APPROVED
By OCD; Dr. Oberding at 8:47 am, May 25, 2016

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Effective Solutions

2015 ANNUAL MONITORING REPORT

LOVINGTON GATHERING WTI
Unit Letter "H" (SE/NE), Section 6, Township 17 South, Range 37 East
Latitude 32º 51' 56.0" North, Longitude 103º 17' 07.2" West
Lea County, New Mexico
Plains SRS Number: 2006-142
NMOCD Reference Number: 1RP-838/AP-96

Prepared for:

PLAINS

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

Prepared By:

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April 2016

Ben J. Arguijo
Project Manager

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1.0 INTRODUCTION

Basin Environmental Service Technologies, LLC (Basin Environmental), on behalf of Plains Marketing, LP (Plains), is pleased to submit this *Annual Monitoring Report* in compliance with the New Mexico Oil Conservation Division (NMOCD) letter of May 1998, requiring submittal of an Annual Monitoring Report by April 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 groundwater monitoring events conducted in calendar year 2015 only.

Groundwater monitoring was conducted during each quarter of 2015 to assess the levels and extent of dissolved phase constituents and phase-separated hydrocarbons (PSH). The groundwater monitoring events consisted of measuring static water levels in the monitor wells, checking for the presence of PSH, and purging and sampling of each well exhibiting sufficient recharge.

2.0 SITE DESCRIPTION & BACKGROUND INFORMATION

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

On April 21, 2006, Basin Environmental, on behalf of Plains, responded to a pipeline release to repair the pipeline and excavate impacted soil. The Lovington Gathering WTI pipeline was repaired utilizing a pipeline clamp, and visibly stained soil was excavated and placed on a polyurethane plastic liner to mitigate any further hydrocarbon impact to the underlying soil. Approximately twelve barrels (12 bbls) of crude oil were released from the pipeline, and eight barrels (8 bbls) were recovered, resulting in a net loss of four barrels (4 bbls) of crude oil. The excavated area was fenced in and is characterized by a Plains pipeline right-of-way adjacent to an idled Plains pump station.

The release occurred in a pasture containing various oil and gas production facilities and resulted in a visibly stained surface area measuring approximately one thousand, five hundred square feet (1,500 ft^2). Excavation activities conducted during the initial response and subsequent remediation of the site covered an area measuring approximately thirty feet (30') in length by twenty-seven feet (27') in width and ranging from in depth from approximately five feet (5') to six feet (6'). Excavated soil was placed on a six-millimeter (6mm) polyurethane plastic liner for future remedial action. Utilizing olfactory and visual senses and photo-ionization detector (PID) technology, it was determined that Volatile Organic Compounds (VOC's) remained in the sidewalls and floor of the excavation.

In July 2006, a soil investigation was conducted to further delineate the horizontal and vertical extent of impacted soil. Eleven (11) soil borings were advanced to depths ranging from approximately thirty feet (30') to approximately seventy-five feet (75') below ground surface (bgs). Based on laboratory analytical results from soil samples collected during advancement of the soil borings, three (3) groundwater monitoring wells (MW-1 through MW-3) were installed to evaluate the status of the groundwater.

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

During installation of the groundwater monitor wells (MW-1 through MW-7), there was no visual evidence of PSH in any of the collected soil samples. Laboratory analytical results indicated benzene, toluene, ethylbenzene, and total xylenes (BTEX) and total petroleum hydrocarbon (TPH) concentrations in all submitted soil samples were less than the appropriate laboratory method detection limit (MDL), with the exception of soil samples collected from monitor well MW-3, which exhibited TPH concentrations of 2,080 mg/kg and 121 mg/kg at fifty-five feet (55') and seventy-five feet (75') bgs, respectively.

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

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

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

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

3.0 FIELD ACTIVITIES

3.1 Groundwater Remediation Activities

Basin Environmental began manual recovery of hydrocarbon-impacted groundwater from monitor well MW-9 in November 2009 to control the down-gradient migration of the dissolved-phase plume. Recovery from monitor well MW-10 commenced in April 2011 at the behest of the NMOCD. Based on the reduction in dissolved-phase plume concentrations at the site, in the *July – September 2013 Quarterly Monitoring Report* (dated October 2013), Plains requested permission from the NMOCD to cease groundwater recovery activities. On November 4, 2013, the request was granted by a representative of the NMOCD's Santa Fe District Office, and weekly recovery from MW-9 and MW-10 ceased on November 8, 2013.

On May 15, 2013, an Oxygen Release Compound (ORC®) filter sock was installed in monitor well MW-3 to facilitate enhanced aerobic biodegradation of the dissolved-phase plume. The ORC sock was replaced following the November 17, 2014, quarterly monitoring event. An ORC sock was also placed in monitor well MW-7 at this time. The ORC socks are inspected on a quarterly basis and replaced, if necessary.

3.2 Groundwater Monitoring

Currently, monitor wells MW-2, MW-3, MW-6, MW-7, MW-9, and MW-10 are sampled on a quarterly basis. Based on the reduction in dissolved-phase plume concentrations at the site, in the *July – September 2013 Quarterly Monitoring Report* (dated October 2013), Plains requested permission from the NMOCD to reduce the sampling frequency for monitor wells MW-1, MW-4, MW-5, and MW-8 from quarterly to semiannually. The request was granted by a representative of the NMOCD's Santa Fe District Office on November 4, 2013, and the four (4) wells are currently sampled during the first and third calendar quarters (i.e., January – March and July – September).

Groundwater monitoring events were conducted on March 18 (1Q2015), May 12 (2Q2015), August 11 and September 9 (3Q2015), and November 24, 2015 (4Q2015) to assess the levels and extent of dissolved-phase constituents in the on-site monitor wells. The groundwater monitoring events consisted of measuring static water levels in the on-site monitor wells (MW-1 through MW-10), checking for the presence of PSH, and purging and sampling of each well exhibiting sufficient recharge. The monitor wells were purged using disposable Teflon bailers of a minimum of three (3) well volumes of water, or until the wells were dry. Groundwater was allowed to recharge, and samples were obtained using clean, disposable Teflon bailers. Water samples were stored in clean, plastic or glass containers provided by the laboratory and placed on ice in the field. Purged water was collected in a trailer-mounted polystyrene tank and disposed of at an NMOCD-approved disposal facility near Monument, New Mexico.

