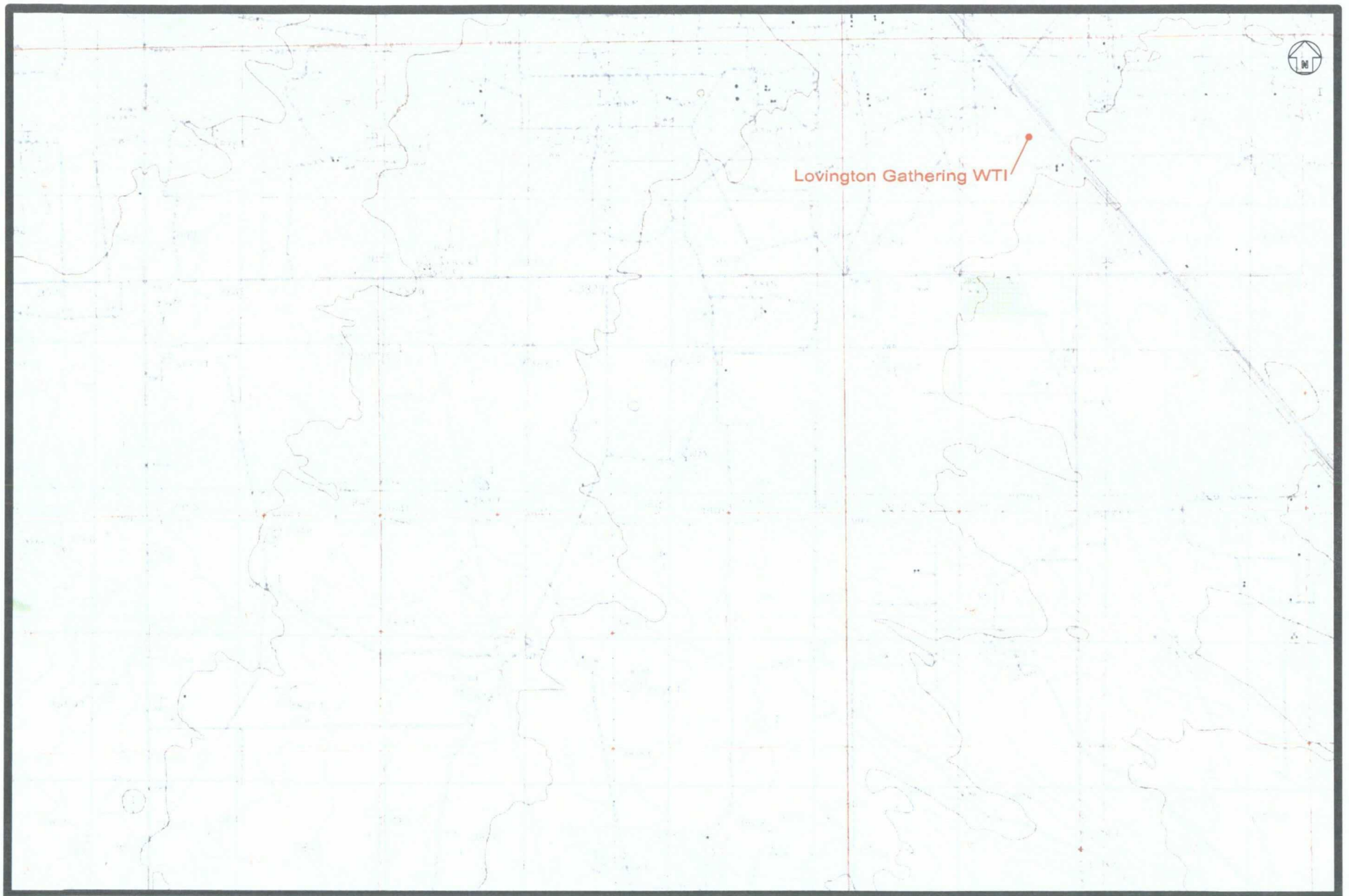
cdstanley@basin-consulting.com

Copy Number:_____

Figures



3000 1500 0 1500 3000

Distance in Feet

Unit Letter "H", Section 6, Township 17 South, Range 37 East

Figure 1
Site Location Map
Lovington Gathering WTI
Plains Marketing, L.P.
Lea County, New Mexico
1RP-838

Basin Environmental Consulting

Prep By: CDS	Checked By: CDS
December 22, 2009	Scale 1"=3000'

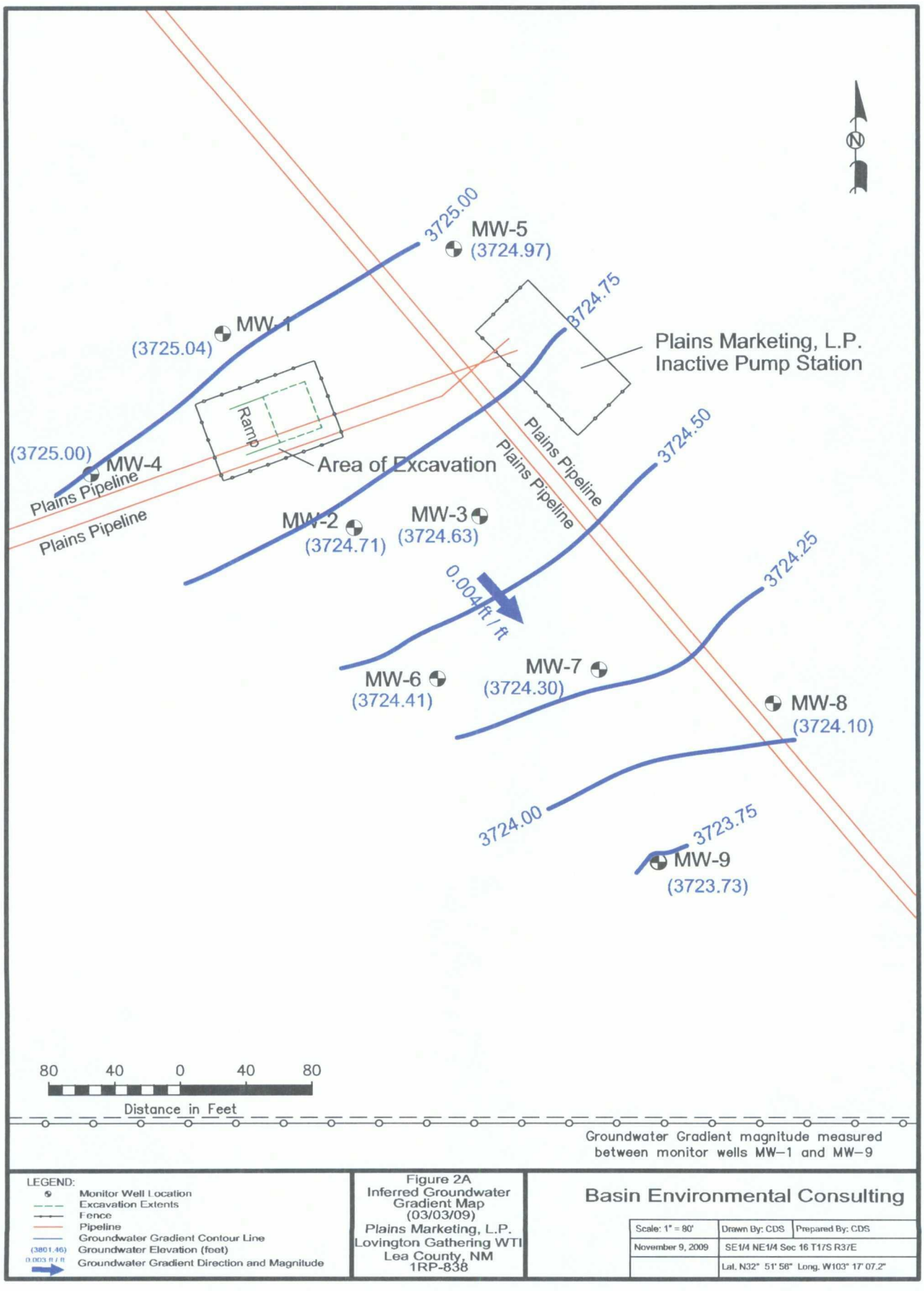


Figure 2A
Inferred Groundwater Gradient Map
(03/03/09)
Plains Marketing, L.P.
Lovington Gathering WTI
Lea County, NM
1RP-838

Basin Environmental Consulting

Scale: 1" = 80'	Drawn By: CDS	Prepared By: CDS
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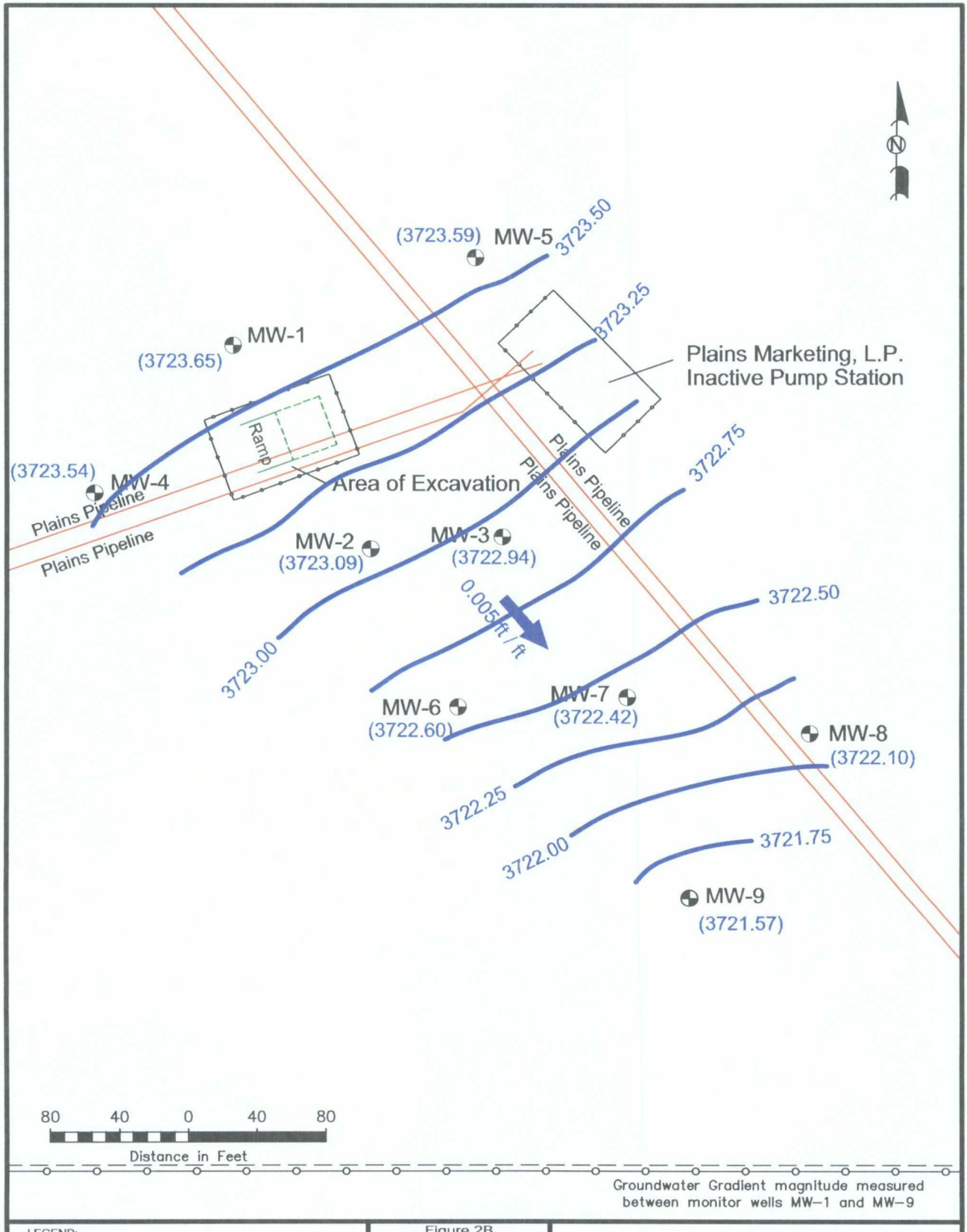
	Lat. N32° 51' 56" Long. W103° 17' 07.2"	



LEGEND:
- Monitor Well Location
- Excavation Extents
- Fence
- Pipeline
- Groundwater Gradient Contour Line
- (3801.46) Groundwater Elevation (feet)
- 0.003 ft / ft Groundwater Gradient Direction and Magnitude

Figure 2B
Inferred Groundwater Gradient Map
(06/18/09)
Plains Marketing, L.P.
Lovington Gathering WTI
Lea County, NM
1RP-838

Basin Environmental Consulting

Scale: 1" = 80'	Drawn By: CDS	Prepared By: CDS
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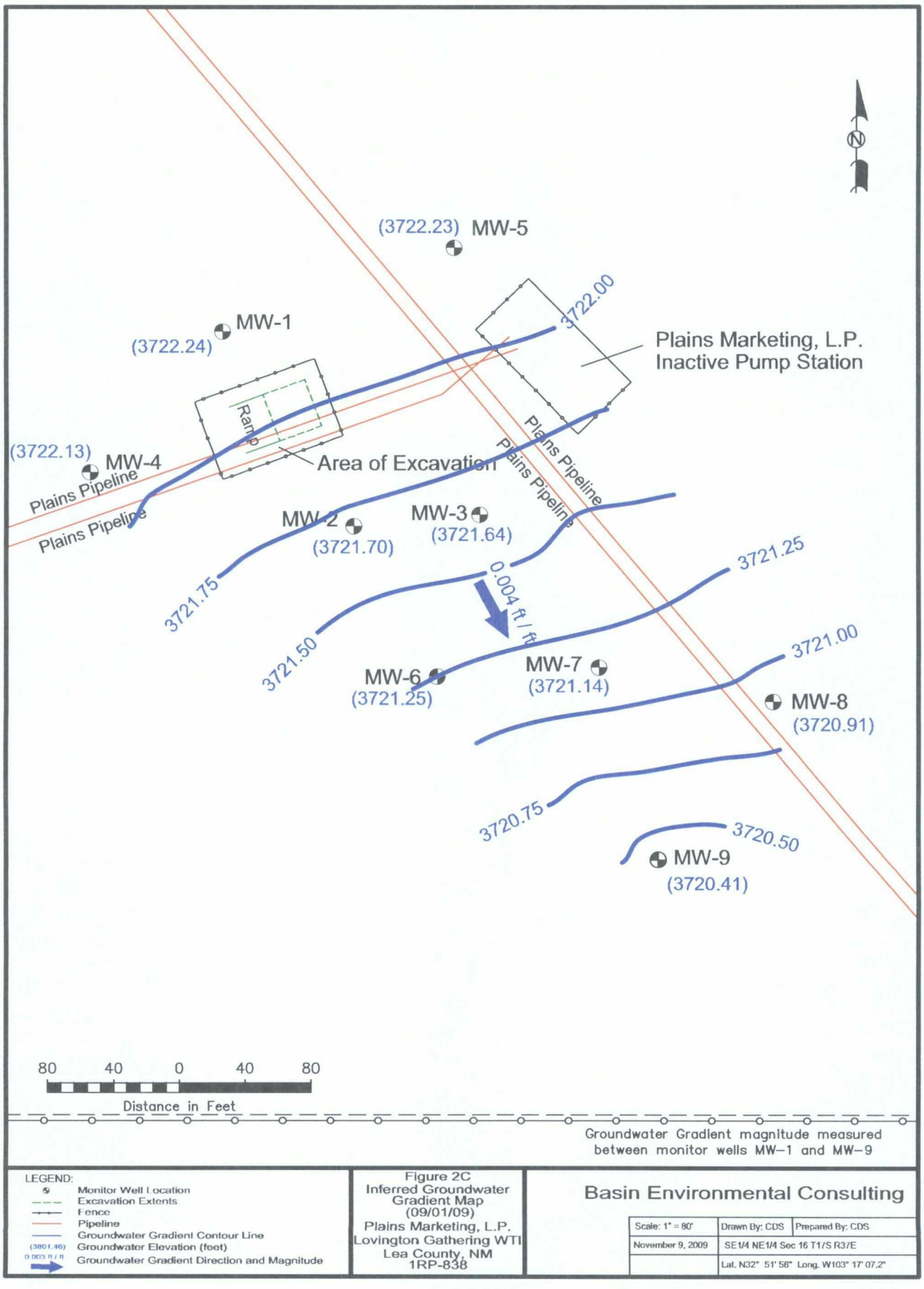

LEGEND:
- Monitor Well Location
- Excavation Extents
- Fence
- Pipeline
- Groundwater Gradient Contour Line
- (3801.46) Groundwater Elevation (feet)
- 0.003 ft / ft Groundwater Gradient Direction and Magnitude

Figure 2C
Inferred Groundwater Gradient Map
(09/01/09)
Plains Marketing, L.P.
Lovington Gathering WTI
Lea County, NM
1RP-838

Basin Environmental Consulting

Scale: 1" = 80'	Drawn By: CDS	Prepared By: CDS
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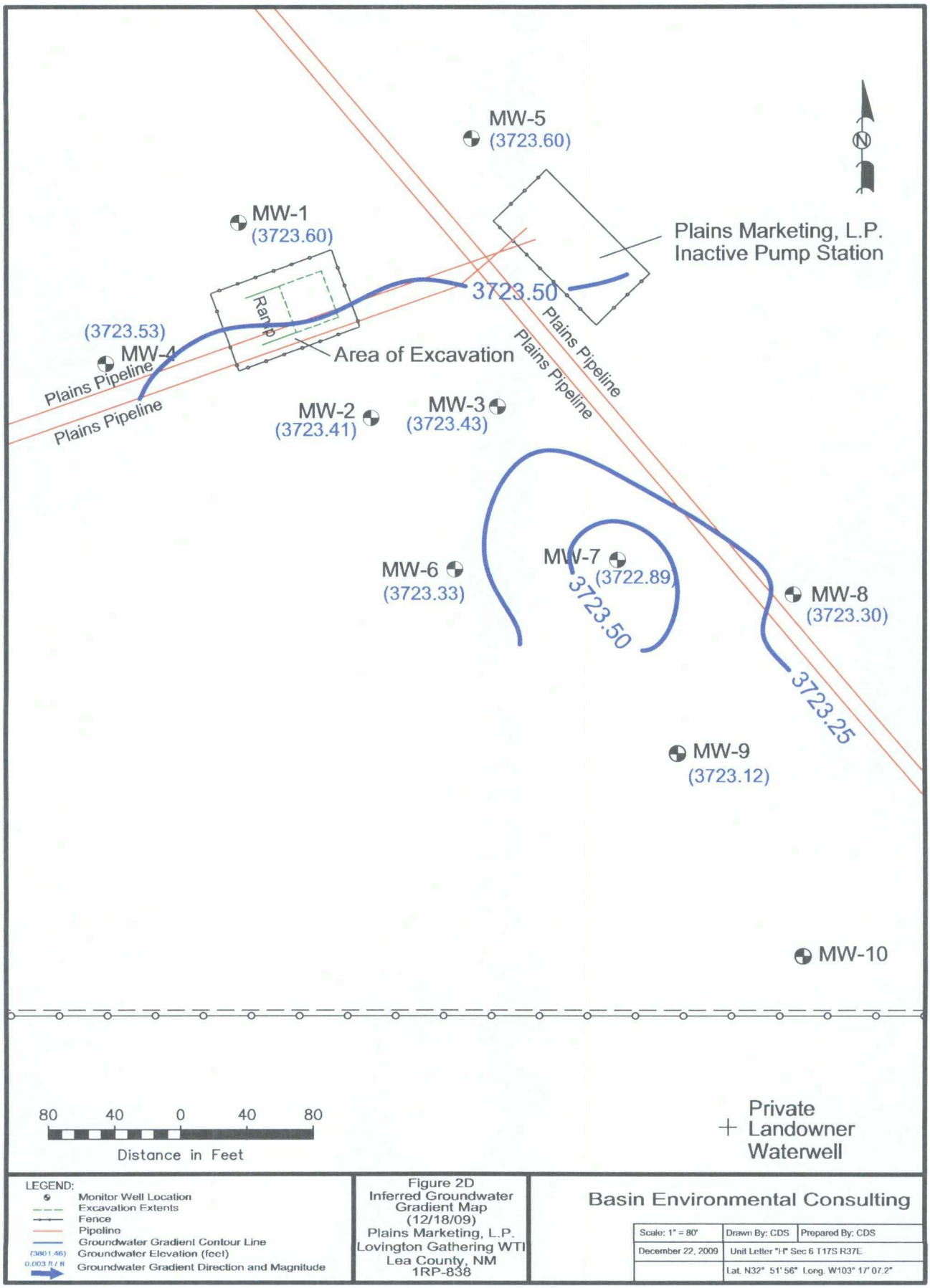

Figure 2D
Inferred Groundwater Gradient Map
(12/18/09)
Plains Marketing, L.P.
Lovington Gathering WTI
Lea County, NM
1RP-838