Per NMOCD request, quarterly monitoring events were also conducted at five (5) locations (Goff Dairy Well, Goff Dairy - Ctr. Pivot Well, Goff Dairy - Ctr. Pivot Beginning, Goff Dairy - Ctr. Pivot End, and JW Well) on property adjacent to the release site (Goff Dairy #9 Pivot).

Diminished well volume and recharge in monitor well MW-2 attributable to the use of a large-capacity irrigation well (Goff Dairy Well) on the adjacent Goff Dairy #9 Pivot precluded sample collection from the monitor well during all four quarterly monitoring events. Similarly, diminished well volume and recharge precluded sample collection from monitor wells MW-1 (3Q2015 and 4Q2015), MW-3 (2Q2015 and 3Q2015), MW-4 (3Q2015), MW-5 (3Q2015), MW-6 (2Q2015 and 3Q2015), and MW-10 (2Q2015) during the reporting period. During the initial 3Q2015 monitoring event conducted on August 11, 2015, eight (8) of the ten (10) on-site monitor wells were found to be dry, necessitating a follow-up sampling event on September 9, 2015.

Prior to the 2Q2015, 3Q2015, and 4Q2015 quarterly monitoring events, the Ctr. Pivot Well was valved off to facilitate harvesting activities and/or cattle grazing in the Goff Dairy #9 Pivot, precluding sample collection from the well itself and the two (2) locations on the center pivot (Goff Dairy - Ctr. Pivot Beginning and Goff Dairy - Ctr. Pivot End).

Following the 4Q2015 quarterly monitoring event, sample vials from the JW Well on the Goff Dairy #9 Pivot were lost in transit to the laboratory, which necessitated resampling of the well on December 2, 2015.

Locations of groundwater monitoring wells and inferred groundwater gradients, which were constructed from groundwater elevation measurements collected during each of the quarterly monitoring events, are depicted in Figures 2A through 2D. The groundwater gradient map from the most recent monitoring event, 4Q2015, indicates a general gradient of approximately 0.004 feet/foot to the southeast, as measured between monitor wells MW-6 and MW-10. The corrected groundwater elevation (measured in feet above mean sea level) ranged between 3,713.84 feet in monitor well MW-10 and 3,715.44 feet in monitor well MW-3. Groundwater elevation data is provided in Table 1, "Groundwater Elevation Data".

Based on a review of laboratory analytical results and sampling criteria provided by the NMOCD, none of the on-site monitor wells were subject to annual polyaromatic hydrocarbon (PAH) monitoring in 2015.

No PSH was detected in any of the on-site monitor wells during the 2015 reporting period.

4.0 LABORATORY RESULTS

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

4.1 Quarterly Monitoring Data

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

- **Monitor Well MW-2:**
    - Diminished well volume and recharge precluded sample collection from monitor well MW-2 during all four quarterly monitoring events of the 2015 reporting period.
- **Monitor Well MW-3:**
    - Benzene concentrations ranged from less than the laboratory MDL in 4Q2015 to 0.0140 mg/L in 1Q2015. Toluene concentrations ranged from less than the laboratory MDL in 4Q2015 to 0.0065 mg/L in 1Q2015. Ethylbenzene concentrations were less than the laboratory MDL in all submitted groundwater samples. Total xylene concentrations ranged from less than the laboratory MDL in 4Q2015 to 0.0154 mg/L in 1Q2015. Benzene concentrations exceeded the NMWQCC regulatory standard of 0.010 mg/L in 1Q2015. Toluene, ethylbenzene, and total xylene concentrations were less than NMWQCC regulatory standards in all submitted groundwater samples.
    - Diminished well volume and recharge precluded sample collection from monitor well MW-3 during the 2Q2015 and 3Q2015 quarterly monitoring events.

- **Monitor Well MW-6:**

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

    - Diminished well volume and recharge precluded sample collection from monitor well MW-6 during the 2Q2015 and 3Q2015 quarterly monitoring events.

- **Monitor Well MW-7:**

    - Benzene concentrations ranged from less than the laboratory MDL in 1Q2015 and 3Q2015 to 0.1420 mg/L in 2Q2015. Toluene, ethylbenzene, and total xylene concentrations were less than the appropriate laboratory MDL in all submitted groundwater samples. Benzene concentrations exceeded the NMWQCC regulatory standard of 0.010 mg/L in 2Q2015. Toluene, ethylbenzene, and total xylene concentrations were less than NMWQCC regulatory standards in all submitted groundwater samples.

- **Monitor Well MW-9:**

    - Benzene concentrations ranged from less than the laboratory MDL in 1Q2015 and 3Q2015 to 0.0268 mg/L in 2Q2015. Toluene, ethylbenzene, and total xylene concentrations were less than the appropriate laboratory MDL in all submitted groundwater samples. Benzene concentrations exceeded the NMWQCC regulatory standard of 0.010 mg/L in 2Q2015. Toluene, ethylbenzene, and total xylene concentrations were less than NMWQCC regulatory standards in all submitted groundwater samples.

- **Monitor Well MW-10:**

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

    - Diminished well volume and recharge precluded sample collection from monitor well MW-10 during the 2Q2015 quarterly monitoring event.

- **Goff Dairy Well:**

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

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

    - Benzene, toluene, ethylbenzene, and total xylene concentrations were both less than the appropriate laboratory MDL and less than NMWQCC regulatory standards during 1Q2015.

    - Harvesting activities and cattle grazing precluded sample collection from the well during the 2Q2015, 3Q2015, and 4Q2015 quarterly monitoring events.

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

    - Benzene, toluene, ethylbenzene, and total xylene concentrations were both less than the appropriate laboratory MDL and less than NMWQCC regulatory standards during 1Q2015.

    - Harvesting activities and cattle grazing precluded sample collection from the well during the 2Q2015, 3Q2015, and 4Q2015 quarterly monitoring events.

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

    - Benzene, toluene, ethylbenzene, and total xylene concentrations were both less than the appropriate laboratory MDL and less than NMWQCC regulatory standards during 1Q2015.

    - Harvesting activities and cattle grazing precluded sample collection from the well during the 2Q2015, 3Q2015, and 4Q2015 quarterly monitoring events.

- **JW Well:**

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

4.2 Semi-Annual Monitoring Data

Data collected during the 1Q2015 and 3Q2015 semi-annual monitoring events is summarized below. Groundwater contaminant concentrations for the semi-annual monitoring events are depicted in Figures 3A through 3D.

- **Monitor Well MW-1:**

    - The benzene concentration in 1Q2015 was 0.3280 mg/L, which exceeded the NMWQCC regulatory standard of 0.010 mg/L. Toluene, ethylbenzene, and total xylene concentrations were both less than the appropriate laboratory MDL and less than NMWQCC regulatory standards.

    - Diminished well volume and recharge precluded sample collection from monitor well MW-1 during the 3Q2015 semi-annual monitoring event.

- **Monitor Well MW-4:**

    - Benzene, toluene, ethylbenzene, and total xylene concentrations were both less than the appropriate laboratory MDL and less than NMWQCC regulatory standards during the 1Q2015 semi-annual monitoring event.

    - Diminished well volume and recharge precluded sample collection from monitor well MW-4 during the 3Q2015 semi-annual monitoring event.

- **Monitor Well MW-5:**

    - Benzene, toluene, ethylbenzene, and total xylene concentrations were both less than the appropriate laboratory MDL and less than NMWQCC regulatory standards during the 1Q2015 semi-annual monitoring event.

    - Diminished well volume and recharge precluded sample collection from monitor well MW-5 during the 3Q2015 semi-annual monitoring event.

- **Monitor Well MW-8:**

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

5.0 SUMMARY

This report presents the results of groundwater monitoring activities for the 2015 annual monitoring period. Currently, there are ten (10) groundwater monitoring wells (MW-1 through MW-10) on-site. Monitor wells MW-2, MW-3, MW-6, MW-7, MW-9, and MW-10 are gauged and sampled on a quarterly basis. Monitor wells MW-1, MW-4, MW-5, and MW-8 are sampled semiannually, during the first and third calendar quarters (i.e., January – March and July – September) of each year. Per NMOCD request, five (5) locations (Goff Dairy Well, Goff Dairy - Ctr. Pivot Well, Goff Dairy - Ctr. Pivot Beginning, Goff Dairy - Ctr. Pivot End, and JW Well) on property adjacent to the Lovington Gathering WTI release site (Goff Dairy #9 Pivot) are sampled on a quarterly basis.

The "Groundwater Gradient Map" from the most recent sampling event (Figure 2D, 4Q 2015) indicates a general gradient of approximately 0.004 feet/foot to the southeast as measured between monitor wells MW-6 and MW-10.

Diminished well volume and recharge in monitor well MW-2 attributable to the use of a large-capacity irrigation well (Goff Dairy Well) on the adjacent Goff Dairy #9 Pivot precluded sample collection from the monitor well during all four quarters of the monitoring period. Similarly, diminished well volume and recharge precluded sample collection from monitor wells MW-1 (3Q2015 and 4Q2015), MW-3 (2Q2015 and 3Q2015), MW-4 (3Q2015), MW-5 (3Q2015), MW-6 (2Q2015 and 3Q2015), and MW-10 (2Q2015).

Review of laboratory analytical results generated from analysis of groundwater samples collected in 2015 indicated benzene concentrations above the NMOCD regulatory standard of 0.01 mg/L were

present in groundwater samples collected from monitor wells MW-1 (1Q2015), MW-3 (1Q2015), MW-7 (2Q2015), and MW-9 (2Q2015). Benzene concentrations were less than the NMOCD regulatory standard in all groundwater samples submitted from monitor wells MW-4, MW-5, MW-6, and MW-8. Toluene, ethylbenzene and total xylene concentrations were less than NMOCD regulatory standards in all submitted groundwater samples from monitor wells MW-1, MW-3, MW-7, and MW-9. Benzene, toluene, ethylbenzene, and total xylene concentrations were both less than the appropriate laboratory MDL and less than NMWQCC regulatory standards in all groundwater samples collected from monitor wells MW-4, MW-5, MW-6, MW-8, MW-9, and MW-10 and the five (5) Goff Dairy locations during the reporting period.

6.0 ANTICIPATED ACTIONS

Monitor well MW-6 is sampled on a quarterly basis. Review of laboratory analytical results indicate BTEX constituent concentrations in monitor well MW-6 have been less than NMWQCC regulatory standards in all groundwater samples collected since May 23, 2012, and less than the appropriate laboratory MDL in all groundwater samples collected since February 22, 2013. Monitor well MW-6 was also found to be dry during 3Q2013, 3Q2014, 2Q2015, and 3Q2015. Plains hereby requests permission to reduce the sampling frequency for monitor well MW-6 from quarterly to semi-annually. Review of historical laboratory analytical data indicates the highest BTEX constituent detections in the well have typically occurred during the first and fourth calendar quarters. Therefore, Plains proposes to sample the monitor well during the first and fourth quarters of each calendar year (i.e., January – March and October – December).

Monitor well MW-9 was placed on a quarterly monitoring schedule with NMOCD approval on November 4, 2013. Review of laboratory analytical results indicate BTEX constituent concentrations in monitor well MW-9 have been less than NMWQCC regulatory standards in all monthly and/or quarterly groundwater samples collected since March 22, 2011. Plains hereby requests permission to reduce the sampling frequency for monitor well MW-9 from quarterly to semi-annually. Review of historical laboratory analytical data indicates the highest BTEX constituent detections in the well have typically occurred during the first and third calendar quarters. Therefore, Plains proposes to sample the monitor well during the first and third quarters of each calendar year (i.e., January – March and July – September).

Monitor well MW-10 was placed on a quarterly monitoring schedule with NMOCD approval on November 4, 2013. Review of laboratory analytical results indicate BTEX constituent concentrations in monitor well MW-10 have been less than NMWQCC regulatory standards in all monthly and/or quarterly groundwater samples collected since November 9, 2011, and less than the appropriate laboratory MDL in all groundwater samples collected since November 27, 2012. Monitor well MW-10 was also found to be dry in 3Q2012, 3Q2013, 3Q2014, and 2Q2015. Plains hereby requests permission to reduce the sampling frequency for monitor well MW-10 from quarterly to semi-annually. Review of historical laboratory analytical data indicates the highest BTEX constituent detections in the well have typically occurred during the first and third calendar quarters. Therefore, Plains proposes to sample the monitor well during the first and third quarters of each calendar year (i.e., January – March and July – September).