Basin Environmental Consulting

Scale: 1" = 80'	Drawn By: CDS	Prepared By: CDS
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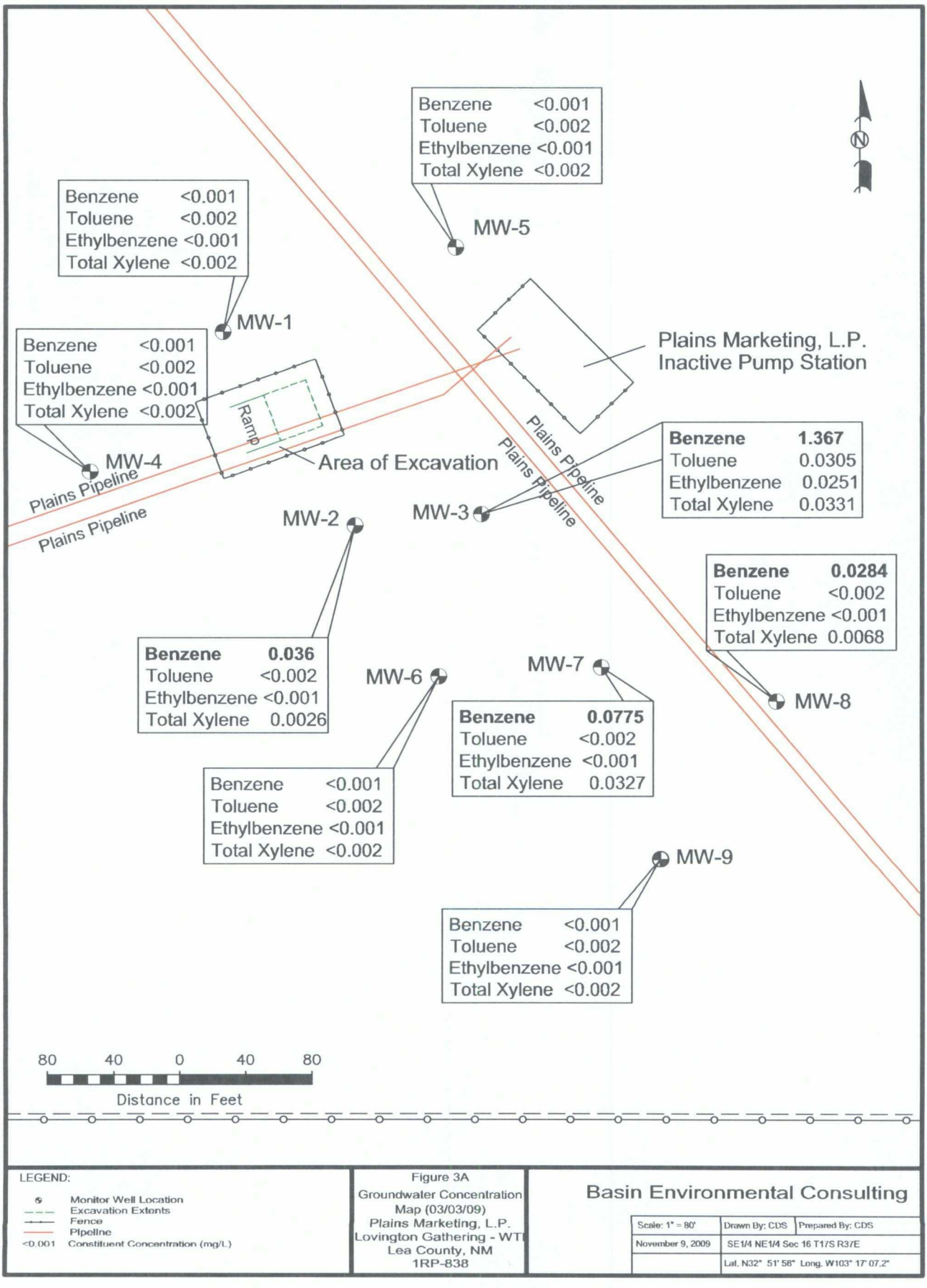


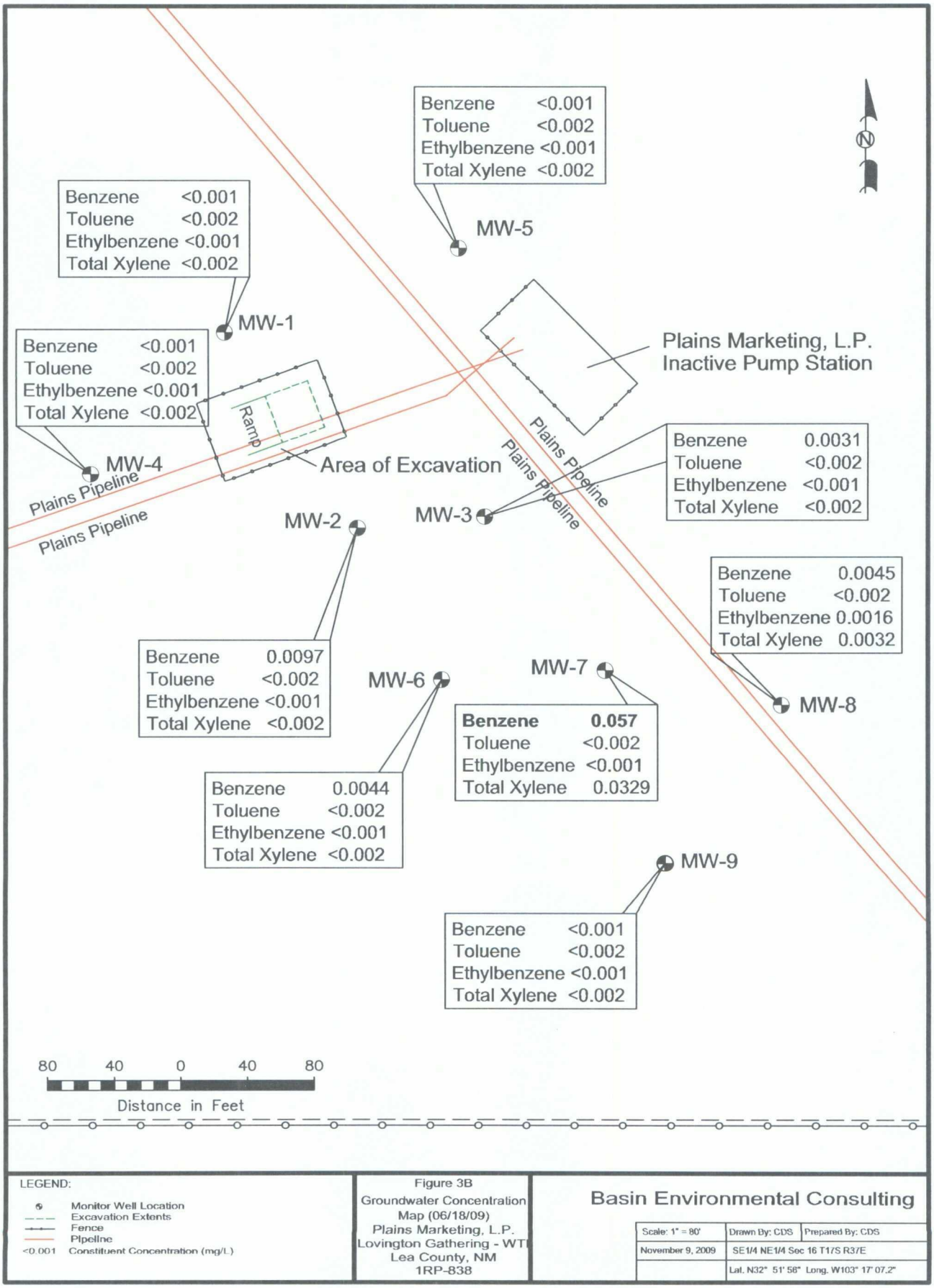
LEGEND:

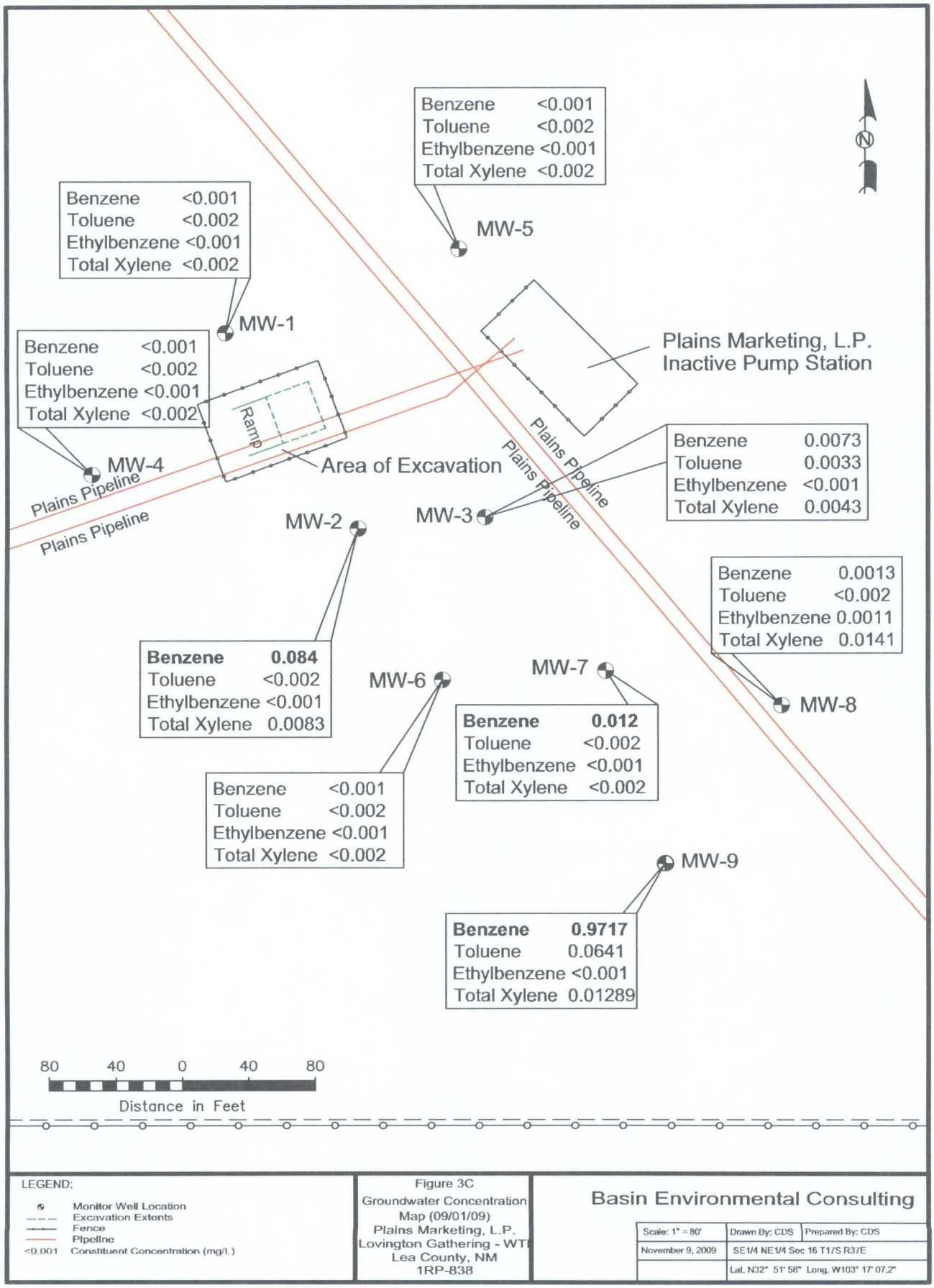
- Monitor Well Location
- Excavation Extents
- Fence
- Pipeline
- <0.001 Constituent Concentration (mg/L)

Figure 3A
Groundwater Concentration Map (03/03/09)
Plains Marketing, L.P.
Lovington Gathering - WTI
Lea County, NM
1RP-838

Basin Environmental Consulting

Scale: 1" = 80'	Drawn By: CDS	Prepared By: CDS
November 9, 2009	SE1/4 NE1/4 Sec 16 T17S R3/E	
	Lat. N32° 51' 56" Long. W103° 17' 07.2"	


Benzene <0.001
Toluene <0.002
Ethylbenzene <0.001
Total Xylene <0.002
MW-5
Benzene <0.001
Toluene <0.002
Ethylbenzene <0.001
Total Xylene <0.002
MW-1
Benzene <0.001
Toluene <0.002
Ethylbenzene <0.001
Total Xylene <0.002
MW-4
Ramp
Area of Excavation
Plains Marketing, L.P.
Inactive Pump Station
Plains Pipeline
Plains Pipeline
Plains Pipeline
Plains Pipeline
Benzene 0.0031
Toluene <0.002
Ethylbenzene <0.001
Total Xylene <0.002
MW-3
MW-2
Benzene 0.0045
Toluene <0.002
Ethylbenzene 0.0016
Total Xylene 0.0032
MW-8
Benzene 0.0097
Toluene <0.002
Ethylbenzene <0.001
Total Xylene <0.002
MW-6
MW-7
Benzene 0.057
Toluene <0.002
Ethylbenzene <0.001
Total Xylene 0.0329
Benzene 0.0044
Toluene <0.002
Ethylbenzene <0.001
Total Xylene <0.002
MW-9
Benzene <0.001
Toluene <0.002
Ethylbenzene <0.001
Total Xylene <0.002
N
80 40 0 40 80
Distance in Feet
LEGEND:
Monitor Well Location
Excavation Extents
Fence
Pipeline
<0.001 Constituent Concentration (mg/L)
Figure 3B
Groundwater Concentration Map (06/18/09)
Plains Marketing, L.P.
Lovington Gathering - WT
Lea County, NM
1RP-838
Basin Environmental Consulting
Scale: 1" = 80'
Drawn By: CDS
Prepared By: CDS
November 9, 2009
SE1/4 NE1/4 Sec 16 T17S R37E
Lat. N32° 51' 58" Long. W103° 17' 07.2"



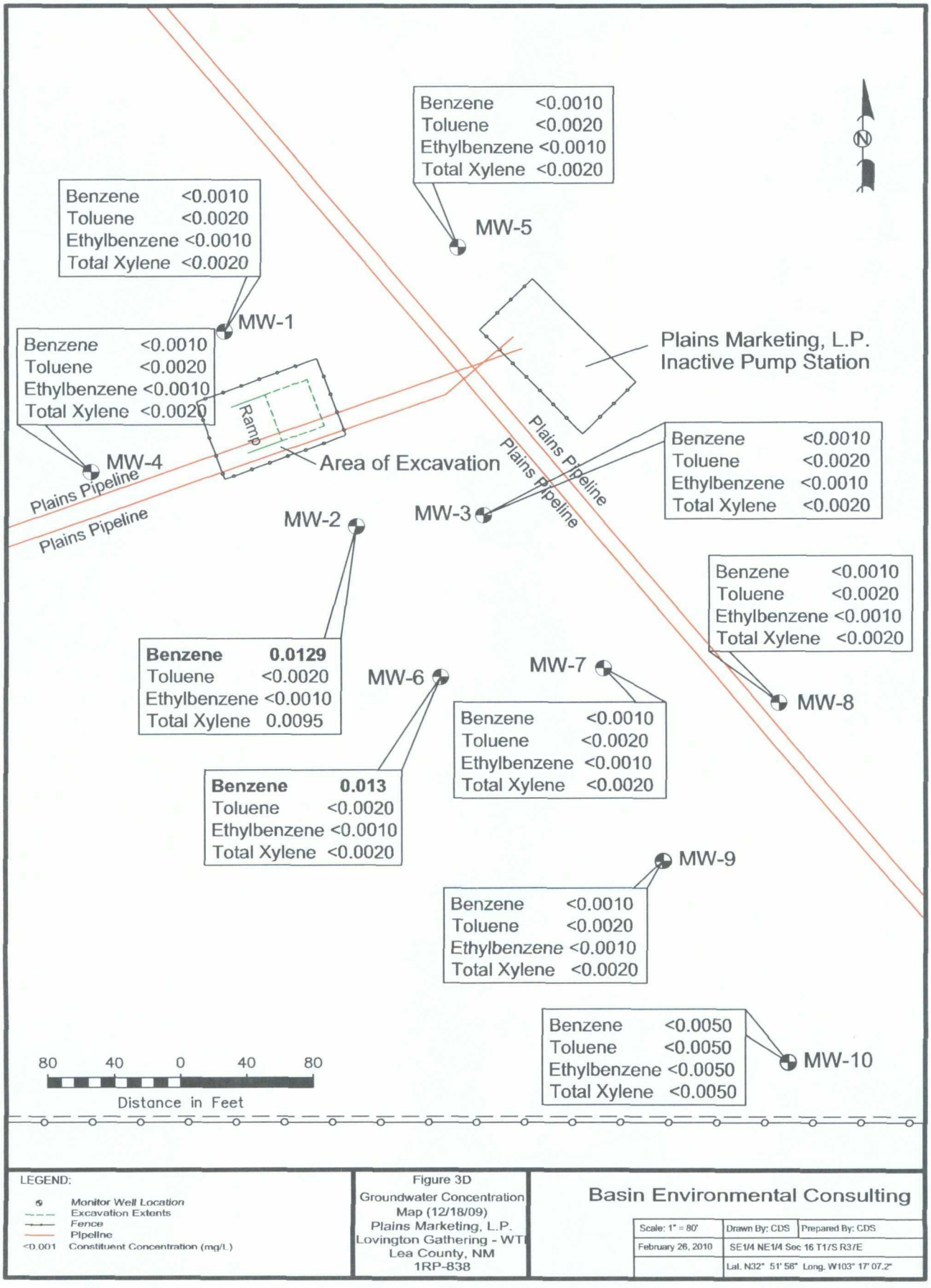
LEGEND:

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

Figure 3C
Groundwater Concentration Map (09/01/09)
Plains Marketing, L.P.
Lovington Gathering - WT
Lea County, NM
1RP-838

Basin Environmental Consulting

Scale: 1" = 80'	Drawn By: CDS	Prepared By: CDS
November 9, 2009	SE1/4 NE1/4 Sec 16 T17S R37E	
	Lat. N32° 51' 56" Long. W103° 17' 07.2"	



LEGEND:

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

Figure 3D
Groundwater Concentration Map (12/18/09)
Plains Marketing, L.P.
Lovington Gathering - WTI
Lea County, NM
1RP-838

Basin Environmental Consulting

Scale: 1" = 80'	Drawn By: CDS	Prepared By: CDS
February 26, 2010	SE1/4 NE1/4 Sec 16 T1/S R3/E	
	Lat. N32° 51' 56" Long. W103° 17' 07.2"	

Tables

TABLE 1

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	03/03/09	3,806.60	-	81.56	0.00	3,725.04
	06/18/09	3,806.60	-	82.95	0.00	3,723.65
	09/01/09	3,806.60	-	84.36	0.00	3,722.24
	12/18/09	3,806.60	-	83.00	0.00	3,723.60
MW-2	03/03/09	3,806.31	-	81.60	0.00	3,724.71
	06/18/09	3,806.31	-	83.22	0.00	3,723.09
	09/01/09	3,806.31	-	84.61	0.00	3,721.70
	12/18/09	3,806.31	-	82.90	0.00	3,723.41
MW-3	03/03/09	3,806.19	-	81.56	0.00	3,724.63
	06/18/09	3,806.19	-	83.25	0.00	3,722.94
	09/01/09	3,806.19	-	84.55	0.00	3,721.64
	12/18/09	3,806.19	-	82.76	0.00	3,723.43
MW-4	03/03/09	3,806.67	-	81.67	0.00	3,725.00
	06/18/09	3,806.67	-	83.13	0.00	3,723.54
	09/01/09	3,806.67	-	84.54	0.00	3,722.13
	12/18/09	3,806.67	-	83.14	0.00	3,723.53
MW-5	03/03/09	3,806.30	-	81.33	0.00	3,724.97
	06/18/09	3,806.30	-	82.71	0.00	3,723.59
	09/01/09	3,806.30	-	84.07	0.00	3,722.23
	12/18/09	3,806.30	-	82.70	0.00	3,723.60
MW-6	03/03/09	3,806.08	-	81.67	0.00	3,724.41
	06/18/09	3,806.08	-	83.48	0.00	3,722.60
	09/01/09	3,806.08	-	84.83	0.00	3,721.25
	12/18/09	3,806.08	-	82.75	0.00	3,723.33
MW-7	03/03/09	3,806.05	-	81.75	0.00	3,724.30
	06/18/09	3,806.05	-	83.63	0.00	3,722.42
	09/01/09	3,806.05	-	84.91	0.00	3,721.14
	12/18/09	3,806.05	-	83.16	0.00	3,722.89

TABLE 1

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	03/03/09	3,805.89	-	81.79	0.00	3,724.10
	06/18/09	3,805.89	-	83.79	0.00	3,722.10
	09/01/09	3,805.89	-	84.98	0.00	3,720.91
	12/18/09	3,805.89	-	82.59	0.00	3,723.30
MW-9	03/03/09	3,806.02	-	82.29	0.00	3,723.73
	06/18/09	3,806.02	-	84.45	0.00	3,721.57
	09/01/09	3,806.02	-	85.61	0.00	3,720.41
	10/05/09	3,806.02	-	84.59	0.00	3,721.43
	12/18/09	3,806.02	-	82.90	0.00	3,723.12
MW-10	11/02/09	-	-	82.99	0.00	-
	12/18/09	-	-	82.94	0.00	-

TABLE 2

CONCENTRATIONS OF BENZENE & BTEX IN GROUNDWATER

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021B, 5030				
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P-XYLENES (mg/L)	O-XYLENES (mg/L)
MW-1	03/03/09	<0.001	<0.002	<0.001	<0.002	<0.001
	06/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010
	09/01/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010
MW-2	03/03/09	**0.036**	<0.002	<0.001	0.0026	<0.001
	06/18/09	0.0097	<0.0020	<0.0010	<0.0020	<0.0010
	09/01/09	**0.084**	<0.0020	<0.0010	0.0083	<0.0010
	12/18/09	**0.0129**	<0.0020	<0.0010	0.0095	<0.0010
MW-3	03/03/09	**1.367**	0.0305	0.0251	0.0173	0.0158
	06/18/09	0.0031	<0.0020	<0.0010	<0.0020	<0.0010
	09/01/09	0.0073	0.0033	<0.0010	0.0028	0.0015
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010
MW-4	03/03/09	<0.001	<0.002	<0.001	<0.002	<0.001
	06/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010
	09/01/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010
MW-5	03/03/09	<0.001	<0.002	<0.001	<0.002	<0.001
	06/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010
	09/01/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010
MW-6	03/03/09	<0.001	<0.002	<0.001	<0.002	<0.001
	06/18/09	0.0044	<0.0020	<0.0010	<0.0020	<0.0010
	09/01/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010
	12/18/09	**0.013**	<0.0020	<0.0010	<0.0020	<0.0010
MW-7	03/03/09	**0.0775**	<0.002	<0.001	0.0327	<0.001
	06/18/09	**0.057**	<0.0020	<0.0010	0.0329	<0.0010
	09/01/09	**0.012**	<0.0020	<0.0010	<0.0020	<0.0010
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010
MW-8	03/03/09	**0.0284**	<0.002	<0.001	0.0068	<0.001
	06/18/09	0.0045	<0.0020	0.0016	0.0032	<0.0010
	09/01/09	**0.0013**	<0.0020	0.0011	0.0141	<0.0010
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010

TABLE 2

CONCENTRATIONS OF BENZENE & BTEX IN GROUNDWATER

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

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021B, 5030				
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P-XYLENES (mg/L)	O-XYLENES (mg/L)
MW-9	03/03/09	<0.001	<0.002	<0.001	<0.002	<0.001
	06/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010
	09/01/09	**0.9717**	0.0641	<0.0100	0.0867	0.0422
	09/10/09	**1.838**	<0.0200	<0.0100	0.0537	<0.0100
	10/05/09	**0.985**	<0.0020	<0.0010	0.0442	<0.0010
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010
MW-10	11/02/09	<0.005	<0.005	<0.005	<0.010	<0.005
NMOCD CRITERIA		0.01	0.75	0.75	TOTAL XYLENES 0.62	

TABLE 3

CONCENTRATIONS OF POLY AROMATIC HYDROCARBONS (SEMI-VOLATILE) COMPOUNDS IN GROUNDWATER

PLAINS MARKETING, L.P.