The five (5) locations on the Goff Dairy #9 Pivot (Goff Dairy Well, Goff Dairy - Ctr. Pivot Well, Goff Dairy - Ctr. Pivot Beginning, Goff Dairy - Ctr. Pivot End, and JW Well) were placed on a quarterly monitoring schedule with NMOCD approval on November 4, 2013. BTEX constituent concentrations in the Goff Dairy Well have been both less than NMWQCC regulatory standards and less than the

appropriate laboratory MDL in all monthly and/or quarterly groundwater samples collected since March 1, 2012. BTEX constituent concentrations in the JW Well have been both less than NMWQCC regulatory standards and less than the appropriate laboratory MDL in all monthly and/or quarterly groundwater samples collected since sampling was initiated on July 14, 2011. Plains hereby requests permission to reduce the sampling frequency for the Goff Dairy and JW Wells from quarterly to semi-annually. Plains proposes to sample the wells during the first and third quarters of each calendar year (i.e., January – March and July – September).

Due to frequent harvesting activities and cattle grazing on the Goff Dairy #9 Pivot, only one (1) quarterly sample was able to be collected from the three (3) Center Pivot locations (Goff Dairy - Ctr. Pivot Well, Goff Dairy - Ctr. Pivot Beginning, and Goff Dairy - Ctr. Pivot End) during both the 2014 and 2015 monitoring periods. Since there have been no detections of BTEX constituents at any of the Center Pivot locations since sampling commenced on July 7, 2011, Plains hereby requests permission to cease sampling activities at these three (3) locations.

The following table summarizes the proposed monitor well P&A and sampling schedule changes detailed above:

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

Pending NMOCD approval of the above changes, quarterly gauging and groundwater sampling of monitor wells MW-2, MW-3, MW-6, MW-7, MW-9, MW-10, and the five (5) Goff Dairy locations will continue throughout the 2016 calendar year. Semi-annual monitoring of monitor wells MW-4, MW-5, and MW-8 will continue throughout the 2016 calendar year.

Based on laboratory analytical results and gauging data from the 2013 through 2015 monitoring periods, Plains proposes to install one (1) additional monitor well (MW-1R) approximately seventy-five feet (75') upgradient of monitor well MW-1 to further evaluate the status of groundwater at the site and to track any migration/infiltration of contaminants from off-site sources. Plains proposes to use monitor well MW-1R as a replacement for monitor well MW-1 and to plug and abandon the existing well. A "Proposed Monitor Well Location" map was submitted to the NMOCD in January 2016 and is included as Figure 4. The proposed monitor well will be installed during calendar year 2016, pending NMOCD and landowner approval and receipt of the proper drilling permit from the NMOSE.

The ORC filter socks installed in monitor wells MW-3 and MW-7 to facilitate enhanced aerobic biodegradation of the dissolved-phase plume will be inspected and replaced (if necessary) on a quarterly basis.

An *Annual Monitoring Report* for the 2016 reporting period will be submitted to the NMOCD by April 1, 2017.

7.0 LIMITATIONS

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

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

8.0 DISTRIBUTION

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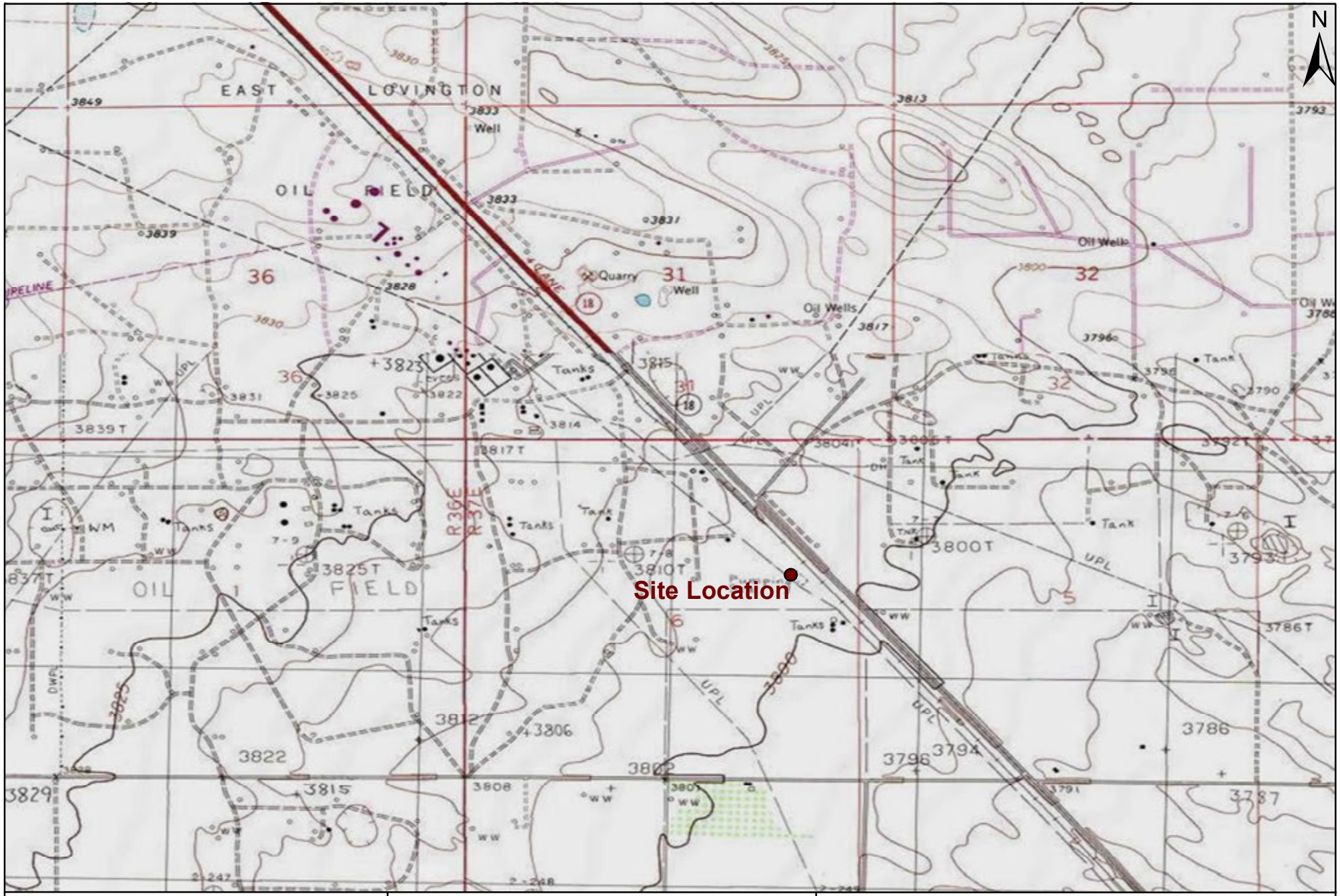
Figures



1,000 500 0 1,000 2,000

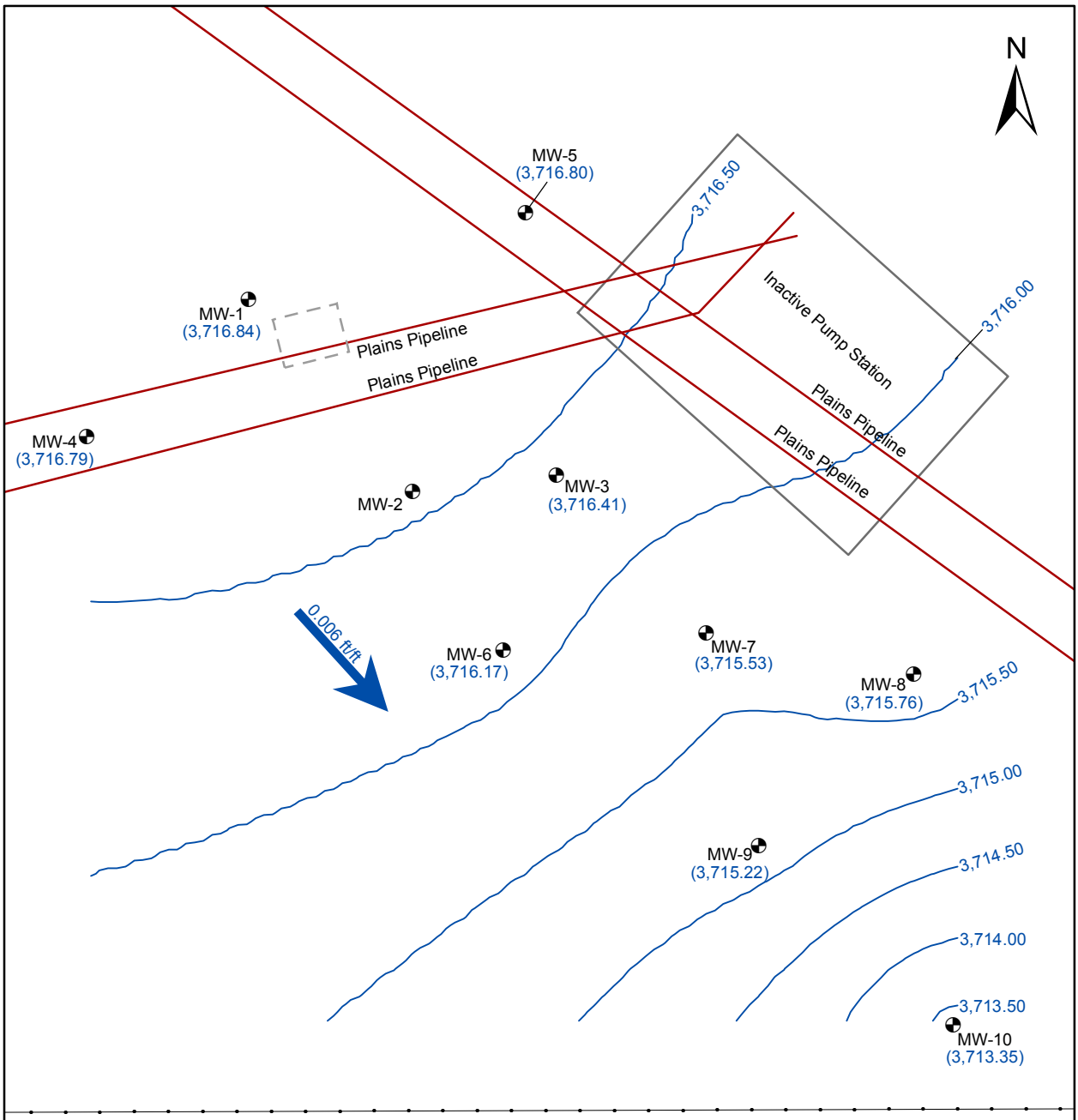
Distance in Feet

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

Basin Environmental Service Technologies
Effective Solutions

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

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



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

25 12.5 0 25 50 75 100 Feet

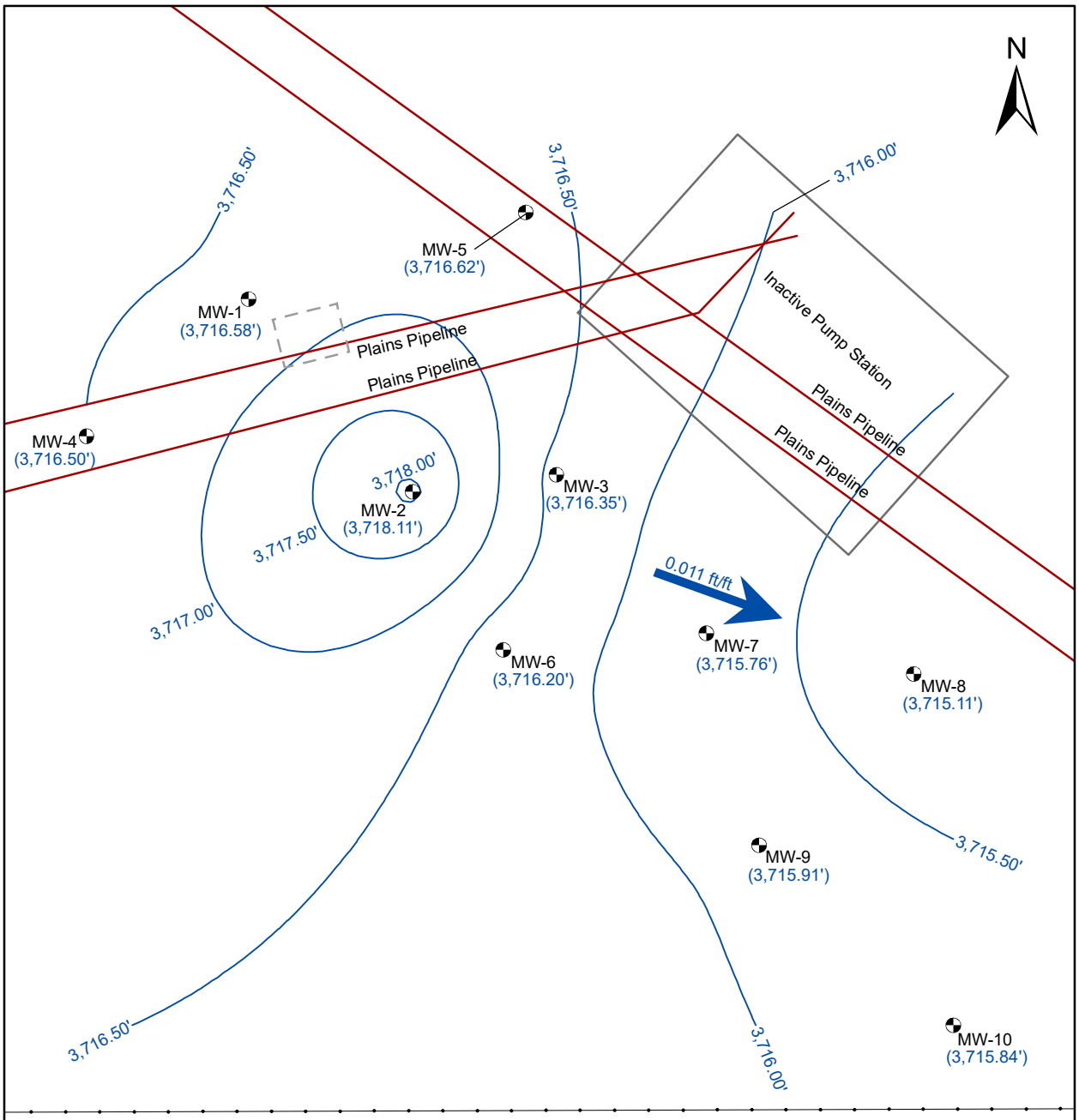
Goff Dairy Well

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

Figure 2A
Inferred Groundwater Gradient Map
1Q2015
Plains Marketing, LP
Lovington Gathering WTI
SRS # 2006-142
Lea County, New Mexico

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