LOVINGTON GATHERING WTI

LEA COUNTY, NEW MEXICO

NMOCD REFERENCE NUMBER 1RP-838

All water concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW846-8270C, 3510															
		Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	Naphthalene	Phenanthrene	Pyrene
MW-10	11/02/09	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-1	12/18/09	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-2	12/18/09	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-3	12/18/09	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-4	12/18/09	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-5	12/18/09	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-6	12/18/09	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-7	12/18/09	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-8	12/18/09	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-9	09/29/09	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

TABLE 4

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER
PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER 1RP-838
All water concentrations are in mg/L

Date Sampled	Sample Location	Acetone	Acrylonitrile	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	2-Butanone	MTBE	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane
11/02/09	MW-2	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	-	-	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.01
Maximum Contaminant Levels from NMWQCC Drinking water standards Sections 1-101.UU and 3-103.A.		-	-	**0.01 mg/L**	-	-	-	-	-	-	-	-	-	-	-	**0.01 mg/L**	-	-

TABLE 4

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER
PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER 1RP-838
All water concentrations are in mg/L

Date Sampled	Sample Location	2-Chloroethyl vinyl ether	Chloroform	Chloromethane	2-Chlorotoluene	4-Chlorotoluene	p-Cymene(p-Isopropyltoluene)	Dibromochloromethane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	Dibromomethane (methylene bromide)	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Dichlorodifluormethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene
11/02/09	MW-10	-	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Maximum Contaminant Levels from NMWQCC Drinking water standards Sections 1-101.UU and 3-103.A.		-	0.1mg/L	-	-	-	-	-	-	0.0001 mg/L	-	-	-	-	-	0.005 mg/L	0.01 mg/L	0.005 mg/L	0.1mg/L

TABLE 4

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER
PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER 1RP-838
All water concentrations are in mg/L

Date Sampled	Sample Location	trans-1,2-Dichloroethene	1,2-Dichloropropane	1,3-Dichloropropane	2,2-Dichloropropane	1,1-Dichloropropane	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene	Ethylbenzene	Hexachlorobutadiene	2-Hexanone	Isopropylbenzene	Methylene chloride	4-Methyl-2-pentanone (MIBK)	Naphthalene	n-Propylbenzene	Styrene	1,1,1,2-Tetrachloroethane
11/02/09	MW-10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	-	<0.01	<0.005	<0.005	<0.005
Maximum Contaminant Levels from NMWQCC Drinking water standards Sections 1-101.UU and 3-103.A.		-	-	-	-	-	-	-	**0.75 mg/L**	-	-	-	**0.1mg/L**	-	**0.03 mg/L**	-	-	-

TABLE 4

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER
PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER 1RP-838
All water concentrations are in mg/L

Date Sampled	Sample Location	1,1,2,2-Tetrachloroethane	Tetrachloroethene (PCE)	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene (TCE)	Trichlorofluoromethane	1,2,3-Trichloropropane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	o-Xylene	m,p-Xylene	Vinyl Acetate	Vinyl Chloride
11/02/09	MW-10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	-	<0.002
Maximum Contaminant Levels from NMWQCC Drinking water standards Sections 1-101.UU and 3-103.A.		**0.02 mg/L**	**-**	**0.75 mg/L**	**-**	**-**	**0.06 mg/L**	**-**	**0.01 mg/ L**	**-**	**-**	**-**	**-**	**Total Xylene 0.62 mg/L**		**-**	**0.001 mg/L**

TABLE 5

CONCENTRATIONS OF RCRA AND NMWQCC METALS IN GROUNDWATER

PLAINS MARKETING, L.P.

LOVINGTON GATHERING WTI

LEA COUNTY, NEW MEXICO

NMOCD REFERENCE NUMBER 1RP-838

All water concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW846-6020A, EPA 7470A															
		Aluminum	Arsenic	Barium	Boron	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Molybdenum	Nickel	Selenium	Silver	Zinc	Mercury
MW-10	11/02/09	0.908	0.007	0.134	0.397	<0.001	**0.053**	<0.005	<0.003	0.82	<0.002	0.017	<0.004	0.027	<0.003	<0.002	<0.003	0.0001
Maximum Contaminant Levels from NM WQCC Drinking water standards Sections 1-101.UU and 3-103.A.		**5.0 mg/L**	**0.1 mg/L**	**1.0 mg/L**	**0.75 mg/L**	**0.01 mg/L**	**0.05 mg/L**	**0.05 mg/L**	**1.0 mg/L**	**1.0 mg/L**	**0.05 mg/L**	**0.2 mg/L**	**1.0 mg/L**	**0.2 mg/L**	**0.05 mg/L**	**0.05 mg/L**	**10 mg/L**	**0.002 mg/L**

TABLE 6
CONCENTRATIONS OF ANIONS/CATIONS IN GROUNDWATER
PLAINS MARKETING, L.P.
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER 1RP -838

All water concentrations are reported in mg/L

SAMPLE DATE	SAMPLE LOCATION	EPA SW375.4, 325,3, 310, 160.1 SW846 6010B										
		Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Bicarbonate	Carbonate	Nitrate	Phosphate	Flouride
11/2/2009	MW-10	76.5	13.6	<12.5	33.3	24.9	64.1	126	<4.00	2.14	<2.5	**9.27**
Maximum Contaminant Levels from NM WQCC Drinking water standards Sections 1-101.UU and 3-103.A.		-	-	-	-	**250 mg/L**	**600 mg/L**	-	-	**10 mg/L**	-	**1.6 mg/L**

Appendices

Appendix A
Laboratory Reports

Analytical Report 326509

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

10-MAR-09

12600 West I-20 East Odessa, Texas 79765

Texas certification numbers:
Houston, TX T104704215-08B-TX - Odessa/Midland, TX T104704400-08-TX

Florida certification numbers:
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675
Miramar, FL E86349
Norcross(Atlanta), GA E87429

South Carolina certification numbers:
Norcross(Atlanta), GA 98015

North Carolina certification numbers:
Norcross(Atlanta), GA 483

Houston - Dallas - San Antonio - Tampa - Miami - Latin America
Midland - Corpus Christi - Atlanta

10-MAR-09

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

Reference: XENCO Report No: **326509**
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 326509. 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. 326509 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 326509

PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-5	W	Mar-03-09 08:00		326509-001
MW-4	W	Mar-03-09 09:00		326509-002
MW-6	W	Mar-03-09 10:00		326509-003
MW-9	W	Mar-03-09 11:00		326509-004
MW-1	W	Mar-03-09 12:00		326509-005
MW-3	W	Mar-03-09 13:00		326509-006
MW-2	W	Mar-03-09 14:00		326509-007
MW-7	W	Mar-03-09 15:00		326509-008
MW-8	W	Mar-03-09 16:00		326509-009

Certificate of Analysis Summary 326509

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 Mar-04-09 05:03 pm
Report Date: 10-MAR-09
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	326509-001		326509-002		326509-003		326509-004		326509-005		326509-006	
	Field Id:	MW-5		MW-4		MW-6		MW-9		MW-1		MW-3	
	Depth:												
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	Sampled:	Mar-03-09 08:00		Mar-03-09 09:00		Mar-03-09 10:00		Mar-03-09 11:00		Mar-03-09 12:00		Mar-03-09 13:00	
BTEX by EPA 8021B	*Extracted:*	Mar-09-09 13:00		Mar-09-09 13:00		Mar-09-09 13:00		Mar-09-09 13:00		Mar-09-09 13:00		Mar-09-09 13:00	
	Analyzed:	Mar-10-09 00:42		Mar-10-09 01:22		Mar-10-09 01:45		Mar-10-09 02:15		Mar-10-09 02:43		Mar-10-09 04:12	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	1.367	0.0050
Toluene		ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	0.0305	0.0100
Ethylbenzene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	0.0251	0.0050
m,p-Xylenes		ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	0.0173	0.0100
o-Xylene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	0.0158	0.0050
Total Xylenes		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	0.0331	0.0050
Total BTEX		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	1.4557	0.0050

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 326509

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 Mar-04-09 05:03 pm
Report Date: 10-MAR-09
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	326509-007		326509-008		326509-009				
	Field Id:	MW-2		MW-7		MW-8				
	Depth:									
	Matrix:	WATER		WATER		WATER				
	Sampled:	Mar-03-09 14:00		Mar-03-09 15:00		Mar-03-09 16:00				
BTEX by EPA 8021B	*Extracted:*	Mar-09-09 13:00		Mar-09-09 13:00		Mar-09-09 13:00				
	Analyzed:	Mar-10-09 04:32		Mar-10-09 04:58		Mar-10-09 05:20				
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL			
Benzene		0.0356	0.0010	0.0775	0.0010	0.0284	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		0.0026	0.0020	0.0327	0.0020	0.0068	0.0020			
o-Xylene		ND	0.0010	ND	0.0010	ND	0.0010			
Total Xylenes		0.0026	0.0010	0.0327	0.0010	0.0068	0.0010			
Total BTEX		0.0382	0.0010	0.1102	0.0010	0.0352	0.0010			

Brent Barron
Odessa Laboratory Director

Flagging Criteria

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

* Outside XENCO's scope of NELAC Accreditation.

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 326509,

Project ID: 2006-142

Lab Batch #: 751977 **Sample:** 526053-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/09/09 22:21

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0317	0.0300	106	80-120	
4-Bromofluorobenzene	0.0289	0.0300	96	80-120	

Lab Batch #: 751977 **Sample:** 526053-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/09/09 22:41

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	0.0291	0.0300	97	80-120	

Lab Batch #: 751977 **Sample:** 526053-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/09/09 23:37

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0265	0.0300	88	80-120	
4-Bromofluorobenzene	0.0285	0.0300	95	80-120	

Lab Batch #: 751977 **Sample:** 326509-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/10/09 00:42

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

Lab Batch #: 751977 **Sample:** 326509-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/10/09 01:22

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0262	0.0300	87	80-120	
4-Bromofluorobenzene	0.0266	0.0300	89	80-120	

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 326509, **Project ID:** 2006-142

Lab Batch #: 751977 **Sample:** 326509-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/10/09 01:45

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0263	0.0300	88	80-120	
4-Bromofluorobenzene	0.0288	0.0300	96	80-120	

Lab Batch #: 751977 **Sample:** 326509-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/10/09 02:15

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0267	0.0300	89	80-120	
4-Bromofluorobenzene	0.0277	0.0300	92	80-120	

Lab Batch #: 751977 **Sample:** 326509-005 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/10/09 02:43

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0266	0.0300	89	80-120	
4-Bromofluorobenzene	0.0286	0.0300	95	80-120	

Lab Batch #: 751977 **Sample:** 326509-006 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/10/09 04:12

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0199	0.0300	66	80-120	*

Lab Batch #: 751977 **Sample:** 326509-007 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/10/09 04:32

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0272	0.0300	91	80-120	
4-Bromofluorobenzene	0.0260	0.0300	87	80-120	

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 326509,

Project ID: 2006-142

Lab Batch #: 751977 **Sample:** 326509-008 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/10/09 04:58

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	0.0282	0.0300	94	80-120	

Lab Batch #: 751977 **Sample:** 326509-009 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/10/09 05:20

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0259	0.0300	86	80-120	
4-Bromofluorobenzene	0.0269	0.0300	90	80-120	

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BSD Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 326509 **Project ID:** 2006-142

Analyst: ASA **Date Prepared:** 03/09/2009 **Date Analyzed:** 03/09/2009

Lab Batch ID: 751977 **Sample:** 526053-1-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	ND	0.1000	0.1086	109	0.1	0.1084	108	0	70-125	25	
Toluene	ND	0.1000	0.1047	105	0.1	0.1072	107	2	70-125	25	
Ethylbenzene	ND	0.1000	0.1015	102	0.1	0.1079	108	6	71-129	25	
m,p-Xylenes	ND	0.2000	0.2115	106	0.2	0.2257	113	6	70-131	25	
o-Xylene	ND	0.1000	0.1054	105	0.1	0.1123	112	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

Environmental Lab of Texas

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: Camille Bryant
Company Name: Basin Environmental Service Technologies, LLC
Company Address: P. O. Box 301
City/State/Zip: Lovington, NM 88260
Telephone No: (575)605-7210 Fax No: (505) 396-1429
Sampler Signature: Cindy Ashley for Lone Report e-mail: cjbryant@basin-consulting.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 #: 326509

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 VOC	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 8015	TPH: TX 1005	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	MW-5			3/3/2009	0800		2	X		X						GW									X				X
02	MW-4			3/3/2009	0900		2	X		X						GW									X				X
03	MW-6			3/3/2009	1000		2	X		X						GW									X				X
04	MW-9			3/3/2009	1100		2	X		X						GW									X				X
05	MW-1			3/3/2009	1200		2	X		X						GW									X				X
06	MW-3			3/3/2009	1300		2	X		X						GW									X				X
07	MW-2			3/3/2009	1400		2	X		X						GW									X				X
08	MW-7			3/3/2009	1500		2	X		X						GW									X				X
09	MW-8			3/3/2009	1600		2	X		X						GW									X				X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
	3/4/09	1703			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Andrea Dunn	3.4.09	17.03

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

Temperature Upon Receipt: 2.0 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Basin Env. | Plains

Date/ Time: 3.4.09 17:03

Lab ID # : 326509

Initials: CL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	2.0 °C	
#2	Shipping container in good condition?	(Yes)	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	(Not Present)	
#4	Custody Seals intact on sample bottles/ container?	(Yes)	No	Not Present	
#5	Chain of Custody present?	(Yes)	No		
#6	Sample instructions complete of Chain of Custody?	(Yes)	No		
#7	Chain of Custody signed when relinquished/ received?	(Yes)	No		
#8	Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	(Yes)	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		
#11	Containers supplied by ELOT?	(Yes)	No		
#12	Samples in proper container/ bottle?	(Yes)	No	See Below	
#13	Samples properly preserved?	(Yes)	No	See Below	
#14	Sample bottles intact?	(Yes)	No		
#15	Preservations documented on Chain of Custody?	(Yes)	No		
#16	Containers documented on Chain of Custody?	(Yes)	No		
#17	Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18	All samples received within sufficient hold time?	(Yes)	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	(Not Applicable)	
#20	VOC samples have zero headspace?	(Yes)	No	Not Applicable	

Variance Documentation

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

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

Analytical Report 335947

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

24-JUN-09

12600 West I-20 East Odessa, Texas 79765

Texas certification numbers:
Houston, TX T104704215-08B-TX - Odessa/Midland, TX T104704400-08-TX
Corpus Christi, TX T104704370-08-TX - Dallas, TX T104704295-08-TX

Florida certification numbers:
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675
Miramar, FL E86349
Norcross(Atlanta), GA E87429

South Carolina certification numbers:
Norcross(Atlanta), GA 98015

North Carolina certification numbers:
Norcross(Atlanta), GA 483

Houston - Dallas - San Antonio - Tampa - Miami - Latin America
Midland - Corpus Christi - Atlanta

24-JUN-09

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

Reference: XENCO Report No: **335947**
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 335947. 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. 335947 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 335947

PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-1	W	Jun-18-09 09:00		335947-001
MW-2	W	Jun-18-09 09:30		335947-002
MW-3	W	Jun-18-09 10:00		335947-003
MW-4	W	Jun-18-09 10:30		335947-004
MW-5	W	Jun-18-09 11:00		335947-005
MW-6	W	Jun-18-09 11:30		335947-006
MW-7	W	Jun-18-09 12:00		335947-007
MW-8	W	Jun-18-09 12:30		335947-008
MW-9	W	Jun-18-09 13:00		335947-009

CASE NARRATIVE

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

Project ID:	*2006-142*	*Report Date:*	*24-JUN-09*
Work Order Number:	*335947*	*Date Received:*	*06/19/2009*

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-763334 BTEX-MTBE EPA 8021B
SW8021BM

Batch 763334, 4-Bromofluorobenzene recovered below QC limits Data not confirmed by re-analysis. Samples affected are: 335947-002,335947-009,335947-004,335947-005,335947-006,335947-001,335947-003.

Batch 763334, 4-bromofluorobenzene recovered below QC limits Data not confirmed by re-analysis. Samples affected are: 532422-1-BLK

Certificate of Analysis Summary 335947

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 Jun-19-09 08:40 am
Report Date: 24-JUN-09
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	335947-001		335947-002		335947-003		335947-004		335947-005		335947-006	
	Field Id:	MW-1		MW-2		MW-3		MW-4		MW-5		MW-6	
	Depth:												
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	Sampled:	Jun-18-09 09:00		Jun-18-09 09:30		Jun-18-09 10:00		Jun-18-09 10:30		Jun-18-09 11:00		Jun-18-09 11:30	
BTEX by EPA 8021B	*Extracted:*	Jun-23-09 16:00		Jun-23-09 16:00		Jun-23-09 16:00		Jun-23-09 16:00		Jun-23-09 16:00		Jun-23-09 16:00	
	Analyzed:	Jun-23-09 17:35		Jun-23-09 17:56		Jun-23-09 18:18		Jun-23-09 18:39		Jun-23-09 19:01		Jun-23-09 19:22	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		ND	0.0010	0.0097	0.0010	0.0031	0.0010	ND	0.0010	ND	0.0010	0.0044	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	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020
o-Xylene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Total Xylenes		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Total BTEX		ND	0.0010	0.0097	0.0010	0.0031	0.0010	ND	0.0010	ND	0.0010	0.0044	0.0010

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 335947

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 Jun-19-09 08:40 am
Report Date: 24-JUN-09
Project Manager: Brent Barron, II

Analysis Requested												
	Lab Id:	335947-007		335947-008		335947-009						
	Field Id:	MW-7		MW-8		MW-9						
	Depth:											
	Matrix:	WATER		WATER		WATER						
	Sampled:	Jun-18-09 12:00		Jun-18-09 12:30		Jun-18-09 13:00						
BTEX by EPA 8021B	*Extracted:*	Jun-23-09 16:00		Jun-23-09 16:00		Jun-23-09 16:00						
	Analyzed:	Jun-23-09 19:44		Jun-23-09 20:05		Jun-23-09 21:09						
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL					
Benzene		0.0570	0.0010	0.0045	0.0010	ND	0.0010					
Toluene		ND	0.0020	ND	0.0020	ND	0.0020					
Ethylbenzene		ND	0.0010	0.0016	0.0010	ND	0.0010					
m,p-Xylenes		0.0329	0.0020	0.0032	0.0020	ND	0.0020					
o-Xylene		ND	0.0010	ND	0.0010	ND	0.0010					
Total Xylenes		0.0329	0.0010	0.0032	0.0010	ND	0.0010					
Total BTEX		0.0899	0.0010	0.0093	0.0010	ND	0.0010					

Brent Barron
Odessa Laboratory Director

Flagging Criteria

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

* Outside XENCO's scope of NELAC Accreditation.