Drawn By: BJA	Checked By: BRB
May 22, 2015	Scale: 1" = 100'



Legend:
- Pipeline
- Fence
- Excavation Extent
- (3,720) Groundwater Elevation (ft)
- 0.009 ft/ft Groundwater Gradient & Magnitude
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Figure 2B
Inferred Groundwater Gradient Map
2Q2015
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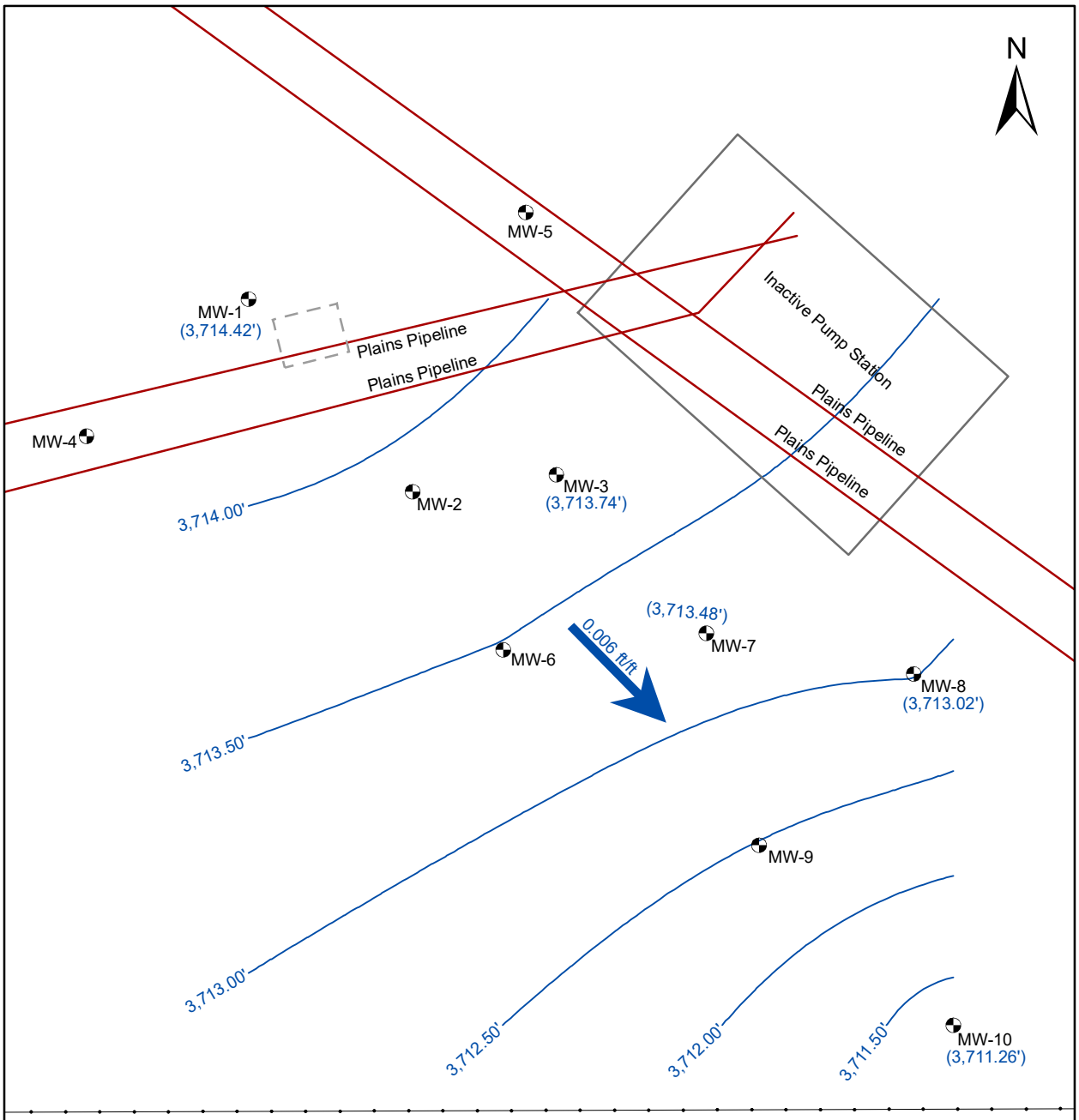
Basin Environmental Service Technologies
3100 Plains Hwy.
Lovington, NM 88260

Drawn By: BJA	Checked By: BRB
April 12, 2016	Scale: 1" = 100'



Groundwater Gradient magnitude measured between monitor wells MW-1 and MW-10. Monitor wells MW-2, MW-4, MW-5, MW-7 & MW-9 were not used in map construction.

25 12.5 0 25 50 75 100 Feet

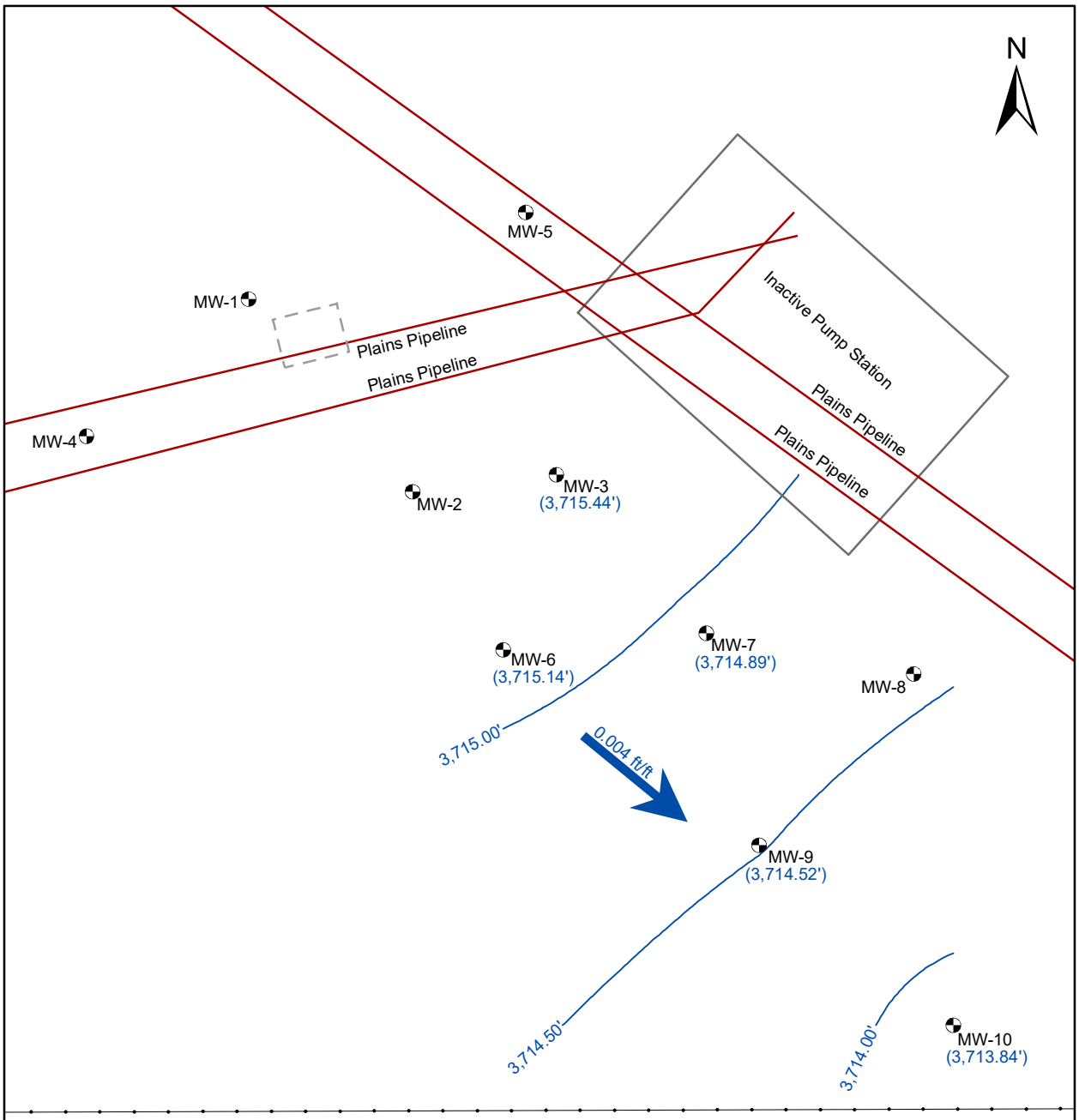
Goff Dairy Well

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

Figure 2C
Inferred Groundwater Gradient Map
3Q2015
Plains Marketing, LP
Lovington Gathering WTI
SRS # 2006-142
Lea County, New Mexico

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

Drawn By: BJA	Checked By: BRB
April 12, 2016	Scale: 1" = 100'



Groundwater Gradient magnitude measured between monitor wells MW-6 and MW-10. Monitor wells MW-1, MW-2, MW-4, MW-5 & MW-8 were not used in map construction.

25 12.5 0 25 50 75 100 Feet

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

Figure 2D
Inferred Groundwater Gradient Map
4Q2015
Plains Marketing, LP
Lovington Gathering WTI
SRS # 2006-142
Lea County, New Mexico

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

Drawn By: BJA	Checked By: BRB
Jan. 21, 2016	Scale: 1" = 100'