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 335947,

Project ID: 2006-142

Lab Batch #: 763334 **Sample:** 532422-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/23/09 15:26

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0299	0.0300	100	80-120	
4-Bromofluorobenzene	0.0314	0.0300	105	80-120	

Lab Batch #: 763334 **Sample:** 532422-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/23/09 15:47

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0316	0.0300	105	80-120	

Lab Batch #: 763334 **Sample:** 532422-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/23/09 16:30

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	0.0190	0.0300	63	80-120	*

Lab Batch #: 763334 **Sample:** 335947-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/23/09 17:35

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	0.0210	0.0300	70	80-120	*

Lab Batch #: 763334 **Sample:** 335947-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/23/09 17:56

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	0.0204	0.0300	68	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 : 335947,

Project ID: 2006-142

Lab Batch #: 763334 **Sample:** 335947-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/23/09 18:18

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0251	0.0300	84	80-120	
4-Bromofluorobenzene	0.0213	0.0300	71	80-120	*

Lab Batch #: 763334 **Sample:** 335947-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/23/09 18:39

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	0.0223	0.0300	74	80-120	*

Lab Batch #: 763334 **Sample:** 335947-005 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/23/09 19:01

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0258	0.0300	86	80-120	
4-Bromofluorobenzene	0.0226	0.0300	75	80-120	*

Lab Batch #: 763334 **Sample:** 335947-006 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/23/09 19:22

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0259	0.0300	86	80-120	
4-Bromofluorobenzene	0.0214	0.0300	71	80-120	*

Lab Batch #: 763334 **Sample:** 335947-007 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/23/09 19:44

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0266	0.0300	89	80-120	
4-Bromofluorobenzene	0.0261	0.0300	87	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 335947, **Project ID:** 2006-142

Lab Batch #: 763334 **Sample:** 335947-008 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/23/09 20:05

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0240	0.0300	80	80-120	
4-Bromofluorobenzene	0.0273	0.0300	91	80-120	

Lab Batch #: 763334 **Sample:** 335947-009 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/23/09 21:09

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0261	0.0300	87	80-120	
4-Bromofluorobenzene	0.0221	0.0300	74	80-120	*

Lab Batch #: 763334 **Sample:** 335947-007 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/24/09 00:01

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0283	0.0300	94	80-120	
4-Bromofluorobenzene	0.0310	0.0300	103	80-120	

Lab Batch #: 763334 **Sample:** 335947-007 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/24/09 00:23

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

BS / BSD Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 335947 **Project ID:** 2006-142

Analyst: ASA **Date Prepared:** 06/23/2009 **Date Analyzed:** 06/23/2009

Lab Batch ID: 763334 **Sample:** 532422-1-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	ND	0.1000	0.1067	107	0.1	0.1046	105	2	70-125	25	
Toluene	ND	0.1000	0.1040	104	0.1	0.1019	102	2	70-125	25	
Ethylbenzene	ND	0.1000	0.1098	110	0.1	0.1083	108	1	71-129	25	
m,p-Xylenes	ND	0.2000	0.2200	110	0.2	0.2170	109	1	70-131	25	
o-Xylene	ND	0.1000	0.1041	104	0.1	0.1035	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

Form 3 - MS / MSD Recoveries

Project Name: Lovington Gathering WTI

Work Order # : 335947 **Project ID:** 2006-142

Lab Batch ID: 763334 **QC- Sample ID:** 335947-007 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 06/24/2009 **Date Prepared:** 06/23/2009 **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	0.0570	0.1000	0.1607	104	0.1000	0.1625	106	1	70-125	25	
Toluene	ND	0.1000	0.0906	91	0.1000	0.0916	92	1	70-125	25	
Ethylbenzene	ND	0.1000	0.0943	94	0.1000	0.0949	95	1	71-129	25	
m,p-Xylenes	0.0329	0.2000	0.2355	101	0.2000	0.2378	102	1	70-131	25	
o-Xylene	ND	0.1000	0.0904	90	0.1000	0.0911	91	1	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

Environmental Lab of Texas

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: Camille Bryant
Project Name: Lovington Gathering WTI

Company Name: Basin Environmental Service Technologies, LLC
Project #: 2006-142

Company Address: P. O. Box 301
Project Loc: Lea County, NM

City/State/Zip: Lovington, NM 88260
PO #: PAA- J. Henry

Telephone No: (575)605-7210
Fax No: (505) 396-1429
Report Format: [X] Standard [ ] TRRP [ ] NPDES

Sampler Signature:
e-mail: cjbryant@basin-consulting.com

(lab use only)
ORDER #: 335947

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 ml glass	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: GW = 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; PCI; N O R M	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
01	MW-1			6/18/2009	9:00		3	X		X						GW				X		X
02	MW-2			6/18/2009	9:30		3	X		X						GW				X		X
03	MW-3			6/18/2009	10:00		3	X		X						GW				X		X
04	MW-4			6/18/2009	10:30		3	X		X						GW				X		X
05	MW-5			6/18/2009	11:00		3	X		X						GW				X		X
06	MW-6			6/18/2009	11:30		3	X		X						GW				X		X
07	MW-7			6/18/2009	12:00		3	X		X						GW				X		X
08	MW-8			6/18/2009	12:30		3	X		X						GW				X		X
09	MW-9			6/18/2009	13:00		3	X		X						GW				X		X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Lance Ramsey	6-18-09	16:00		6/18/09	1600
	6/19/09	0840			
			Received by ELOT: Jeanne Fitch	06-19-09	0840

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: 1.6 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Plains / Basin

Date/ Time: 06-19-09 @ 0840

Lab ID #: 33594 7

Initials: JMF

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	1.6 °C	
#2	Shipping container in good condition?	(Yes)	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	(Not Present)	
#4	Custody Seals intact on sample bottles/ container? /label	(Yes)	No	Not Present	
#5	Chain of Custody present?	(Yes)	No		
#6	Sample instructions complete of Chain of Custody?	(Yes)	No		
#7	Chain of Custody signed when relinquished/ received?	(Yes)	No		
#8	Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont / Lid	
#9	Container label(s) legible and intact?	(Yes)	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		
#11	Containers supplied by ELOT?	(Yes)	No		
#12	Samples in proper container/ bottle?	(Yes)	No	See Below	
#13	Samples properly preserved?	(Yes)	No	See Below	
#14	Sample bottles intact?	(Yes)	No		
#15	Preservations documented on Chain of Custody?	(Yes)	No		
#16	Containers documented on Chain of Custody?	(Yes)	No		
#17	Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18	All samples received within sufficient hold time?	(Yes)	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	(Not Applicable)	
#20	VOC samples have zero headspace?	(Yes)	No	Not Applicable	

Variance Documentation

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

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

Analytical Report 343328

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

08-SEP-09

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-08-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 (LAO00308), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87428), 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 (T104704400-08-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-08-TX)
Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370-08-TX)
Xenco-Boca Raton (EPA Lab Code: FL00449): Florida(E86240),
South Carolina(96031001), Louisiana(04154), Georgia(917)

08-SEP-09

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

Reference: XENCO Report No: **343328**
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 343328. 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. 343328 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 343328

PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-5	W	Sep-01-09 08:30		343328-001
MW-4	W	Sep-01-09 09:15		343328-002
MW-6	W	Sep-01-09 09:50		343328-003
MW-9	W	Sep-01-09 10:25		343328-004
MW-1	W	Sep-01-09 11:05		343328-005
MW-2	W	Sep-01-09 11:30		343328-006
MW-8	W	Sep-01-09 12:05		343328-007
MW-7	W	Sep-01-09 12:35		343328-008
MW-3	W	Sep-01-09 13:05		343328-009

CASE NARRATIVE

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

Project ID:	*2006-142*	*Report Date:*	*08-SEP-09*
Work Order Number:	*343328*	*Date Received:*	*09/03/2009*

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-771027 BTEX-MTBE EPA 8021B
SW8021BM

Batch 771027, 4-Bromofluorobenzene recovered below QC limits Data not confirmed by re-analysis. Samples affected are: 536990-1-BLK,343328-006,343328-008,343328-003,343328-009,343328-001,343328-002. Matrix interference is suspected in sample surrogate failures. 4-Bromofluorobenzene recovered above QC limits Data not confirmed by re-analysis. Samples affected are: 343218-001 S and 343218-001 SD

Batch: LBA-771296 BTEX-MTBE EPA 8021B
SW8021BM

Batch 771296, 4-Bromofluorobenzene recovered below QC limits Matrix Interference is suspected in sample surrogate failures. Samples affected are: 537136-1-BLK,343328-004,343328-005. Data confirmed by re-analysis for sample 343328-005.

Certificate of Analysis Summary 343328

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 Sep-03-09 01:50 pm
Report Date: 08-SEP-09
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	343328-001		343328-002		343328-003		343328-004		343328-005		343328-006	
	Field Id:	MW-5		MW-4		MW-6		MW-9		MW-1		MW-2	
	Depth:												
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	Sampled:	Sep-01-09 08:30		Sep-01-09 09:15		Sep-01-09 09:50		Sep-01-09 10:25		Sep-01-09 11:05		Sep-01-09 11:30	
BTEX by EPA 8021B	*Extracted:*	Sep-03-09 14:38		Sep-03-09 14:38		Sep-03-09 14:38		Sep-04-09 15:00		Sep-04-09 15:00		Sep-03-09 14:38	
	Analyzed:	Sep-03-09 15:48		Sep-03-09 16:07		Sep-03-09 16:25		Sep-05-09 21:39		Sep-05-09 16:07		Sep-03-09 17:21	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		ND	0.0010	ND	0.0010	ND	0.0010	0.9717	0.0100	ND	0.0010	0.0842	0.0010
Toluene		ND	0.0020	ND	0.0020	ND	0.0020	0.0641	0.0200	ND	0.0020	ND	0.0020
Ethylbenzene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0100	ND	0.0010	ND	0.0010
m,p-Xylenes		ND	0.0020	ND	0.0020	ND	0.0020	0.0867	0.0200	ND	0.0020	0.0083	0.0020
o-Xylene		ND	0.0010	ND	0.0010	ND	0.0010	0.0422	0.0100	ND	0.0010	ND	0.0010
Total Xylenes		ND	0.0010	ND	0.0010	ND	0.0010	0.1289	0.0100	ND	0.0010	0.0083	0.0010
Total BTEX		ND	0.0010	ND	0.0010	ND	0.0010	1.1647	0.0100	ND	0.0010	0.0925	0.0010

Brent Barron, II
Odessa Laboratory Manager

Certificate of Analysis Summary 343328

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 Sep-03-09 01:50 pm
Report Date: 08-SEP-09
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	343328-007		343328-008		343328-009				
	Field Id:	MW-8		MW-7		MW-3				
	Depth:									
	Matrix:	WATER		WATER		WATER				
	Sampled:	Sep-01-09 12:05		Sep-01-09 12:35		Sep-01-09 13:05				
BTEX by EPA 8021B	*Extracted:*	Sep-03-09 14:38		Sep-03-09 14:38		Sep-03-09 14:38				
	Analyzed:	Sep-03-09 17:39		Sep-03-09 17:57		Sep-03-09 18:16				
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL			
Benzene		0.0013	0.0010	0.0120	0.0010	0.0073	0.0010			
Toluene		ND	0.0020	ND	0.0020	0.0033	0.0020			
Ethylbenzene		0.0011	0.0010	ND	0.0010	ND	0.0010			
m,p-Xylenes		0.0141	0.0020	ND	0.0020	0.0028	0.0020			
o-Xylene		ND	0.0010	ND	0.0010	0.0015	0.0010			
Total Xylenes		0.0141	0.0010	ND	0.0010	0.0043	0.0010			
Total BTEX		0.0165	0.0010	0.0120	0.0010	0.0149	0.0010			

Brent Barron, II
Odessa Laboratory Manager

Flagging Criteria

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

* Outside XENCO's scope of NELAC Accreditation.

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 343328, **Project ID:** 2006-142

Lab Batch #: 771027 **Sample:** 536990-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/03/09 09:41

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0350	0.0300	117	80-120	

Lab Batch #: 771027 **Sample:** 536990-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/03/09 09:59

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0306	0.0300	102	80-120	
4-Bromofluorobenzene	0.0342	0.0300	114	80-120	

Lab Batch #: 771027 **Sample:** 536990-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/03/09 10:36

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0273	0.0300	91	80-120	
4-Bromofluorobenzene	0.0115	0.0300	38	80-120	*

Lab Batch #: 771027 **Sample:** 343218-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/03/09 13:22

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0369	0.0300	123	80-120	*

Lab Batch #: 771027 **Sample:** 343218-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/03/09 14:34

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0313	0.0300	104	80-120	
4-Bromofluorobenzene	0.0372	0.0300	124	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 : 343328,

Project ID: 2006-142

Lab Batch #: 771027 **Sample:** 343328-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/03/09 15:48

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0274	0.0300	91	80-120	
4-Bromofluorobenzene	0.0162	0.0300	54	80-120	*

Lab Batch #: 771027 **Sample:** 343328-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/03/09 16:07

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0274	0.0300	91	80-120	
4-Bromofluorobenzene	0.0163	0.0300	54	80-120	*

Lab Batch #: 771027 **Sample:** 343328-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/03/09 16:25

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0280	0.0300	93	80-120	
4-Bromofluorobenzene	0.0153	0.0300	51	80-120	*

Lab Batch #: 771027 **Sample:** 343328-006 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/03/09 17:21

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0296	0.0300	99	80-120	
4-Bromofluorobenzene	0.0202	0.0300	67	80-120	*

Lab Batch #: 771027 **Sample:** 343328-007 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/03/09 17:39

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0239	0.0300	80	80-120	
4-Bromofluorobenzene	0.0265	0.0300	88	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 343328,

Project ID: 2006-142

Lab Batch #: 771027 **Sample:** 343328-008 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/03/09 17:57

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0275	0.0300	92	80-120	
4-Bromofluorobenzene	0.0205	0.0300	68	80-120	*

Lab Batch #: 771027 **Sample:** 343328-009 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/03/09 18:16

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0248	0.0300	83	80-120	
4-Bromofluorobenzene	0.0175	0.0300	58	80-120	*

Lab Batch #: 771296 **Sample:** 537136-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/05/09 14:52

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0329	0.0300	110	80-120	

Lab Batch #: 771296 **Sample:** 537136-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/05/09 15:11

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0350	0.0300	117	80-120	

Lab Batch #: 771296 **Sample:** 537136-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/05/09 15:48

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	0.0133	0.0300	44	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 : 343328,

Project ID: 2006-142

Lab Batch #: 771296 **Sample:** 343328-005 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/05/09 16:07

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0268	0.0300	89	80-120	
4-Bromofluorobenzene	0.0179	0.0300	60	80-120	**

Lab Batch #: 771296 **Sample:** 343328-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/05/09 21:39

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0312	0.0300	104	80-120	
4-Bromofluorobenzene	0.0183	0.0300	61	80-120	*

Lab Batch #: 771296 **Sample:** 343498-012 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/05/09 22:34

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0323	0.0300	108	80-120	
4-Bromofluorobenzene	0.0327	0.0300	109	80-120	

Lab Batch #: 771296 **Sample:** 343498-012 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/05/09 22:53

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0316	0.0300	105	80-120	
4-Bromofluorobenzene	0.0330	0.0300	110	80-120	

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

BS / BSD Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 343328 **Project ID:** 2006-142

Analyst: ASA **Date Prepared:** 09/03/2009 **Date Analyzed:** 09/03/2009

Lab Batch ID: 771027 **Sample:** 536990-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

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
	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Benzene	ND	0.1000	0.1023	102	0.1	0.0998	100	2	70-125	25	
Toluene	ND	0.1000	0.0982	98	0.1	0.0956	96	3	70-125	25	
Ethylbenzene	ND	0.1000	0.1093	109	0.1	0.1071	107	2	71-129	25	
m,p-Xylenes	ND	0.2000	0.2292	115	0.2	0.2240	112	2	70-131	25	
o-Xylene	ND	0.1000	0.1065	107	0.1	0.1040	104	2	71-133	25	

Analyst: ASA **Date Prepared:** 09/04/2009 **Date Analyzed:** 09/05/2009

Lab Batch ID: 771296 **Sample:** 537136-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

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
	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Benzene	ND	0.1000	0.0981	98	0.1	0.1047	105	7	70-125	25	
Toluene	ND	0.1000	0.0941	94	0.1	0.1006	101	7	70-125	25	
Ethylbenzene	ND	0.1000	0.1048	105	0.1	0.1124	112	7	71-129	25	
m,p-Xylenes	ND	0.2000	0.2192	110	0.2	0.2333	117	6	70-131	25	
o-Xylene	ND	0.1000	0.1025	103	0.1	0.1103	110	7	71-133	25	

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

Form 3 - MS / MSD Recoveries

Project Name: Lovington Gathering WTI

Work Order # : 343328 **Project ID:** 2006-142

Lab Batch ID: 771027 **QC- Sample ID:** 343218-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 09/03/2009 **Date Prepared:** 09/03/2009 **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	ND	0.1000	0.0950	95	0.1000	0.1022	102	7	70-125	25	
Toluene	ND	0.1000	0.0916	92	0.1000	0.0983	98	7	70-125	25	
Ethylbenzene	ND	0.1000	0.1034	103	0.1000	0.1104	110	7	71-129	25	
m,p-Xylenes	ND	0.2000	0.2147	107	0.2000	0.2288	114	6	70-131	25	
o-Xylene	ND	0.1000	0.0997	100	0.1000	0.1073	107	7	71-133	25	

Lab Batch ID: 771296 **QC- Sample ID:** 343498-012 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 09/05/2009 **Date Prepared:** 09/04/2009 **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	0.0738	0.1000	0.1737	100	0.1000	0.1715	98	1	70-125	25	
Toluene	ND	0.1000	0.0904	90	0.1000	0.0881	88	3	70-125	25	
Ethylbenzene	ND	0.1000	0.0966	97	0.1000	0.0954	95	1	71-129	25	
m,p-Xylenes	ND	0.2000	0.2006	100	0.2000	0.1992	100	1	70-131	25	
o-Xylene	ND	0.1000	0.0940	94	0.1000	0.0929	93	1	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

Environmental Lab of Texas

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: Curt Stanley PAGE 01 OF 01

Company Name: Basin Environmental Service Technologies, LLC

Company Address: 2800 Plains Hwy

City/State/Zip: Lovington, NM 88260

Telephone No: (575) 441-2244

Fax No: (575) 396-1429

Sampler Signature: [signature]

e-mail: cstanley@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 #: 343328

Analyze For: TCLP / TOTAL: X

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO_3	HCl (VOA X 2)	H_2SO_4	NaOH	$Na_2S_2O_3$	None (PAH)	Other (Specify)	Matrix	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.	PAH	EPA Paint Filter Test	Chlorides E 300	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	MW-5			9/1/2009	0830		3	X		X						GW									X							X
02	MW-4			9/1/2009	0915		3	X		X						GW									X							X
03	MW-6			9/1/2009	0950		3	X		X						GW									X							X
04	MW-9			9/1/2009	1025		3	X		X						GW									X							X
05	MW-1			9/1/2009	1105		3	X		X						GW									X							X
06	MW-2			9/1/2009	1130		3	X		X						GW									X							X
07	MW-8			9/1/2009	1205		3	X		X						GW									X							X
08	MW-7			9/1/2009	1235		3	X		X						GW									X							X
09	MW-3			9/1/2009	1305		3	X		X						GW									X							X

Matrix: DW=Drinking Water SL=Sludge; GW = Groundwater S=Soil/Solid; NP=Non-Potable Specify Other (printed "Soil" struck through and "GW" handwritten on each row)

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	9/3/09	1350			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Andrea Lam	9.3.09	1350

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: 5.1 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Plains / Basin Env.

Date/ Time: 9309 13:50

Lab ID # : 343328

Initials: AL

Sample Receipt Checklist

				Client Initials
#1 Temperature of container/ cooler?	(Yes)	No	5.1 °C	
#2 Shipping container in good condition?	(Yes)	No		
#3 Custody Seals intact on shipping container/ cooler?	Yes	No	(Not Present)	
#4 Custody Seals intact on sample bottles/ container?	(Yes)	No	Not Present	
#5 Chain of Custody present?	(Yes)	No		
#6 Sample instructions complete of Chain of Custody?	(Yes)	No		
#7 Chain of Custody signed when relinquished/ received?	(Yes)	No		
#8 Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont./ Lid	
#9 Container label(s) legible and intact?	(Yes)	No	Not Applicable	
#10 Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		
#11 Containers supplied by ELOT?	(Yes)	No		
#12 Samples in proper container/ bottle?	(Yes)	No	See Below	
#13 Samples properly preserved?	(Yes)	No	See Below	
#14 Sample bottles intact?	(Yes)	No		
#15 Preservations documented on Chain of Custody?	(Yes)	No		
#16 Containers documented on Chain of Custody?	(Yes)	No		
#17 Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18 All samples received within sufficient hold time?	(Yes)	No	See Below	
#19 Subcontract of sample(s)?	Yes	No	(Not Applicable)	
#20 VOC samples have zero headspace?	(Yes)	No	Not Applicable	

Variance Documentation

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

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

Analytical Report 344353

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

16-SEP-09

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-08-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 (LAO00308), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87428), 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 (T104704400-08-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-08-TX)
Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370-08-TX)
Xenco-Boca Raton (EPA Lab Code: FL00449): Florida(E86240),
South Carolina(96031001), Louisiana(04154), Georgia(917)

16-SEP-09

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

Reference: XENCO Report No: **344353**
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 344353. 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. 344353 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 344353

PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-9	W	Sep-10-09 09:40		344353-001

CASE NARRATIVE

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

Project ID: 2006-142 | *Report Date:* 16-SEP-09
Work Order Number: 344353 | *Date Received:* 09/11/2009

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-772597 BTEX-MTBE EPA 8021B
SW8021BM

Batch 772597, 4-Bromofluorobenzene recovered below QC limits sample Data confirmed by re-analysis. Matrix Interference is suspected in sample surrogate failures. Samples affected are: 537880-1-BLK,344353-001. QC samples were not reanalyzed.

Certificate of Analysis Summary 344353

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 Sep-11-09 04:35 pm
Report Date: 16-SEP-09
Project Manager: Brent Barron, II

Analysis Requested							
	Lab Id:	344353-001					
	Field Id:	MW-9					
	Depth:						
	Matrix:	WATER					
	Sampled:	Sep-10-09 09:40					
BTEX by EPA 8021B	*Extracted:*	Sep-15-09 14:30					
	Analyzed:	Sep-16-09 02:38					
	Units/RL:	mg/L RL					
Benzene		1.838 0.0100					
Toluene		ND 0.0200					
Ethylbenzene		ND 0.0100					
m,p-Xylenes		0.0537 0.0200					
o-Xylene		ND 0.0100					
Total Xylenes		0.0537 0.0100					
Total BTEX		1.892 0.0100					

Brent Barron, II
Odessa Laboratory Manager

Flagging Criteria

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

* Outside XENCO's scope of NELAC Accreditation.

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 344353,

Project ID: 2006-142

Lab Batch #: 772597 **Sample:** 537880-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/15/09 22:37

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0302	0.0300	101	80-120	
4-Bromofluorobenzene	0.0310	0.0300	103	80-120	

Lab Batch #: 772597 **Sample:** 537880-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/15/09 22:55

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0300	0.0300	100	80-120	
4-Bromofluorobenzene	0.0302	0.0300	101	80-120	

Lab Batch #: 772597 **Sample:** 537880-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/15/09 23:32

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	0.0145	0.0300	48	80-120	*

Lab Batch #: 772597 **Sample:** 344353-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/16/09 02:38

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0307	0.0300	102	80-120	
4-Bromofluorobenzene	0.0208	0.0300	69	80-120	**

Lab Batch #: 772597 **Sample:** 344338-003 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/16/09 05:41

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0319	0.0300	106	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 : 344353,

Project ID: 2006-142

Lab Batch #: 772597 **Sample:** 344338-003 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/16/09 06:00

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0302	0.0300	101	80-120	
4-Bromofluorobenzene	0.0351	0.0300	117	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BSD Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 344353 **Project ID:** 2006-142

Analyst: ASA **Date Prepared:** 09/15/2009 **Date Analyzed:** 09/15/2009

Lab Batch ID: 772597 **Sample:** 537880-1-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	ND	0.1000	0.1069	107	0.1	0.1062	106	1	70-125	25	
Toluene	ND	0.1000	0.1012	101	0.1	0.1007	101	0	70-125	25	
Ethylbenzene	ND	0.1000	0.1095	110	0.1	0.1110	111	1	71-129	25	
m,p-Xylenes	ND	0.2000	0.2246	112	0.2	0.2248	112	0	70-131	25	
o-Xylene	ND	0.1000	0.1069	107	0.1	0.1064	106	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 # : 344353 **Project ID:** 2006-142

Lab Batch ID: 772597 **QC- Sample ID:** 344338-003 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 09/16/2009 **Date Prepared:** 09/15/2009 **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	ND	0.1000	0.0930	93	0.1000	0.1047	105	12	70-125	25	
Toluene	ND	0.1000	0.0879	88	0.1000	0.0993	99	12	70-125	25	
Ethylbenzene	ND	0.1000	0.0970	97	0.1000	0.1103	110	13	71-129	25	
m,p-Xylenes	ND	0.2000	0.1977	99	0.2000	0.2248	112	13	70-131	25	
o-Xylene	ND	0.1000	0.0930	93	0.1000	0.1066	107	14	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

Environmental Lab of Texas

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: Curt Stanley
Project Name: Lovington Gathering WTI
Company Name: Basin Environmental Service Technologies, LLC
Project #: 2006-142
Company Address: P. O. Box 301
Project Loc: Lea County, NM
City/State/Zip: Lovington, NM 88260
PO #: PAA- J. Henry
Telephone No: (575) 441-2244 Fax No: (505) 396-1429
Report Format: [X] Standard [ ] TRRP [ ] NPDES
Sampler Signature: Curt Stanley for C.L. Reynolds e-mail: cdstanley@basin-consulting.com

(lab use only)
ORDER #: 344353

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 ml VOA	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: GW – Drinking Water SL – Sludge; SW – Groundwater S – Soil/Solid; WW – 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	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-9			9/10/2009	0940		3	X		X						GW									X					X

Special Instructions:

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: 3.6 °C

Relinquished by:	Date	Time	Received by:	Date	Time
	9/11/09	1635			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Andrea Sun	9.11.09	16:35

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Basin Env. / Plains

Date/ Time: 9-11-09 16:35

Lab ID # : 344353

Initials: al

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	3.6 °C	
#2	Shipping container in good condition?	(Yes)	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	(Not Present)	
#4	Custody Seals intact on sample bottles/ container?	(Yes)	No	Not Present	
#5	Chain of Custody present?	(Yes)	No		
#6	Sample instructions complete of Chain of Custody?	(Yes)	No		
#7	Chain of Custody signed when relinquished/ received?	(Yes)	No		
#8	Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	(Yes)	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		
#11	Containers supplied by ELOT?	(Yes)	No		
#12	Samples in proper container/ bottle?	(Yes)	No	See Below	
#13	Samples properly preserved?	(Yes)	No	See Below	
#14	Sample bottles intact?	(Yes)	No		
#15	Preservations documented on Chain of Custody?	(Yes)	No		
#16	Containers documented on Chain of Custody?	(Yes)	No		
#17	Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18	All samples received within sufficient hold time?	(Yes)	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	(Not Applicable)	
#20	VOC samples have zero headspace?	(Yes)	No	Not Applicable	

Variance Documentation

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

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

Analytical Report 347203

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

09-OCT-09

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-08-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 (LAO00308), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87428), 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 (T104704400-08-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-08-TX)
Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370-08-TX)
Xenco-Boca Raton (EPA Lab Code: FL00449): Florida(E86240),
South Carolina(96031001), Louisiana(04154), Georgia(917)

09-OCT-09

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

Reference: XENCO Report No: **347203**
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 347203. 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. 347203 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 347203

PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-9	W	Oct-05-09 11:00		347203-001

CASE NARRATIVE

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

Project ID: 2006-142
Work Order Number: 347203

Report Date: 09-OCT-09
Date Received: 10/06/2009

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-775966 BTEX-MTBE EPA 8021B
SW8021BM

Batch 775966, 1,4-Difluorobenzene recovered above QC limits . Matrix interferences is suspected; data confirmed by re-analysis
Samples affected are: 347203-001.

Batch: LBA-776140 BTEX-MTBE EPA 8021B
None

Certificate of Analysis Summary 347203

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 Oct-06-09 09:13 am
Report Date: 09-OCT-09
Project Manager: Brent Barron, II

Analysis Requested							
	Lab Id:	347203-001					
	Field Id:	MW-9					
	Depth:						
	Matrix:	WATER					
	Sampled:	Oct-05-09 11:00					
BTEX by EPA 8021B	*Extracted:*	Oct-06-09 15:00					
	Analyzed:	Oct-06-09 23:27					
	Units/RL:	mg/L RL					
Benzene		0.9850 D 0.1000					
Toluene		ND 0.0020					
Ethylbenzene		ND 0.0010					
m,p-Xylenes		0.0442 0.0020					
o-Xylene		ND 0.0010					
Total Xylenes		0.0442 0.0010					
Total BTEX		1.029 0.0010					

Brent Barron, II
Odessa Laboratory Manager

Flagging Criteria

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

* Outside XENCO's scope of NELAC Accreditation.

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 347203, **Project ID:** 2006-142

Lab Batch #: 775966 **Sample:** 539833-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/06/09 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	0.0300	0.0300	100	80-120	
4-Bromofluorobenzene	0.0298	0.0300	99	80-120	

Lab Batch #: 775966 **Sample:** 539833-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/06/09 20:38

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

Lab Batch #: 775966 **Sample:** 539833-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/06/09 21:20

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0269	0.0300	90	80-120	
4-Bromofluorobenzene	0.0298	0.0300	99	80-120	

Lab Batch #: 775966 **Sample:** 347203-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/06/09 23:27

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0408	0.0300	136	80-120	**
4-Bromofluorobenzene	0.0248	0.0300	83	80-120	

Lab Batch #: 775966 **Sample:** 346642-006 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/07/09 05:46

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0304	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.

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 347203,

Project ID: 2006-142

Lab Batch #: 775966 **Sample:** 346642-006 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/07/09 06:07

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0319	0.0300	106	80-120	

Lab Batch #: 776140 **Sample:** 539963-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/07/09 09:09

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

Lab Batch #: 776140 **Sample:** 539963-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/07/09 09:30

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

Lab Batch #: 776140 **Sample:** 539963-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/07/09 10:12

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	0.0290	0.0300	97	80-120	

Lab Batch #: 776140 **Sample:** 347203-001 / DL **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/07/09 19:13

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

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 347203,

Project ID: 2006-142

Lab Batch #: 776140 **Sample:** 347183-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/07/09 19:55

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0295	0.0300	98	80-120	
4-Bromofluorobenzene	0.0307	0.0300	102	80-120	

Lab Batch #: 776140 **Sample:** 347183-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/07/09 20:16

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0296	0.0300	99	80-120	
4-Bromofluorobenzene	0.0305	0.0300	102	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BSD Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 347203 **Project ID:** 2006-142

Analyst: ASA **Date Prepared:** 10/06/2009 **Date Analyzed:** 10/06/2009

Lab Batch ID: 775966 **Sample:** 539833-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.0919	92	0.1	0.0915	92	0	70-125	25	
Toluene	ND	0.1000	0.0903	90	0.1	0.0903	90	0	70-125	25	
Ethylbenzene	ND	0.1000	0.0917	92	0.1	0.0921	92	0	71-129	25	
m,p-Xylenes	ND	0.2000	0.2002	100	0.2	0.2013	101	1	70-131	25	
o-Xylene	ND	0.1000	0.0975	98	0.1	0.0983	98	1	71-133	25	

Analyst: ASA **Date Prepared:** 10/07/2009 **Date Analyzed:** 10/07/2009

Lab Batch ID: 776140 **Sample:** 539963-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.0931	93	0.1	0.0942	94	1	70-125	25	
Toluene	ND	0.1000	0.0918	92	0.1	0.0928	93	1	70-125	25	
Ethylbenzene	ND	0.1000	0.0940	94	0.1	0.0945	95	1	71-129	25	
m,p-Xylenes	ND	0.2000	0.2064	103	0.2	0.2069	103	0	70-131	25	
o-Xylene	ND	0.1000	0.0990	99	0.1	0.0991	99	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 # : 347203 **Project ID:** 2006-142

Lab Batch ID: 775966 **QC- Sample ID:** 346642-006 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 10/07/2009 **Date Prepared:** 10/06/2009 **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	ND	0.1000	0.0827	83	0.1000	0.0900	90	8	70-125	25	
Toluene	ND	0.1000	0.0817	82	0.1000	0.0888	89	8	70-125	25	
Ethylbenzene	ND	0.1000	0.0818	82	0.1000	0.0893	89	9	71-129	25	
m,p-Xylenes	ND	0.2000	0.1784	89	0.2000	0.1951	98	9	70-131	25	
o-Xylene	ND	0.1000	0.0859	86	0.1000	0.0949	95	10	71-133	25	

Lab Batch ID: 776140 **QC- Sample ID:** 347183-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 10/07/2009 **Date Prepared:** 10/07/2009 **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	ND	0.1000	0.0800	80	0.1000	0.0802	80	0	70-125	25	
Toluene	ND	0.1000	0.0795	80	0.1000	0.0796	80	0	70-125	25	
Ethylbenzene	ND	0.1000	0.0802	80	0.1000	0.0801	80	0	71-129	25	
m,p-Xylenes	ND	0.2000	0.1743	87	0.2000	0.1728	86	1	70-131	25	
o-Xylene	ND	0.1000	0.0844	84	0.1000	0.0836	84	1	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

Environmental Lab of Texas

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: Curt Stanley   PAGE 01 OF 01

Company Name: Basin Environmental Service Technologies, LLC

Company Address: P. O. Box 301

City/State/Zip: Lovington, NM 88260

Telephone No: (505) 441-2244   Fax No: (505) 396-1429

Sampler Signature: [signature] C.L. Reyes   e-mail: cstanley@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 #: 347203

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers (1 Liter amber, 2 VOAs)	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)	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.	PAH 8270			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
																								TCLP / TOTAL	X							
01	MW-9			10/5/2009	1100		3	X		X						GW									X							X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	10/6/09	0412			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: [signature]	10-6-09	9.13

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: 5.1 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-in

Client: Basin Env. / Plains

Date/ Time: 10.6.09 9:13

Lab ID # : 347203

Initials: AL

Sample Receipt Checklist

				Client Initials
#1 Temperature of container/ cooler?	(Yes)	No	5.1 °C	
#2 Shipping container in good condition?	(Yes)	No		
#3 Custody Seals intact on shipping container/ cooler?	Yes	No	(Not Present)	
#4 Custody Seals intact on sample bottles/ container?	(Yes)	No	Not Present	
#5 Chain of Custody present?	(Yes)	No		
#6 Sample instructions complete of Chain of Custody?	(Yes)	No		
#7 Chain of Custody signed when relinquished/ received?	(Yes)	No		
#8 Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont./ Lid	
#9 Container label(s) legible and intact?	(Yes)	No	Not Applicable	
#10 Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		
#11 Containers supplied by ELOT?	(Yes)	No		
#12 Samples in proper container/ bottle?	(Yes)	No	See Below	
#13 Samples properly preserved?	(Yes)	No	See Below	
#14 Sample bottles intact?	(Yes)	No		
#15 Preservations documented on Chain of Custody?	(Yes)	No		
#16 Containers documented on Chain of Custody?	(Yes)	No		
#17 Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18 All samples received within sufficient hold time?	(Yes)	No	See Below	
#19 Subcontract of sample(s)?	Yes	No	(Not Applicable)	
#20 VOC samples have zero headspace?	(Yes)	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time _____

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

Analytical Report 350679

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

11-NOV-09

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-08-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 (LAO00308), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87428), 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 (T104704400-08-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-08-TX)
Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370-08-TX)
Xenco-Boca Raton (EPA Lab Code: FL00449): Florida(E86240),
South Carolina(96031001), Louisiana(04154), Georgia(917)

11-NOV-09

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

Reference: XENCO Report No: **350679**
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 350679. 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. 350679 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 350679

PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-10	W	Nov-02-09 09:00		350679-001

CASE NARRATIVE

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

Project ID: 2006-142 *Report Date:* 11-NOV-09
Work Order Number: 350679 *Date Received:* 11/03/2009

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-780311 Determination of Inorganic Anions In Water By Ion E300MI

Batch 780311, Chloride, Fluoride recovered above QC limits in the Matrix Spike.
Samples affected are: 350679-001.
The Laboratory Control Sample for Chloride , Fluoride is within laboratory Control Limits

E300MI
Batch 780311, Nitrate as N RPD is outside the QC limit. This is most likely due to sample non-homogeneity.
Samples affected are: 350679-001.

Batch: LBA-780340 Alkalinity by SM2320B
None

Batch: LBA-780359 Mercury by SW-846 7470A
SW7470A

Batch 780359, Mercury recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.
Samples affected are: 350679-001.
The Laboratory Control Sample for Mercury is within laboratory Control Limits

Batch: LBA-780428 Metals per ICP by SW846 6010B
None

CASE NARRATIVE

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

Project ID: 2006-142 *Report Date:* 11-NOV-09
Work Order Number: 350679 *Date Received:* 11/03/2009

Batch: LBA-780438 Metals by EPA 200.8
SW6020
Batch 780438, Boron and Iron RPD is outside the QC limit. This is most likely due to sample non-homogeneity.
Samples affected are: 350103-015, 350679-001.

SW6020

Batch 780438, Zinc recovered below QC limits in the Matrix Spike Duplicate. Aluminum recovered above QC limits in the Matrix Spike. Boron recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate.
Samples affected are: 350679-001.
The Laboratory Control Sample for Aluminum, Zinc, Boron is within laboratory Control Limits

Batch: LBA-780540 VOAs by SW-846 8260B
None

Batch: LBA-780919 SVOAs by SW-846 8270C
None

Certificate of Analysis Summary 350679

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 Nov-03-09 10:22 am
Report Date: 11-NOV-09
Project Manager: Brent Barron, II

Analysis Requested								
	Lab Id:	350679-001						
	Field Id:	MW-10						
	Depth:							
	Matrix:	WATER						
	Sampled:	Nov-02-09 09:00						
Alkalinity by SM2320B	*Extracted:*							
	Analyzed:	Nov-03-09 15:25						
	Units/RL:	mg/L	RL					
Alkalinity, Bicarbonate (as CaCO3)		126	4.00					
Alkalinity, Total (as CaCO3)		126	4.00					
Alkalinity, phenolphthalein		ND	4.00					
Alkalinity, Carbonate (as CaCO3)		ND	4.00					
Determination of Inorganic Anions In Water By Ion	*Extracted:*							
	Analyzed:	Nov-04-09 11:19						
	Units/RL:	mg/L	RL					
Fluoride		9.27	2.00					
Chloride		24.9	5.00					
Sulfate		64.1	5.00					
Nitrate as N		2.14	0.500					
Ortho-Phosphate		ND	2.50					

Certificate of Analysis Summary 350679

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 Nov-03-09 10:22 am
Report Date: 11-NOV-09
Project Manager: Brent Barron, II

Analysis Requested							
	Lab Id:	350679-001					
	Field Id:	MW-10					
	Depth:						
	Matrix:	WATER					
	Sampled:	Nov-02-09 09:00					
Inductively Coupled Plasma Atomic Emission Spectroscopy Mass Spectrometry SUB: T104704215-08B-TX	*Extracted:*	Nov-05-09 09:20					
	Analyzed:	Nov-05-09 15:55					
	Units/RL:	mg/L	RL				
Aluminum		0.908	0.010				
Arsenic		0.007	0.002				
Barium		0.134	0.005				
Boron		0.397	0.010				
Cadmium		ND	0.001				
Chromium		0.053	0.003				
Cobalt		ND	0.005				
Copper		ND	0.003				
Iron		0.820	0.150				
Lead		ND	0.002				
Manganese		0.017	0.003				
Molybdenum		ND	0.004				
Nickel		0.027	0.005				
Selenium		ND	0.003				
Silver		ND	0.002				
Zinc		ND	0.003				
Mercury by SW-846 7470A	*Extracted:*	Nov-04-09 11:00					
	Analyzed:	Nov-05-09 11:44					
	Units/RL:	mg/L	RL				
Mercury		0.0001	0.0001				

Brent Barron, II
Odessa Laboratory Manager

Certificate of Analysis Summary 350679

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 Nov-03-09 10:22 am
Report Date: 11-NOV-09
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	350679-001					
	Field Id:	MW-10					
	Depth:						
	Matrix:	WATER					
	Sampled:	Nov-02-09 09:00					
Metals per ICP by SW846 6010B	*Extracted:*						
	Analyzed:	Nov-05-09 13:02					
	Units/RL:	mg/L	RL				
Calcium		76.5	2.50				
Magnesium		13.6	0.250				
Potassium		ND	12.5				
Sodium		33.3	12.5				

Brent Barron, II
Odessa Laboratory Manager

Certificate of Analysis Summary 350679

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 Nov-03-09 10:22 am
Report Date: 11-NOV-09
Project Manager: Brent Barron, II

Analysis Requested							
	Lab Id:	350679-001					
	Field Id:	MW-10					
	Depth:						
	Matrix:	WATER					
	Sampled:	Nov-02-09 09:00					
SVOAs by SW-846 8270C	*Extracted:*	Nov-05-09 08:16					
SUB: T104704215-08B-TX	*Analyzed:*	Nov-09-09 12:29					
	Units/RL:	mg/L RL					
Acenaphthene		ND 0.005					
Acenaphthylene		ND 0.005					
Aniline (Phenylamine, Aminobenzene)		ND 0.020					
Anthracene		ND 0.005					
Benzo(a)anthracene		ND 0.005					
Benzo(a)pyrene		ND 0.005					
Benzo(b)fluoranthene		ND 0.005					
Benzo(k)fluoranthene		ND 0.005					
Benzo(g,h,i)perylene		ND 0.005					
Benzoic Acid		ND 0.030					
Benzyl Butyl Phthalate		ND 0.005					
bis(2-chloroethoxy) methane		ND 0.010					
bis(2-chloroethyl) ether		ND 0.010					
bis(2-chloroisopropyl) ether		ND 0.010					
bis(2-ethylhexyl) phthalate		ND 0.005					
4-Bromophenyl-phenylether		ND 0.010					
4-chloro-3-methylphenol		ND 0.010					
4-Chloroaniline		ND 0.020					
2-Chloronaphthalene		ND 0.010					
2-Chlorophenol		ND 0.010					
4-Chlorophenyl Phenyl Ether		ND 0.010					
Chrysene		ND 0.005					
Dibenz(a,h)anthracene		ND 0.005					
Dibenzofuran		ND 0.010					
di-n-Butyl Phthalate		ND 0.005					

Certificate of Analysis Summary 350679

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 Nov-03-09 10:22 am
Report Date: 11-NOV-09
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	350679-001					
	Field Id:	MW-10					
	Depth:						
	Matrix:	WATER					
	Sampled:	Nov-02-09 09:00					
SVOAs by SW-846 8270C	*Extracted:*	Nov-05-09 08:16					
SUB: T104704215-08B-TX	*Analyzed:*	Nov-09-09 12:29					
	Units/RL:	mg/L RL					
1,2-Dichlorobenzene		ND 0.010					
1,3-Dichlorobenzene		ND 0.010					
1,4-Dichlorobenzene		ND 0.010					
3,3-Dichlorobenzidine		ND 0.010					
2,4-Dichlorophenol		ND 0.010					
Diethyl Phthalate		ND 0.005					
Dimethyl Phthalate		ND 0.005					
2,4-Dimethylphenol		ND 0.010					
4,6-dinitro-2-methyl phenol		ND 0.010					
2,4-Dinitrophenol		ND 0.010					
2,4-Dinitrotoluene		ND 0.010					
2,6-Dinitrotoluene		ND 0.010					
di-n-Octyl Phthalate		ND 0.005					
Fluoranthene		ND 0.005					
Fluorene		ND 0.005					
Hexachlorobenzene		ND 0.010					
Hexachlorobutadiene		ND 0.010					
Hexachlorocyclopentadiene		ND 0.010					
Hexachloroethane		ND 0.010					
Indeno(1,2,3-c,d)Pyrene		ND 0.005					
Isophorone		ND 0.010					
2-Methylnaphthalene		ND 0.005					
2-methylphenol		ND 0.010					
3&4-Methylphenol		ND 0.010					
Naphthalene		ND 0.005					

Certificate of Analysis Summary 350679

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 Nov-03-09 10:22 am
Report Date: 11-NOV-09
Project Manager: Brent Barron, II

Analysis Requested							
	Lab Id:	350679-001					
	Field Id:	MW-10					
	Depth:						
	Matrix:	WATER					
	Sampled:	Nov-02-09 09:00					
SVOAs by SW-846 8270C	*Extracted:*	Nov-05-09 08:16					
SUB: T104704215-08B-TX	*Analyzed:*	Nov-09-09 12:29					
	Units/RL:	mg/L RL					
2-Nitroaniline		ND 0.010					
3-Nitroaniline		ND 0.010					
4-Nitroaniline		ND 0.020					
Nitrobenzene		ND 0.010					
2-Nitrophenol		ND 0.010					
4-Nitrophenol		ND 0.010					
N-Nitrosodi-n-Propylamine		ND 0.010					
N-Nitrosodiphenylamine		ND 0.010					
Pentachlorophenol		ND 0.010					
Phenanthrene		ND 0.005					
Phenol		ND 0.010					
Pyrene		ND 0.005					
Pyridine		ND 0.010					
1,2,4-Trichlorobenzene		ND 0.010					
2,4,5-Trichlorophenol		ND 0.010					
2,4,6-Trichlorophenol		ND 0.010					

Brent Barron, II
Odessa Laboratory Manager

Certificate of Analysis Summary 350679

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 Nov-03-09 10:22 am
Report Date: 11-NOV-09
Project Manager: Brent Barron, II

Analysis Requested							
	Lab Id:	350679-001					
	Field Id:	MW-10					
	Depth:						
	Matrix:	WATER					
	Sampled:	Nov-02-09 09:00					
VOAs by SW-846 8260B	*Extracted:*	Nov-05-09 14:05					
SUB: T104704295-08-TX	*Analyzed:*	Nov-05-09 15:29					
	Units/RL:	mg/L RL					
Benzene		ND 0.005					
Bromobenzene		ND 0.005					
Bromochloromethane		ND 0.005					
Bromodichloromethane		ND 0.005					
Bromoform		ND 0.005					
Methyl bromide		ND 0.005					
MTBE		ND 0.005					
n-Butylbenzene		ND 0.005					
Sec-Butylbenzene		ND 0.005					
tert-Butylbenzene		ND 0.005					
Carbon Tetrachloride		ND 0.005					
Chlorobenzene		ND 0.005					
Chloroethane		ND 0.010					
Chloroform		ND 0.005					
Methyl Chloride		ND 0.010					
2-Chlorotoluene		ND 0.005					
4-Chlorotoluene		ND 0.005					
p-Cymene (p-Isopropyltoluene)		ND 0.005					
Dibromochloromethane		ND 0.005					
1,2-Dibromo-3-Chloropropane		ND 0.005					
1,2-Dibromoethane		ND 0.005					
Methylene bromide		ND 0.005					
1,2-Dichlorobenzene		ND 0.005					
1,3-Dichlorobenzene		ND 0.005					
1,4-Dichlorobenzene		ND 0.005					

Brent Barron, II
Odessa Laboratory Manager

Certificate of Analysis Summary 350679

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 Nov-03-09 10:22 am
Report Date: 11-NOV-09
Project Manager: Brent Barron, II

Analysis Requested							
	Lab Id:	350679-001					
	Field Id:	MW-10					
	Depth:						
	Matrix:	WATER					
	Sampled:	Nov-02-09 09:00					
VOAs by SW-846 8260B	*Extracted:*	Nov-05-09 14:05					
SUB: T104704295-08-TX	*Analyzed:*	Nov-05-09 15:29					
	Units/RL:	mg/L RL					
Dichlorodifluoromethane		ND 0.005					
1,1-Dichloroethane		ND 0.005					
1,2-Dichloroethane		ND 0.005					
1,1-Dichloroethene		ND 0.005					
cis-1,2-Dichloroethylene		ND 0.005					
trans-1,2-dichloroethylene		ND 0.005					
1,2-Dichloropropane		ND 0.005					
1,3-Dichloropropane		ND 0.005					
2,2-Dichloropropane		ND 0.005					
1,1-Dichloropropene		ND 0.005					
cis-1,3-Dichloropropene		ND 0.005					
trans-1,3-dichloropropene		ND 0.005					
Ethylbenzene		ND 0.005					
Hexachlorobutadiene		ND 0.005					
isopropylbenzene		ND 0.005					
Methylene Chloride		ND 0.005					
Naphthalene		ND 0.010					
n-Propylbenzene		ND 0.005					
Styrene		ND 0.005					
1,1,1,2-Tetrachloroethane		ND 0.005					
1,1,2,2-Tetrachloroethane		ND 0.005					
Tetrachloroethylene		ND 0.005					
Toluene		ND 0.005					
1,2,3-Trichlorobenzene		ND 0.005					
1,2,4-Trichlorobenzene		ND 0.005					

Brent Barron, II
Odessa Laboratory Manager

Certificate of Analysis Summary 350679

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 Nov-03-09 10:22 am
Report Date: 11-NOV-09
Project Manager: Brent Barron, II

Analysis Requested							
	Lab Id:	350679-001					
	Field Id:	MW-10					
	Depth:						
	Matrix:	WATER					
	Sampled:	Nov-02-09 09:00					
VOAs by SW-846 8260B	*Extracted:*	Nov-05-09 14:05					
SUB: T104704295-08-TX	*Analyzed:*	Nov-05-09 15:29					
	Units/RL:	mg/L RL					
1,1,1-Trichloroethane		ND 0.005					
1,1,2-Trichloroethane		ND 0.005					
Trichloroethylene		ND 0.005					
Trichlorofluoromethane		ND 0.005					
1,2,3-Trichloropropane		ND 0.005					
1,2,4-Trimethylbenzene		ND 0.005					
1,3,5-Trimethylbenzene		ND 0.005					
o-Xylene		ND 0.005					
m,p-Xylene		ND 0.010					
Vinyl Chloride		ND 0.002					

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

* Outside XENCO's scope of NELAC Accreditation.

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 350679,

Project ID: 2006-142

Lab Batch #: 780919 **Sample:** 542398-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/05/09 13:34

SVOAs by SW-846 8270C	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.047	0.050	94	43-116	
2-Fluorophenol	0.039	0.050	78	21-100	
Nitrobenzene-d5	0.044	0.050	88	35-114	
Phenol-d6	0.029	0.050	58	10-94	
Terphenyl-D14	0.055	0.050	110	33-141	
2,4,6-Tribromophenol	0.048	0.050	96	10-123	

Lab Batch #: 780919 **Sample:** 542398-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/05/09 14:12

SVOAs by SW-846 8270C	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.045	0.050	90	43-116	
2-Fluorophenol	0.034	0.050	68	21-100	
Nitrobenzene-d5	0.044	0.050	88	35-114	
Phenol-d6	0.024	0.050	48	10-94	
Terphenyl-D14	0.052	0.050	104	33-141	
2,4,6-Tribromophenol	0.048	0.050	96	10-123	

Lab Batch #: 780919 **Sample:** 542398-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/05/09 14:50

SVOAs by SW-846 8270C	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.048	0.050	96	43-116	
2-Fluorophenol	0.035	0.050	70	21-100	
Nitrobenzene-d5	0.046	0.050	92	35-114	
Phenol-d6	0.026	0.050	52	10-94	
Terphenyl-D14	0.054	0.050	108	33-141	
2,4,6-Tribromophenol	0.051	0.050	102	10-123	

* 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.

Version: 1.014

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 350679,

Project ID: 2006-142

Lab Batch #: 780919 **Sample:** 350679-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/09/09 12:29

SVOAs by SW-846 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.044	0.050	88	43-116	
2-Fluorophenol	0.021	0.050	42	21-100	
Nitrobenzene-d5	0.040	0.050	80	35-114	
Phenol-d6	0.011	0.050	22	10-94	
Terphenyl-D14	0.049	0.050	98	33-141	
2,4,6-Tribromophenol	0.047	0.050	94	10-123	

Lab Batch #: 780540 **Sample:** 542495-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/05/09 11:26

VOAs by SW-846 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0496	0.0500	99	74-124	
Dibromofluoromethane	0.0458	0.0500	92	75-131	
1,2-Dichloroethane-D4	0.0464	0.0500	93	63-144	
Toluene-D8	0.0514	0.0500	103	80-117	

Lab Batch #: 780540 **Sample:** 542495-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/05/09 14:42

VOAs by SW-846 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0472	0.0500	94	74-124	
Dibromofluoromethane	0.0424	0.0500	85	75-131	
1,2-Dichloroethane-D4	0.0464	0.0500	93	63-144	
Toluene-D8	0.0520	0.0500	104	80-117	

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

Version: 1.014

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 350679,

Project ID: 2006-142

Lab Batch #: 780540 **Sample:** 350679-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/05/09 15:29

VOAs by SW-846 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0487	0.0500	97	74-124	
Dibromofluoromethane	0.0436	0.0500	87	75-131	
1,2-Dichloroethane-D4	0.0448	0.0500	90	63-144	
Toluene-D8	0.0522	0.0500	104	80-117	

Lab Batch #: 780540 **Sample:** 350679-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/05/09 17:17

VOAs by SW-846 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0494	0.0500	99	74-124	
Dibromofluoromethane	0.0425	0.0500	85	75-131	
1,2-Dichloroethane-D4	0.0435	0.0500	87	63-144	
Toluene-D8	0.0509	0.0500	102	80-117	

Lab Batch #: 780540 **Sample:** 350679-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 11/05/09 17:39

VOAs by SW-846 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0501	0.0500	100	74-124	
Dibromofluoromethane	0.0432	0.0500	86	75-131	
1,2-Dichloroethane-D4	0.0438	0.0500	88	63-144	
Toluene-D8	0.0506	0.0500	101	80-117	

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

Version: 1.014

Blank Spike Recovery

Project Name: Lovington Gathering WTI

Work Order #: 350679 **Project ID:** 2006-142

Lab Batch #: 780340 **Sample:** 780340-1-BKS **Matrix:** Water
Date Analyzed: 11/03/2009 **Date Prepared:** 11/03/2009 **Analyst:** WRU
Reporting Units: mg/L **Batch #:** 1

Alkalinity by SM2320B Analytes	Blank Result [A]	BLANK /BLANK SPIKE RECOVERY STUDY Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Alkalinity, Total (as CaCO3)	ND	170	170	100	80-120	

Lab Batch #: 780438 **Sample:** 542412-1-BKS **Matrix:** Water
Date Analyzed: 11/05/2009 **Date Prepared:** 11/05/2009 **Analyst:** HAT
Reporting Units: mg/L **Batch #:** 1

Inductively Coupled Plasma Atomic Emission Sp Analytes	Blank Result [A]	BLANK /BLANK SPIKE RECOVERY STUDY Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Aluminum	ND	0.200	0.171	86	75-125	
Arsenic	ND	0.050	0.051	102	75-125	
Barium	ND	0.050	0.055	110	75-125	
Boron	0.015	0.020	0.022	110	75-125	
Cadmium	ND	0.020	0.022	110	75-125	
Chromium	ND	0.050	0.049	98	75-125	
Cobalt	ND	0.050	0.050	100	75-125	
Copper	ND	0.050	0.051	102	75-125	
Iron	ND	0.200	0.200	100	75-125	
Lead	ND	0.050	0.049	98	75-125	
Manganese	ND	0.050	0.050	100	75-125	
Molybdenum	ND	0.050	0.053	106	75-125	
Nickel	ND	0.050	0.049	98	75-125	
Selenium	ND	0.050	0.054	108	75-125	
Silver	ND	0.020	0.022	110	75-125	
Zinc	ND	0.050	0.051	102	75-125	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.
BRL - Below Reporting Limit

Version: 1.014

Final Ver. 1.000

Blank Spike Recovery

Project Name: Lovington Gathering WTI

Work Order #: 350679 **Project ID:** 2006-142

Lab Batch #: 780311 **Sample:** 780311-1-BKS **Matrix:** Water

Date Analyzed: 11/04/2009 **Date Prepared:** 11/04/2009 **Analyst:** LATCOR

Reporting Units: mg/L **Batch #:** 1

	BLANK /BLANK SPIKE RECOVERY STUDY					
Determination of Inorganic Anions In Water By Analytes	**Blank Result [A]**	**Spike Added [B]**	**Blank Spike Result [C]**	**Blank Spike %R [D]**	**Control Limits %R**	**Flags**
Fluoride	ND	2.50	2.43	97	90-110	
Chloride	ND	10.0	10.3	103	90-110	
Sulfate	ND	11.0	11.2	102	90-110	
Nitrate as N	ND	2.00	2.00	100	90-110	
Ortho-Phosphate	ND	1.60	1.69	106	90-110	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.
BRL - Below Reporting Limit

Version: 1.014

Blank Spike Recovery

Project Name: Lovington Gathering WTI

Work Order #: 350679 **Project ID:** 2006-142

Lab Batch #: 780540 **Sample:** 542495-1-BKS **Matrix:** Water

Date Analyzed: 11/05/2009 **Date Prepared:** 11/05/2009 **Analyst:** JEA

Reporting Units: mg/L **Batch #:** 1

VOAs by SW-846 8260B Analytes	Blank Result [A]	BLANK /BLANK SPIKE RECOVERY STUDY Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Benzene	ND	0.050	0.047	94	66-142	
Bromobenzene	ND	0.050	0.045	90	75-125	
Bromochloromethane	ND	0.050	0.046	92	73-125	
Bromodichloromethane	ND	0.050	0.046	92	75-125	
Bromoform	ND	0.050	0.046	92	75-125	
Methyl bromide	ND	0.050	0.049	98	70-130	
MTBE	ND	0.050	0.050	100	65-135	
n-Butylbenzene	ND	0.050	0.052	104	75-125	
Sec-Butylbenzene	ND	0.050	0.052	104	75-125	
tert-Butylbenzene	ND	0.050	0.052	104	75-125	
Carbon Tetrachloride	ND	0.050	0.052	104	62-125	
Chlorobenzene	ND	0.050	0.048	96	60-133	
Chloroethane	ND	0.050	0.049	98	70-130	
Chloroform	ND	0.050	0.047	94	74-125	
Methyl Chloride	ND	0.050	0.043	86	70-130	
2-Chlorotoluene	ND	0.050	0.049	98	73-125	
4-Chlorotoluene	ND	0.050	0.048	96	74-125	
p-Cymene (p-Isopropyltoluene)	ND	0.050	0.052	104	75-125	
Dibromochloromethane	ND	0.050	0.047	94	73-125	
1,2-Dibromo-3-Chloropropane	ND	0.050	0.054	108	59-125	
Methylene bromide	ND	0.050	0.050	100	69-127	
1,2-Dichlorobenzene	ND	0.050	0.048	96	75-125	
1,3-Dichlorobenzene	ND	0.050	0.048	96	75-125	
1,4-Dichlorobenzene	ND	0.050	0.048	96	75-125	
Dichlorodifluoromethane	ND	0.050	0.046	92	70-130	
1,1-Dichloroethane	ND	0.050	0.044	88	72-125	
1,2-Dichloroethane	ND	0.050	0.046	92	68-127	
1,1-Dichloroethene	ND	0.050	0.046	92	59-172	
cis-1,2-Dichloroethylene	ND	0.050	0.047	94	75-125	
trans-1,2-dichloroethylene	ND	0.050	0.044	88	75-125	
1,2-Dichloropropane	ND	0.050	0.043	86	74-125	
1,3-Dichloropropane	ND	0.050	0.046	92	75-125	
2,2-Dichloropropane	ND	0.050	0.043	86	75-125	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.
BRL - Below Reporting Limit

Version: 1.014

Blank Spike Recovery

Project Name: Lovington Gathering WTI

Work Order #: 350679 **Project ID:** 2006-142

Lab Batch #: 780540 **Sample:** 542495-1-BKS **Matrix:** Water

Date Analyzed: 11/05/2009 **Date Prepared:** 11/05/2009 **Analyst:** JEA

Reporting Units: mg/L **Batch #:** 1

BLANK /BLANK SPIKE RECOVERY STUDY

VOAs by SW-846 8260B Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
1,1-Dichloropropene	ND	0.050	0.045	90	75-125	
cis-1,3-Dichloropropene	ND	0.050	0.045	90	74-125	
trans-1,3-dichloropropene	ND	0.050	0.046	92	66-125	
Ethylbenzene	ND	0.050	0.051	102	75-125	
Hexachlorobutadiene	ND	0.050	0.052	104	75-125	
isopropylbenzene	ND	0.050	0.052	104	75-125	
Methylene Chloride	ND	0.050	0.038	76	75-125	
Naphthalene	ND	0.050	0.044	88	75-125	
n-Propylbenzene	ND	0.050	0.053	106	75-125	
Styrene	ND	0.050	0.050	100	75-125	
1,1,1,2-Tetrachloroethane	ND	0.050	0.048	96	72-125	
1,1,2,2-Tetrachloroethane	ND	0.050	0.047	94	74-125	
Tetrachloroethylene	ND	0.050	0.051	102	71-125	
Toluene	ND	0.050	0.049	98	59-139	
1,2,3-Trichlorobenzene	ND	0.050	0.045	90	75-137	
1,2,4-Trichlorobenzene	ND	0.050	0.045	90	75-135	
1,1,1-Trichloroethane	ND	0.050	0.044	88	75-125	
1,1,2-Trichloroethane	ND	0.050	0.045	90	75-127	
Trichloroethylene	ND	0.050	0.047	94	62-137	
Trichlorofluoromethane	ND	0.050	0.048	96	67-125	
1,2,3-Trichloropropane	ND	0.050	0.046	92	75-125	
1,2,4-Trimethylbenzene	ND	0.050	0.050	100	75-125	
1,3,5-Trimethylbenzene	ND	0.050	0.051	102	70-125	
o-Xylene	ND	0.050	0.050	100	75-125	
m,p-Xylene	ND	0.100	0.101	101	75-125	
Vinyl Chloride	ND	0.050	0.044	88	75-125	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.
BRL - Below Reporting Limit

Version: 1.014

BS / BSD Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 350679 **Project ID:** 2006-142

Analyst: LATCOR **Date Prepared:** 11/04/2009 **Date Analyzed:** 11/05/2009

Lab Batch ID: 780359 **Sample:** 542392-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Mercury by SW-846 7470A **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
Mercury	ND	0.0010	0.0010	100	0.001	0.0009	90	11	75-125	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

Version: 1.014

BS / BSD Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 350679 **Project ID:** 2006-142

Analyst: KAN **Date Prepared:** 11/04/2009 **Date Analyzed:** 11/05/2009

Lab Batch ID: 780919 **Sample:** 542398-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

SVOAs by SW-846 8270C 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	ND	0.050	0.042	84	0.05	0.044	88	5	27-132	31	
Acenaphthylene	ND	0.050	0.042	84	0.05	0.045	90	7	46-108	25	
Aniline (Phenylamine, Aminobenzene)	ND	0.050	0.038	76	0.05	0.040	80	5	5-115	25	
Anthracene	ND	0.050	0.043	86	0.05	0.045	90	5	47-145	25	
Benzo(a)anthracene	ND	0.050	0.041	82	0.05	0.044	88	7	33-143	25	
Benzo(a)pyrene	ND	0.050	0.044	88	0.05	0.046	92	4	65-135	25	
Benzo(b)fluoranthene	ND	0.050	0.045	90	0.05	0.049	98	9	24-159	25	
Benzo(k)fluoranthene	ND	0.050	0.044	88	0.05	0.045	90	2	25-125	25	
Benzo(g,h,i)perylene	ND	0.050	0.049	98	0.05	0.053	106	8	65-135	25	
Benzoic Acid	ND	0.150	0.091	61	0.15	0.090	60	1	30-115	40	
Benzyl Butyl Phthalate	ND	0.050	0.047	94	0.05	0.049	98	4	65-135	25	
bis(2-chloroethoxy) methane	ND	0.050	0.039	78	0.05	0.041	82	5	54-188	25	
bis(2-chloroethyl) ether	ND	0.050	0.037	74	0.05	0.039	78	5	65-135	25	
bis(2-chloroisopropyl) ether	ND	0.050	0.037	74	0.05	0.039	78	5	65-135	25	
bis(2-ethylhexyl) phthalate	ND	0.050	0.041	82	0.05	0.043	86	5	8-158	25	
4-Bromophenyl-phenylether	ND	0.050	0.046	92	0.05	0.050	100	8	65-135	25	
4-chloro-3-methylphenol	ND	0.050	0.044	88	0.05	0.047	94	7	16-129	33	
4-Chloroaniline	ND	0.050	0.050	100	0.05	0.051	102	2	9-128	25	
2-Chloronaphthalene	ND	0.050	0.042	84	0.05	0.045	90	7	65-135	25	
2-Chlorophenol	ND	0.050	0.041	82	0.05	0.044	88	7	16-116	40	

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

Version: 1.014

BS / BSD Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 350679 **Project ID:** 2006-142

Analyst: KAN **Date Prepared:** 11/04/2009 **Date Analyzed:** 11/05/2009

Lab Batch ID: 780919 **Sample:** 542398-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

SVOAs by SW-846 8270C 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
4-Chlorophenyl Phenyl Ether	ND	0.050	0.046	92	0.05	0.048	96	4	65-135	25	
Chrysene	ND	0.050	0.046	92	0.05	0.048	96	4	65-135	25	
Dibenz(a,h)anthracene	ND	0.050	0.047	94	0.05	0.050	100	6	50-125	25	
Dibenzofuran	ND	0.050	0.045	90	0.05	0.048	96	6	52-125	25	
di-n-Butyl Phthalate	ND	0.050	0.042	84	0.05	0.045	90	7	49-135	50	
1,2-Dichlorobenzene	ND	0.050	0.042	84	0.05	0.044	88	5	65-135	25	
1,3-Dichlorobenzene	ND	0.050	0.042	84	0.05	0.044	88	5	65-135	25	
1,4-Dichlorobenzene	ND	0.050	0.041	82	0.05	0.044	88	7	19-121	28	
3,3-Dichlorobenzidine	ND	0.050	0.041	82	0.05	0.036	72	13	12-147	25	
2,4-Dichlorophenol	ND	0.050	0.045	90	0.05	0.048	96	6	65-135	25	
Diethyl Phthalate	ND	0.050	0.044	88	0.05	0.047	94	7	37-125	50	
Dimethyl Phthalate	ND	0.050	0.043	86	0.05	0.046	92	7	25-175	50	
2,4-Dimethylphenol	ND	0.050	0.039	78	0.05	0.041	82	5	32-119	25	
4,6-dinitro-2-methyl phenol	ND	0.050	0.044	88	0.05	0.047	94	7	2-181	25	
2,4-Dinitrophenol	ND	0.050	0.043	86	0.05	0.044	88	2	65-135	25	
2,4-Dinitrotoluene	ND	0.050	0.045	90	0.05	0.049	98	9	22-135	38	
2,6-Dinitrotoluene	ND	0.050	0.044	88	0.05	0.047	94	7	49-122	38	
di-n-Octyl Phthalate	ND	0.050	0.044	88	0.05	0.047	94	7	43-134	50	
Fluoranthene	ND	0.050	0.041	82	0.05	0.043	86	5	47-125	25	
Fluorene	ND	0.050	0.044	88	0.05	0.047	94	7	48-139	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

Version: 1.014

BS / BSD Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 350679 **Project ID:** 2006-142

Analyst: KAN **Date Prepared:** 11/04/2009 **Date Analyzed:** 11/05/2009

Lab Batch ID: 780919 **Sample:** 542398-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

SVOAs by SW-846 8270C 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
Hexachlorobenzene	ND	0.050	0.047	94	0.05	0.050	100	6	46-133	25	
Hexachlorobutadiene	ND	0.050	0.046	92	0.05	0.048	96	4	44-125	25	
Hexachlorocyclopentadiene	ND	0.050	0.044	88	0.05	0.046	92	4	41-125	25	
Hexachloroethane	ND	0.050	0.039	78	0.05	0.041	82	5	25-153	25	
Indeno(1,2,3-c,d)Pyrene	ND	0.050	0.046	92	0.05	0.049	98	6	27-160	25	
Isophorone	ND	0.050	0.041	82	0.05	0.043	86	5	26-175	25	
2-Methylnaphthalene	ND	0.050	0.046	92	0.05	0.048	96	4	25-175	25	
2-methylphenol	ND	0.050	0.039	78	0.05	0.041	82	5	14-176	25	
3&4-Methylphenol	ND	0.100	0.065	65	0.1	0.068	68	5	14-176	25	
Naphthalene	ND	0.050	0.042	84	0.05	0.045	90	7	26-175	25	
2-Nitroaniline	ND	0.050	0.042	84	0.05	0.044	88	5	65-135	25	
3-Nitroaniline	ND	0.050	0.051	102	0.05	0.052	104	2	65-135	25	
4-Nitroaniline	ND	0.050	0.059	118	0.05	0.061	122	3	65-135	25	
Nitrobenzene	ND	0.050	0.040	80	0.05	0.043	86	7	65-135	25	
2-Nitrophenol	ND	0.050	0.044	88	0.05	0.047	94	7	65-135	25	
4-Nitrophenol	ND	0.050	0.025	50	0.05	0.028	56	11	10-80	50	
N-Nitrosodi-n-Propylamine	ND	0.050	0.036	72	0.05	0.036	72	0	22-134	38	
N-Nitrosodiphenylamine	ND	0.050	0.051	102	0.05	0.055	110	8	2-196	25	
Pentachlorophenol	ND	0.050	0.035	70	0.05	0.036	72	3	17-117	50	
Phenanthrene	ND	0.050	0.042	84	0.05	0.044	88	5	65-135	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

Version: 1.014

BS / BSD Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 350679
Analyst: KAN
Lab Batch ID: 780919
Sample: 542398-1-BKS
Units: mg/L

Date Prepared: 11/04/2009
Batch #: 1

Project ID: 2006-142
Date Analyzed: 11/05/2009
Matrix: Water

SVOAs by SW-846 8270C 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
Phenol	ND	0.050	0.026	52	0.05	0.029	58	11	12-110	25	
Pyrene	ND	0.050	0.050	100	0.05	0.052	104	4	23-152	31	
Pyridine	ND	0.050	0.018	36	0.05	0.019	38	5	16-86	28	
1,2,4-Trichlorobenzene	ND	0.050	0.044	88	0.05	0.047	94	7	20-124	28	
2,4,5-Trichlorophenol	ND	0.050	0.043	86	0.05	0.045	90	5	65-135	25	
2,4,6-Trichlorophenol	ND	0.050	0.043	86	0.05	0.046	92	7	65-135	25	

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

Form 3 - MS Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 350679
Lab Batch #: 780311
Project ID: 2006-142
Date Analyzed: 11/04/2009
Date Prepared: 11/04/2009
Analyst: LATCOR
QC- Sample ID: 350679-001 S
Batch #: 1
Matrix: Water
Reporting Units: mg/L

Inorganic Anions by EPA 300 Analytes	MATRIX / MATRIX SPIKE RECOVERY STUDY					
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Fluoride	9.27	20.0	33.4	121	90-110	X
Chloride	24.9	100	137	112	90-110	X
Sulfate	64.1	110	173	99	90-110	
Nitrate as N	2.14	20.0	22.9	104	90-110	
Ortho-Phosphate	ND	20.0	19.8	99	90-110	

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

Version: 1.014

Form 3 - MS / MSD Recoveries

Project Name: Lovington Gathering WTI

Work Order # : 350679 **Project ID:** 2006-142

Lab Batch ID: 780438 **QC- Sample ID:** 350103-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 11/05/2009 **Date Prepared:** 11/05/2009 **Analyst:** HAT

Reporting Units: mg/L

Inductively Coupled Plasma Atomic Emission Spectroscopy Mass Spectrometry	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
Aluminum	0.550	0.200	0.806	128	0.200	0.751	101	24	75-125	25	X
Arsenic	0.012	0.050	0.057	90	0.050	0.056	88	2	75-125	25	
Barium	0.037	0.050	0.087	100	0.050	0.086	98	2	75-125	25	
Boron	4.99	0.020	5.64	3250	0.020	5.41	2100	43	75-125	25	XF
Cadmium	ND	0.020	0.017	85	0.020	0.017	85	0	75-125	25	
Chromium	ND	0.050	0.047	94	0.050	0.046	92	2	75-125	25	
Cobalt	ND	0.050	0.045	90	0.050	0.044	88	2	75-125	25	
Copper	ND	0.050	0.045	90	0.050	0.043	86	5	75-125	25	
Iron	0.320	0.200	0.510	95	0.200	0.510	95	0	75-125	25	
Lead	0.002	0.050	0.051	98	0.050	0.049	94	4	75-125	25	
Manganese	0.029	0.050	0.078	98	0.050	0.075	92	6	75-125	25	
Molybdenum	0.026	0.050	0.075	98	0.050	0.074	96	2	75-125	25	
Nickel	ND	0.050	0.044	88	0.050	0.043	86	2	75-125	25	
Selenium	0.006	0.050	0.046	80	0.050	0.045	78	3	75-125	25	
Silver	ND	0.020	0.016	80	0.020	0.016	80	0	75-125	25	
Zinc	0.004	0.050	0.042	76	0.050	0.041	74	3	75-125	25	X

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

Form 3 - MS / MSD Recoveries

Project Name: Lovington Gathering WTI

Work Order # : 350679 **Project ID:** 2006-142

Lab Batch ID: 780359 **QC- Sample ID:** 350336-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 11/05/2009 **Date Prepared:** 11/04/2009 **Analyst:** LATCOR

Reporting Units: mg/L

	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
Mercury by SW-846 7470A **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
Mercury	ND	0.0010	0.0007	70	0.0010	0.0007	70	0	75-125	20	X

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

Form 3 - MS / MSD Recoveries

Project Name: Lovington Gathering WTI

Work Order # : 350679 **Project ID:** 2006-142

Lab Batch ID: 780540 **QC- Sample ID:** 350679-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 11/05/2009 **Date Prepared:** 11/05/2009 **Analyst:** JEA

Reporting Units: mg/L

VOAs by SW-846 8260B 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	ND	0.050	0.045	90	0.050	0.045	90	0	66-142	21	
Bromobenzene	ND	0.050	0.047	94	0.050	0.047	94	0	75-125	20	
Bromochloromethane	ND	0.050	0.048	96	0.050	0.048	96	0	73-125	20	
Bromodichloromethane	ND	0.050	0.044	88	0.050	0.044	88	0	75-125	20	
Bromoform	ND	0.050	0.044	88	0.050	0.049	98	11	75-125	20	
Methyl bromide	ND	0.050	0.047	94	0.050	0.049	98	4	70-130	20	
MTBE	ND	0.050	0.049	98	0.050	0.048	96	2	65-135	20	
n-Butylbenzene	ND	0.050	0.048	96	0.050	0.050	100	4	75-125	20	
Sec-Butylbenzene	ND	0.050	0.048	96	0.050	0.050	100	4	75-125	20	
tert-Butylbenzene	ND	0.050	0.049	98	0.050	0.051	102	4	75-125	20	
Carbon Tetrachloride	ND	0.050	0.044	88	0.050	0.045	90	2	62-125	20	
Chlorobenzene	ND	0.050	0.047	94	0.050	0.048	96	2	60-133	21	
Chloroethane	ND	0.050	0.045	90	0.050	0.045	90	0	70-130	20	
Chloroform	ND	0.050	0.047	94	0.050	0.048	96	2	74-125	20	
Methyl Chloride	ND	0.050	0.042	84	0.050	0.043	86	2	70-130	20	
2-Chlorotoluene	ND	0.050	0.050	100	0.050	0.050	100	0	73-125	20	
4-Chlorotoluene	ND	0.050	0.048	96	0.050	0.049	98	2	74-125	20	
p-Cymene (p-Isopropyltoluene)	ND	0.050	0.048	96	0.050	0.051	102	6	75-125	20	
Dibromochloromethane	ND	0.050	0.046	92	0.050	0.046	92	0	73-125	20	
1,2-Dibromo-3-Chloropropane	ND	0.050	0.052	104	0.050	0.051	102	2	59-125	28	
Methylene bromide	ND	0.050	0.046	92	0.050	0.050	100	8	69-127	23	
1,2-Dichlorobenzene	ND	0.050	0.049	98	0.050	0.050	100	2	75-125	20	
1,3-Dichlorobenzene	ND	0.050	0.048	96	0.050	0.049	98	2	75-125	20	

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

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

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

Form 3 - MS / MSD Recoveries

Project Name: Lovington Gathering WTI

Work Order # : 350679 **Project ID:** 2006-142

Lab Batch ID: 780540 **QC- Sample ID:** 350679-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 11/05/2009 **Date Prepared:** 11/05/2009 **Analyst:** JEA

Reporting Units: mg/L

VOAs by SW-846 8260B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
1,4-Dichlorobenzene	ND	0.050	0.048	96	0.050	0.050	100	4	75-125	20	
Dichlorodifluoromethane	ND	0.050	0.039	78	0.050	0.041	82	5	70-130	23	
1,1-Dichloroethane	ND	0.050	0.042	84	0.050	0.043	86	2	72-125	20	
1,2-Dichloroethane	ND	0.050	0.048	96	0.050	0.048	96	0	68-127	20	
1,1-Dichloroethene	ND	0.050	0.042	84	0.050	0.042	84	0	59-172	22	
cis-1,2-Dichloroethylene	ND	0.050	0.048	96	0.050	0.048	96	0	75-125	20	
trans-1,2-dichloroethylene	ND	0.050	0.042	84	0.050	0.044	88	5	75-125	20	
1,2-Dichloropropane	ND	0.050	0.042	84	0.050	0.043	86	2	74-125	20	
1,3-Dichloropropane	ND	0.050	0.044	88	0.050	0.048	96	9	75-125	20	
2,2-Dichloropropane	ND	0.050	0.040	80	0.050	0.041	82	2	75-125	20	
1,1-Dichloropropene	ND	0.050	0.042	84	0.050	0.043	86	2	75-125	20	
cis-1,3-Dichloropropene	ND	0.050	0.044	88	0.050	0.045	90	2	74-125	20	
trans-1,3-dichloropropene	ND	0.050	0.046	92	0.050	0.047	94	2	66-125	20	
Ethylbenzene	ND	0.050	0.047	94	0.050	0.049	98	4	75-125	20	
Hexachlorobutadiene	ND	0.050	0.046	92	0.050	0.049	98	6	75-125	20	
isopropylbenzene	ND	0.050	0.048	96	0.050	0.049	98	2	75-125	20	
Methylene Chloride	ND	0.050	0.048	96	0.050	0.049	98	2	75-125	35	
Naphthalene	ND	0.050	0.046	92	0.050	0.050	100	8	75-125	20	
n-Propylbenzene	ND	0.050	0.049	98	0.050	0.051	102	4	75-125	20	
Styrene	ND	0.050	0.049	98	0.050	0.051	102	4	75-125	51	
1,1,1,2-Tetrachloroethane	ND	0.050	0.048	96	0.050	0.049	98	2	72-125	20	
1,1,2,2-Tetrachloroethane	ND	0.050	0.045	90	0.050	0.047	94	4	74-125	31	
Tetrachloroethylene	ND	0.050	0.045	90	0.050	0.046	92	2	71-125	20	

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

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

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

Form 3 - MS / MSD Recoveries

Project Name: Lovington Gathering WTI

Work Order # : 350679 **Project ID:** 2006-142

Lab Batch ID: *780540* ***QC- Sample ID:*** *350679-001 S* ***Batch #:*** 1 ***Matrix:*** Water

Date Analyzed: 11/05/2009 **Date Prepared:** 11/05/2009 **Analyst:** JEA

Reporting Units: mg/L

VOAs by SW-846 8260B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Toluene	ND	0.050	0.046	92	0.050	0.048	96	4	59-139	21	
1,2,3-Trichlorobenzene	ND	0.050	0.047	94	0.050	0.050	100	6	75-137	20	
1,2,4-Trichlorobenzene	ND	0.050	0.046	92	0.050	0.050	100	8	75-135	20	
1,1,1-Trichloroethane	ND	0.050	0.041	82	0.050	0.042	84	2	75-125	20	
1,1,2-Trichloroethane	ND	0.050	0.045	90	0.050	0.046	92	2	75-127	20	
Trichloroethylene	ND	0.050	0.045	90	0.050	0.044	88	2	62-137	24	
Trichlorofluoromethane	ND	0.050	0.041	82	0.050	0.042	84	2	67-125	20	
1,2,3-Trichloropropane	ND	0.050	0.046	92	0.050	0.046	92	0	75-125	20	
1,2,4-Trimethylbenzene	ND	0.050	0.049	98	0.050	0.051	102	4	75-125	20	
1,3,5-Trimethylbenzene	ND	0.050	0.049	98	0.050	0.052	104	6	70-125	20	
o-Xylene	ND	0.050	0.046	92	0.050	0.049	98	6	75-125	20	
m,p-Xylene	ND	0.100	0.095	95	0.100	0.097	97	2	75-125	20	
Vinyl Chloride	ND	0.050	0.041	82	0.050	0.043	86	5	75-125	20	

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

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

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

Sample Duplicate Recovery

Project Name: Lovington Gathering WTI

Work Order #: 350679

Lab Batch #: 780340 **Project ID:** 2006-142

Date Analyzed: 11/03/2009 **Date Prepared:** 11/03/2009 **Analyst:** WRU

QC- Sample ID: 350089-001 D **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

Alkalinity by SM2320B Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Alkalinity, phenolphthalein	ND	ND	NC	20	
Alkalinity, Total (as CaCO3)	94.0	96.0	2	20	
Alkalinity, Carbonate (as CaCO3)	ND	ND	NC	20	
Alkalinity, Bicarbonate (as CaCO3)	ND	ND	NC	20	

Lab Batch #: 780311

Date Analyzed: 11/04/2009 **Date Prepared:** 11/04/2009 **Analyst:** LATCOR

QC- Sample ID: 350679-001 D **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

Determination of Inorganic Anions In Water By Ion Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Fluoride	9.27	9.54	3	20	
Chloride	24.9	23.8	5	20	
Sulfate	64.1	65.8	3	20	
Nitrate as N	2.14	1.12	63	20	F
Ortho-Phosphate	ND	ND	NC	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

Version: 1.014

Sample Duplicate Recovery

Project Name: Lovington Gathering WTI

Work Order #: 350679

Lab Batch #: 780438 **Project ID:** 2006-142

Date Analyzed: 11/05/2009 **Date Prepared:** 11/05/2009 **Analyst:** HAT

QC- Sample ID: 350103-001 D **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

Inductively Coupled Plasma Atomic Emission Spectroscopy Mass Spectrometry Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Aluminum	0.550	0.669	20	20	
Arsenic	0.012	0.014	15	20	
Barium	0.037	0.039	5	20	
Boron	4.99	5.58	11	20	
Cadmium	ND	ND	NC	20	
Chromium	ND	ND	NC	20	
Cobalt	ND	ND	NC	20	
Copper	ND	ND	NC	20	
Iron	0.320	0.400	22	20	F
Lead	0.002	ND	NC	20	
Manganese	0.029	0.032	10	20	
Molybdenum	0.026	0.027	4	20	
Nickel	ND	ND	NC	20	
Selenium	0.006	0.006	0	20	
Silver	ND	ND	NC	20	
Zinc	0.004	0.004	0	20	

Lab Batch #: 780428

Date Analyzed: 11/05/2009 **Date Prepared:** 11/05/2009 **Analyst:** LATCOR

QC- Sample ID: 350679-001 D **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

Metals per ICP by SW846 6010B Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Calcium	76.5	73.5	4	25	
Magnesium	13.6	12.7	7	25	
Potassium	ND	ND	NC	25	
Sodium	33.3	29.8	11	25	

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

Version: 1.014

Environmental Lab of Texas

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: Curt Stanley

Company Name: Basin Environmental Service Technologies, LLC

Company Address: P. O. Box 301

City/State/Zip: Lovington, NM 88260

Telephone No: (575)605-7210 Fax No: (575) 396-1429

Sampler Signature: C. D. Stanley for C.L. Reynolds E-mail: cdstanley@basin-consulting.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 #: 350679

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/Sol NP=Non-Potable Specify Oth	Analyze For: TCLP: TPH: 418.1 8015M	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	TOTAL: Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	NMWQCC Metals (see Attached)	NO3 Prosphate, F	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
01	MW-10			11/02/09	0900		7	X	X	X						GW			X	X		X	X	X			X	X		X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
	11/3/09	1022			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Cindy Sam	11.3.09	10:22

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: 1.1 °C

NMOCD - Analytical Parameters for Initial Groundwater Sampling (3-12-08)

Field Parameters

specific conductance
pH
temperature
depth to water

General Chemistry

Calcium
Magnesium
Potassium
Sodium
Chloride
Sulfate
Bicarbonate Alkalinity
Carbonate Alkalinity
Nitrate
Phosphate
Fluoride

RCRA Metals

Arsenic
Barium
Cadmium
Chromium
Lead
Mercury
Selenium
Silver

Additional WQCC Metals

Copper
Iron
Manganese
Zinc
Aluminum
Boron
Cobalt
Molybdenum
Nickel

All compounds listed in U.S. EPA SW-846 Methods: 8260 (VOCs) & 8270 (SVOCs)

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Basin Env. / Plains

Date/ Time: 11.3.09 10:22

Lab ID # : 350679

Initials: AL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	1.1 °C	
#2	Shipping container in good condition?	(Yes)	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	(Not Present)	
#4	Custody Seals intact on sample bottles/ container?	(Yes)	No	Not Present	
#5	Chain of Custody present?	(Yes)	No		
#6	Sample instructions complete of Chain of Custody?	(Yes)	No		
#7	Chain of Custody signed when relinquished/ received?	(Yes)	No		
#8	Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	(Yes)	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		
#11	Containers supplied by ELOT?	(Yes)	No		
#12	Samples in proper container/ bottle?	(Yes)	No	See Below	
#13	Samples properly preserved?	(Yes)	No	See Below	
#14	Sample bottles intact?	(Yes)	No		
#15	Preservations documented on Chain of Custody?	(Yes)	No		
#16	Containers documented on Chain of Custody?	(Yes)	No		
#17	Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18	All samples received within sufficient hold time?	(Yes)	No	See Below	
#19	Subcontract of sample(s)?	(Yes)	No	Not Applicable	
#20	VOC samples have zero headspace?	(Yes)	No	Not Applicable	

Variance Documentation

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

Regarding: 16 metals, SVOC subbed to Xenco-Houston, VOC subbed to Xenco-Dallas.

Corrective Action Taken:

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

Analytical Report 356497

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

Lovington Gathering WTI

2006-142

29-DEC-09

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-08-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 (LAO00308), 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 (T104704400-08-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-08-TX)
Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370-08-TX)
Xenco-Boca Raton (EPA Lab Code: FL00449): Florida(E86240),
South Carolina(96031001), Louisiana(04154), Georgia(917)

29-DEC-09

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

Reference: XENCO Report No: **356497**
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 356497. 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. 356497 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 356497

PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-5	W	Dec-18-09 10:45		356497-001
MW-1	W	Dec-18-09 11:30		356497-002
MW-4	W	Dec-18-09 12:15		356497-003
MW-6	W	Dec-18-09 13:00		356497-004
MW-3	W	Dec-18-09 14:30		356497-005
MW-7	W	Dec-18-09 15:15		356497-006
MW-8	W	Dec-18-09 16:00		356497-007
MW-2	W	Dec-18-09 16:45		356497-008
MW-9	W	Dec-18-09 17:30		356497-009

CASE NARRATIVE

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

Project ID: 2006-142
Work Order Number: 356497

Report Date: 29-DEC-09
Date Received: 12/21/2009

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-787254 SVOA PAHs List by SW-846 8270C
None

Batch: LBA-787355 BTEX by EPA 8021
SW8021BM

Batch 787355, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data not confirmed by re-analysis
Samples affected are: 356497-007.

Certificate of Analysis Summary 356497

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-21-09 05:13 pm
Report Date: 29-DEC-09
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	356497-001		356497-002		356497-003		356497-004		356497-005		356497-006	
	Field Id:	MW-5		MW-1		MW-4		MW-6		MW-3		MW-7	
	Depth:												
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	Sampled:	Dec-18-09 10:45		Dec-18-09 11:30		Dec-18-09 12:15		Dec-18-09 13:00		Dec-18-09 14:30		Dec-18-09 15:15	
BTEX by EPA 8021	*Extracted:*	Dec-21-09 17:30		Dec-21-09 17:30		Dec-21-09 17:30		Dec-21-09 17:30		Dec-21-09 17:30		Dec-21-09 17:30	
	Analyzed:	Dec-24-09 12:57		Dec-24-09 13:20		Dec-24-09 13:42		Dec-24-09 14:05		Dec-24-09 15:14		Dec-24-09 15:37	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		ND	0.0010	ND	0.0010	ND	0.0010	0.0130	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	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020
o-Xylene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Xylenes, Total		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Total BTEX		ND	0.0010	ND	0.0010	ND	0.0010	0.0130	0.0010	ND	0.0010	ND	0.0010

Brent Barron, II
Odessa Laboratory Manager

Certificate of Analysis Summary 356497

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-21-09 05:13 pm
Report Date: 29-DEC-09
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	356497-001		356497-002		356497-003		356497-004		356497-005		356497-006	
	Field Id:	MW-5		MW-1		MW-4		MW-6		MW-3		MW-7	
	Depth:												
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	Sampled:	Dec-18-09 10:45		Dec-18-09 11:30		Dec-18-09 12:15		Dec-18-09 13:00		Dec-18-09 14:30		Dec-18-09 15:15	
SVOA PAHs List	*Extracted:*	Dec-23-09 11:36		Dec-23-09 11:39		Dec-23-09 11:42		Dec-23-09 11:45		Dec-23-09 11:48		Dec-23-09 11:51	
SUB: T104704215-08B-TX	*Analyzed:*	Dec-24-09 15:46		Dec-24-09 16:23		Dec-24-09 17:01		Dec-24-09 17:40		Dec-24-09 18:17		Dec-24-09 18:56	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Acenaphthene		ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Acenaphthylene		ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Anthracene		ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Benzo(a)anthracene		ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Benzo(a)pyrene		ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Benzo(b)fluoranthene		ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Benzo(k)fluoranthene		ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Benzo(g,h,i)perylene		ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Chrysene		ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Dibenz(a,h)anthracene		ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Fluoranthene		ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Fluorene		ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Indeno(1,2,3-c,d)Pyrene		ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005
1-Methylnaphthalene		ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005
2-Methylnaphthalene		ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Naphthalene		ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Phenanthrene		ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005
Pyrene		ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	0.005

Brent Barron, II
Odessa Laboratory Manager

Certificate of Analysis Summary 356497

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-21-09 05:13 pm
Report Date: 29-DEC-09
Project Manager: Brent Barron, II

Analysis Requested											
	Lab Id:	356497-007		356497-008		356497-009					
	Field Id:	MW-8		MW-2		MW-9					
	Depth:										
	Matrix:	WATER		WATER		WATER					
	Sampled:	Dec-18-09 16:00		Dec-18-09 16:45		Dec-18-09 17:30					
BTEX by EPA 8021	*Extracted:*	Dec-21-09 17:30		Dec-21-09 17:30		Dec-21-09 17:30					
	Analyzed:	Dec-24-09 15:59		Dec-24-09 16:22		Dec-24-09 16:45					
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL				
Benzene		ND	0.0010	0.0129	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	0.0095	0.0020	ND	0.0020				
o-Xylene		ND	0.0010	ND	0.0010	ND	0.0010				
Xylenes, Total		ND	0.0010	0.0095	0.0010	ND	0.0010				
Total BTEX		ND	0.0010	0.0224	0.0010	ND	0.0010				

Brent Barron, II
Odessa Laboratory Manager

Final Ver. 1.000

Certificate of Analysis Summary 356497

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-21-09 05:13 pm
Report Date: 29-DEC-09
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	356497-007		356497-008		356497-009				
	Field Id:	MW-8		MW-2		MW-9				
	Depth:									
	Matrix:	WATER		WATER		WATER				
	Sampled:	Dec-18-09 16:00		Dec-18-09 16:45		Dec-18-09 17:30				
SVOA PAHs List	*Extracted:*	Dec-23-09 11:54		Dec-23-09 11:57		Dec-23-09 12:00				
SUB: T104704215-08B-TX	*Analyzed:*	Dec-24-09 19:33		Dec-24-09 20:11		Dec-24-09 20:48				
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL			
Acenaphthene		ND	0.005	ND	0.005	ND	0.005			
Acenaphthylene		ND	0.005	ND	0.005	ND	0.005			
Anthracene		ND	0.005	ND	0.005	ND	0.005			
Benzo(a)anthracene		ND	0.005	ND	0.005	ND	0.005			
Benzo(a)pyrene		ND	0.005	ND	0.005	ND	0.005			
Benzo(b)fluoranthene		ND	0.005	ND	0.005	ND	0.005			
Benzo(k)fluoranthene		ND	0.005	ND	0.005	ND	0.005			
Benzo(g,h,i)perylene		ND	0.005	ND	0.005	ND	0.005			
Chrysene		ND	0.005	ND	0.005	ND	0.005			
Dibenz(a,h)anthracene		ND	0.005	ND	0.005	ND	0.005			
Fluoranthene		ND	0.005	ND	0.005	ND	0.005			
Fluorene		ND	0.005	ND	0.005	ND	0.005			
Indeno(1,2,3-c,d)Pyrene		ND	0.005	ND	0.005	ND	0.005			
1-Methylnaphthalene		ND	0.005	ND	0.005	ND	0.005			
2-Methylnaphthalene		ND	0.005	ND	0.005	ND	0.005			
Naphthalene		ND	0.005	ND	0.005	ND	0.005			
Phenanthrene		ND	0.005	ND	0.005	ND	0.005			
Pyrene		ND	0.005	ND	0.005	ND	0.005			

Brent Barron, II
Odessa Laboratory Manager

Flagging Criteria

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

* Outside XENCO's scope of NELAC Accreditation.

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 356497,

Project ID: 2006-142

Lab Batch #: 787355 **Sample:** 546427-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/24/09 08:46

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0313	0.0300	104	80-120	
4-Bromofluorobenzene	0.0296	0.0300	99	80-120	

Lab Batch #: 787355 **Sample:** 546427-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/24/09 09:09

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	0.0304	0.0300	101	80-120	

Lab Batch #: 787355 **Sample:** 546427-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/24/09 10:17

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0271	0.0300	90	80-120	
4-Bromofluorobenzene	0.0298	0.0300	99	80-120	

Lab Batch #: 787355 **Sample:** 356497-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/24/09 12:57

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0270	0.0300	90	80-120	
4-Bromofluorobenzene	0.0313	0.0300	104	80-120	

Lab Batch #: 787355 **Sample:** 356497-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/24/09 13:20

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0270	0.0300	90	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.

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 356497,

Project ID: 2006-142

Lab Batch #: 787355 **Sample:** 356497-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/24/09 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	0.0270	0.0300	90	80-120	
4-Bromofluorobenzene	0.0318	0.0300	106	80-120	

Lab Batch #: 787355 **Sample:** 356497-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/24/09 14:05

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0283	0.0300	94	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

Lab Batch #: 787355 **Sample:** 356497-005 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/24/09 15:14

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0268	0.0300	89	80-120	
4-Bromofluorobenzene	0.0310	0.0300	103	80-120	

Lab Batch #: 787355 **Sample:** 356497-006 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/24/09 15:37

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0254	0.0300	85	80-120	
4-Bromofluorobenzene	0.0295	0.0300	98	80-120	

Lab Batch #: 787355 **Sample:** 356497-007 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/24/09 15:59

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0208	0.0300	69	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.

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 356497,

Project ID: 2006-142

Lab Batch #: 787355 **Sample:** 356497-008 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/24/09 16:22

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	0.0298	0.0300	99	80-120	

Lab Batch #: 787355 **Sample:** 356497-009 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/24/09 16:45

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0267	0.0300	89	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

Lab Batch #: 787355 **Sample:** 356194-011 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/24/09 19:01

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0310	0.0300	103	80-120	
4-Bromofluorobenzene	0.0296	0.0300	99	80-120	

Lab Batch #: 787355 **Sample:** 356194-011 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/24/09 19:24

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	0.0279	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.

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 356497,

Project ID: 2006-142

Lab Batch #: 787254 **Sample:** 546283-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/24/09 13:52

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.036	0.050	72	43-116	
2-Fluorophenol	0.024	0.050	48	21-100	
Nitrobenzene-d5	0.037	0.050	74	35-114	
Phenol-d6	0.015	0.050	30	10-94	
Terphenyl-D14	0.043	0.050	86	33-141	
2,4,6-Tribromophenol	0.037	0.050	74	10-123	

Lab Batch #: 787254 **Sample:** 546283-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/24/09 14:30

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.025	0.050	50	43-116	
2-Fluorophenol	0.024	0.050	48	21-100	
Nitrobenzene-d5	0.024	0.050	48	35-114	
Phenol-d6	0.013	0.050	26	10-94	
Terphenyl-D14	0.025	0.050	50	33-141	
2,4,6-Tribromophenol	0.022	0.050	44	10-123	

Lab Batch #: 787254 **Sample:** 546283-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/24/09 15:08

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.037	0.050	74	43-116	
2-Fluorophenol	0.024	0.050	48	21-100	
Nitrobenzene-d5	0.038	0.050	76	35-114	
Phenol-d6	0.018	0.050	36	10-94	
Terphenyl-D14	0.041	0.050	82	33-141	
2,4,6-Tribromophenol	0.038	0.050	76	10-123	

* 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 : 356497,

Project ID: 2006-142

Lab Batch #: 787254 **Sample:** 356497-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/24/09 15:46

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.037	0.050	74	43-116	
2-Fluorophenol	0.022	0.050	44	21-100	
Nitrobenzene-d5	0.039	0.050	78	35-114	
Phenol-d6	0.011	0.050	22	10-94	
Terphenyl-D14	0.042	0.050	84	33-141	
2,4,6-Tribromophenol	0.040	0.050	80	10-123	

Lab Batch #: 787254 **Sample:** 356497-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/24/09 16:23

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.036	0.050	72	43-116	
2-Fluorophenol	0.021	0.050	42	21-100	
Nitrobenzene-d5	0.038	0.050	76	35-114	
Phenol-d6	0.010	0.050	20	10-94	
Terphenyl-D14	0.042	0.050	84	33-141	
2,4,6-Tribromophenol	0.040	0.050	80	10-123	

Lab Batch #: 787254 **Sample:** 356497-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/24/09 17:01

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.037	0.050	74	43-116	
2-Fluorophenol	0.021	0.050	42	21-100	
Nitrobenzene-d5	0.038	0.050	76	35-114	
Phenol-d6	0.011	0.050	22	10-94	
Terphenyl-D14	0.044	0.050	88	33-141	
2,4,6-Tribromophenol	0.039	0.050	78	10-123	

* 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 : 356497,

Project ID: 2006-142

Lab Batch #: 787254 **Sample:** 356497-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/24/09 17:40

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.041	0.050	82	43-116	
2-Fluorophenol	0.024	0.050	48	21-100	
Nitrobenzene-d5	0.041	0.050	82	35-114	
Phenol-d6	0.011	0.050	22	10-94	
Terphenyl-D14	0.048	0.050	96	33-141	
2,4,6-Tribromophenol	0.047	0.050	94	10-123	

Lab Batch #: 787254 **Sample:** 356497-005 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/24/09 18:17

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.035	0.050	70	43-116	
2-Fluorophenol	0.021	0.050	42	21-100	
Nitrobenzene-d5	0.036	0.050	72	35-114	
Phenol-d6	0.012	0.050	24	10-94	
Terphenyl-D14	0.041	0.050	82	33-141	
2,4,6-Tribromophenol	0.037	0.050	74	10-123	

Lab Batch #: 787254 **Sample:** 356497-006 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/24/09 18:56

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.035	0.050	70	43-116	
2-Fluorophenol	0.021	0.050	42	21-100	
Nitrobenzene-d5	0.035	0.050	70	35-114	
Phenol-d6	0.012	0.050	24	10-94	
Terphenyl-D14	0.043	0.050	86	33-141	
2,4,6-Tribromophenol	0.043	0.050	86	10-123	

* 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 : 356497,

Project ID: 2006-142

Lab Batch #: 787254 **Sample:** 356497-007 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/24/09 19:33

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.033	0.050	66	43-116	
2-Fluorophenol	0.021	0.050	42	21-100	
Nitrobenzene-d5	0.035	0.050	70	35-114	
Phenol-d6	0.011	0.050	22	10-94	
Terphenyl-D14	0.038	0.050	76	33-141	
2,4,6-Tribromophenol	0.041	0.050	82	10-123	

Lab Batch #: 787254 **Sample:** 356497-008 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/24/09 20:11

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.038	0.050	76	43-116	
2-Fluorophenol	0.022	0.050	44	21-100	
Nitrobenzene-d5	0.040	0.050	80	35-114	
Phenol-d6	0.013	0.050	26	10-94	
Terphenyl-D14	0.044	0.050	88	33-141	
2,4,6-Tribromophenol	0.050	0.050	100	10-123	

Lab Batch #: 787254 **Sample:** 356497-009 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/24/09 20:48

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.047	0.050	94	43-116	
2-Fluorophenol	0.026	0.050	52	21-100	
Nitrobenzene-d5	0.049	0.050	98	35-114	
Phenol-d6	0.013	0.050	26	10-94	
Terphenyl-D14	0.057	0.050	114	33-141	
2,4,6-Tribromophenol	0.055	0.050	110	10-123	

* 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 #: 356497 **Project ID:** 2006-142

Analyst: ASA **Date Prepared:** 12/21/2009 **Date Analyzed:** 12/24/2009

Lab Batch ID: 787355 **Sample:** 546427-1-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	ND	0.1000	0.1105	111	0.1	0.1144	114	3	70-125	25	
Toluene	ND	0.1000	0.1095	110	0.1	0.1140	114	4	70-125	25	
Ethylbenzene	ND	0.1000	0.1076	108	0.1	0.1126	113	5	71-129	25	
m,p-Xylenes	ND	0.2000	0.2202	110	0.2	0.2302	115	4	70-131	25	
o-Xylene	ND	0.1000	0.1144	114	0.1	0.1188	119	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

BS / BSD Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 356497 **Project ID:** 2006-142

Analyst: KAN **Date Prepared:** 12/23/2009 **Date Analyzed:** 12/24/2009

Lab Batch ID: 787254 **Sample:** 546283-1-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	ND	0.050	0.038	76	0.05	0.040	80	5	27-132	31	
Acenaphthylene	ND	0.050	0.038	76	0.05	0.040	80	5	46-108	25	
Anthracene	ND	0.050	0.039	78	0.05	0.041	82	5	47-145	25	
Benzo(a)anthracene	ND	0.050	0.040	80	0.05	0.042	84	5	33-143	25	
Benzo(a)pyrene	ND	0.050	0.041	82	0.05	0.043	86	5	65-135	25	
Benzo(b)fluoranthene	ND	0.050	0.042	84	0.05	0.046	92	9	24-159	25	
Benzo(k)fluoranthene	ND	0.050	0.042	84	0.05	0.044	88	5	25-125	25	
Benzo(g,h,i)perylene	ND	0.050	0.040	80	0.05	0.043	86	7	65-135	25	
Chrysene	ND	0.050	0.037	74	0.05	0.039	78	5	65-135	25	
Dibenz(a,h)anthracene	ND	0.050	0.042	84	0.05	0.045	90	7	50-125	25	
Fluoranthene	ND	0.050	0.040	80	0.05	0.043	86	7	47-125	25	
Fluorene	ND	0.050	0.040	80	0.05	0.042	84	5	48-139	25	
Indeno(1,2,3-c,d)Pyrene	ND	0.050	0.042	84	0.05	0.045	90	7	27-160	25	
Naphthalene	ND	0.050	0.036	72	0.05	0.039	78	8	26-175	25	
Phenanthrene	ND	0.050	0.039	78	0.05	0.041	82	5	65-135	25	
Pyrene	ND	0.050	0.040	80	0.05	0.042	84	5	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

Form 3 - MS / MSD Recoveries

Project Name: Lovington Gathering WTI

Work Order # : 356497 **Project ID:** 2006-142

Lab Batch ID: 787355 **QC- Sample ID:** 356194-011 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 12/24/2009 **Date Prepared:** 12/21/2009 **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	ND	0.1000	0.0886	89	0.1000	0.0882	88	0	70-125	25	
Toluene	ND	0.1000	0.0866	87	0.1000	0.0853	85	2	70-125	25	
Ethylbenzene	ND	0.1000	0.0858	86	0.1000	0.0825	83	4	71-129	25	
m,p-Xylenes	ND	0.2000	0.1738	87	0.2000	0.1545	77	12	70-131	25	
o-Xylene	ND	0.1000	0.0925	93	0.1000	0.0862	86	7	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

Environmental Lab of Texas

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: Camille Bryant

Project Name: Lovington Gathering WTI

Company Name: Basin Environmental Service Technologies, LLC

Project #: 2006-142

Company Address: P. O. Box 301

Project Loc: Lea County, NM

City/State/Zip: Lovington, NM 88260

PO #: PAA- J. Henry

Telephone No: (575) 605-7210 Fax No: (505) 396-1429

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

Sampler Signature: C.T. Finley for C.L. Reynolds E-mail: cjbryant@basin-consulting.com

(lab use only)

ORDER #: 356497

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice (1) 1L amber glass	HNO3	HCl (3) 40mL glass	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW - Drinking Water SL - Sludge; GW - Groundwater S - Soil/Soil; NP - Non-Potable Specify Oth	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.	PAH (8270)			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
01	MW-5			12/18/2009	1045		4	X		X						GW									X			X				X
02	MW-1			12/18/2009	1130		4	X		X						GW									X			X				X
03	MW-4			12/18/2009	1215		4	X		X						GW									X			X				X
04	MW-6			12/18/2009	1300		4	X		X						GW									X			X				X
05	MW-3			12/18/2009	1430		4	X		X						GW									X			X				X
06	MW-7			12/18/2009	1515		4	X		X						GW									X			X				X
07	MW-8			12/18/2009	1600		4	X		X						GW									X			X				X
08	MW-2			12/18/2009	1645		4	X		X						GW									X			X				X
09	MW-9			12/18/2009	1730		4	X		X						GW									X			X				X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
C.T. Finley	12/21/09	1713			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Jeanne Fitch	Date 12-21-09	Time 1713

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s) / labels	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	Y	N

Temperature Upon Receipt: 3.6 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Plains / Basin Env.

Date/ Time: 12-21-09 @ 1713

Lab ID # : 356497

Initials: JMF

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	3.6 °C	
#2	Shipping container in good condition?	(Yes)	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	(Not Present)	
#4	Custody Seals intact on sample bottles/ container? / labels	(Yes)	No	Not Present	
#5	Chain of Custody present?	(Yes)	No		
#6	Sample instructions complete of Chain of Custody?	(Yes)	No		
#7	Chain of Custody signed when relinquished/ received?	(Yes)	No		
#8	Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	(Yes)	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		
#11	Containers supplied by ELOT?	(Yes)	No		
#12	Samples in proper container/ bottle?	(Yes)	No	See Below	
#13	Samples properly preserved?	(Yes)	No	See Below	
#14	Sample bottles intact?	(Yes)	No		
#15	Preservations documented on Chain of Custody?	(Yes)	No		
#16	Containers documented on Chain of Custody?	(Yes)	No		
#17	Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18	All samples received within sufficient hold time?	(Yes)	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	Not Applicable	Xenco-Houston - PAH
#20	VOC samples have zero headspace?	(Yes)	No	Not Applicable	

Variance Documentation

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

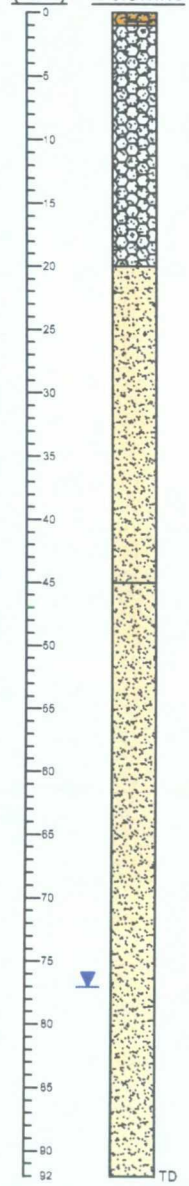
Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

Appendix B
Monitor Well Logs



PID Reading	Petroleum Odor	Petroleum Stain
8.2	None	None
7.1	None	None
3.5	None	None
5.0	None	None
7.3	None	None
4.3	None	None
5.2	None	None
0.8	None	None
7.2	None	None
2.9	None	None
5.6	None	None
5.1	None	None
5.3	None	None
6.3	None	None
5.7	None	None

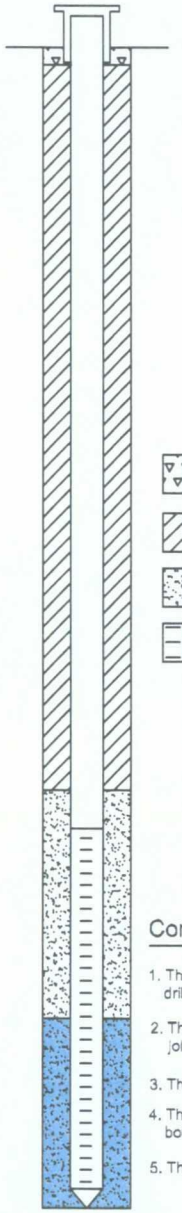
Soil Description

0 - 1' - Sand, brown to tan, clayey with some caliche nodules, moist

1 - 20' - Caliche, white to tan, soft, sandy, very fine grained

20 - 45' - Sand, tan to brown, very fine grained with sandstone layering

45 - 92' - Sand, tan to brown, very fine grained, very heavy sandstone layering 72-75' bgs, wet at 77' bgs



Monitor Well MW-10

Monitor Well Details

Date Drilled October 27, 2009
Thickness of Bentonite Seal 57 Ft
Length of PVC Well Screen 30 Ft
Depth of PVC Well 92 Ft
Depth of Exploratory Well 92 Ft
Depth to Groundwater 77 Ft
Ground Water Elevation

Grout Surface Seal
Bentonite Pellet Seal
Sand Pack
Screen

Indicates the PSH level measured on _____
Indicates the groundwater level measured on _____
Indicates samples selected for Laboratory Analysis.
PID Head-space reading in ppm obtained with a photo-ionization detector.

Completion Notes

1. The monitor well was installed on date using air rotary drilling techniques.
2. The well was constructed with 2" ID, 0.020 inch factory slotted, threaded joint, schedule 40 PVC pipe.
3. The well is protected with a locked stick up steel cover and a compression cap.
4. The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
5. The depths indicated are referenced from below ground surface (bgs).

Monitor Well Details
Monitor Well MW-10
Lovington Gathering WTI Lea County, New Mexico
Plains Marketing, L.P.

Basin Environmental Consulting

Prep By: CDS	Checked By: CDS
November 2, 2009	

Appendix C
Release Notification and 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.*

Received
Hobbs
OCD

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

Printed Name: Camille Reynolds

Title: Remediation Coordinator

E-mail Address: cjreynolds@paalp.com

Date: 4/26/2006 Phone:505-441-0965

OIL CONSERVATION DIVISION

Approved by District Supervisor:

Approval Date: Expiration Date:

Conditions of Approval: Attached ☐

application - pPAC0611639267

facility - fPAC0611638437
incident - nPAC0611638542