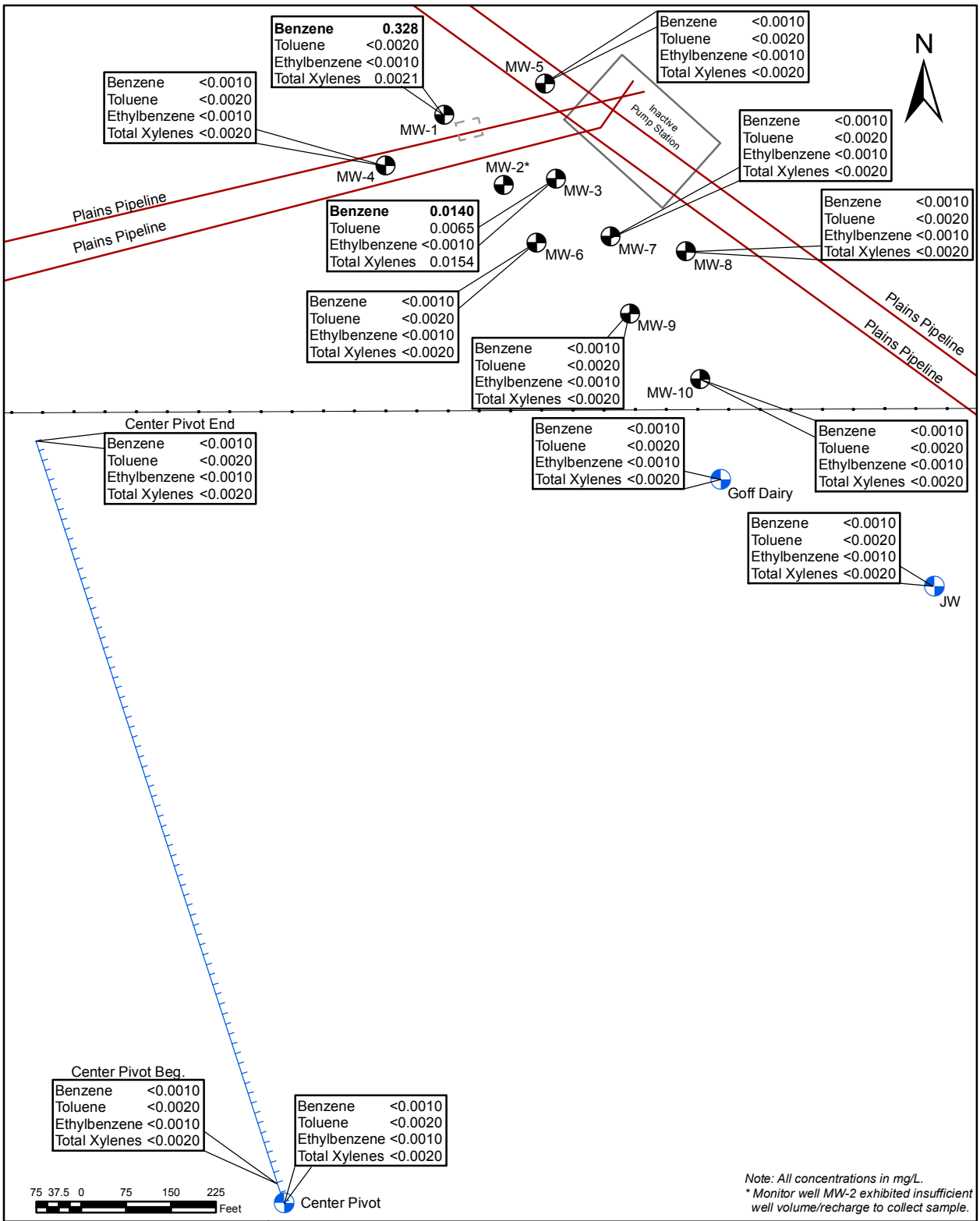
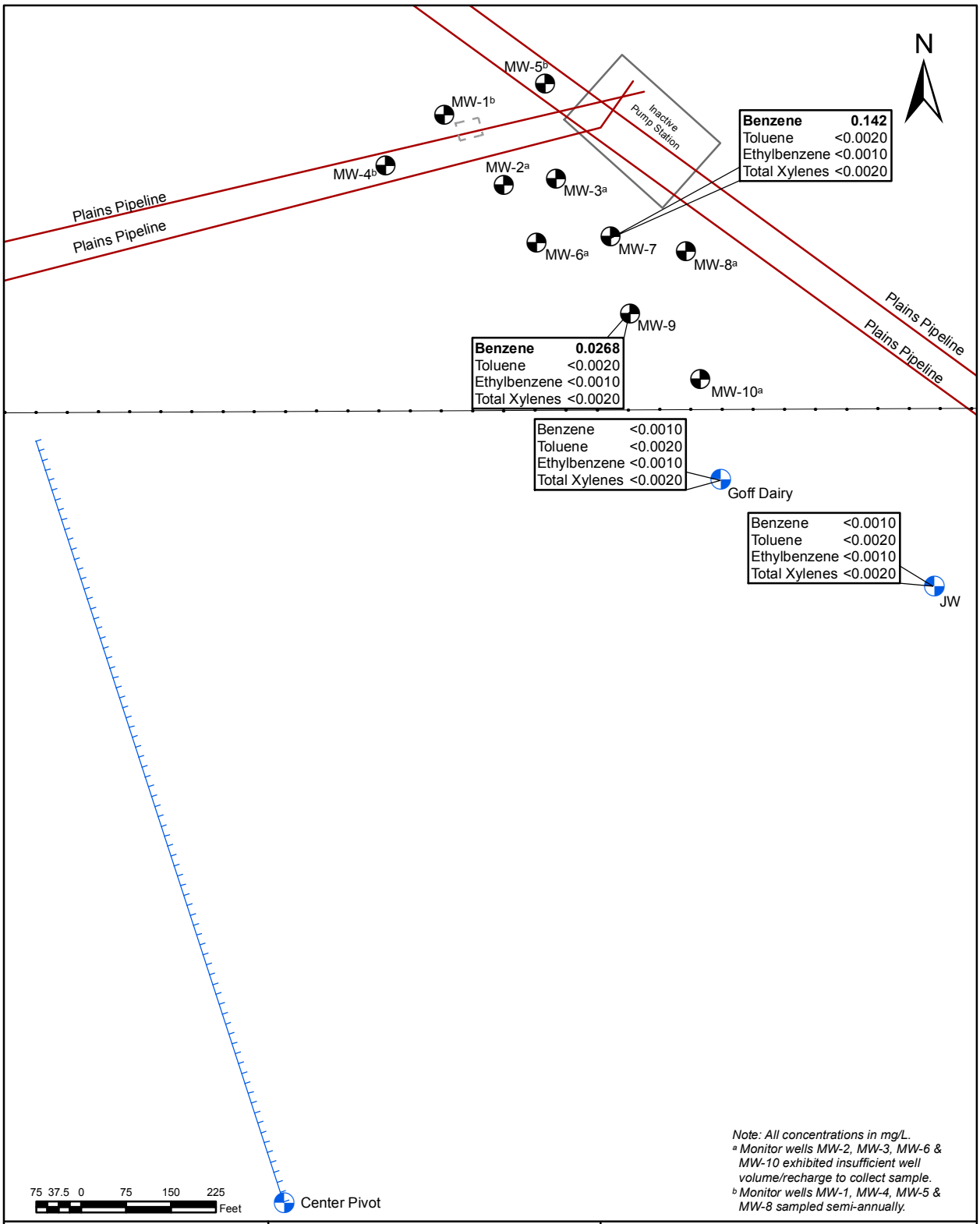


Figure 3A
Groundwater Concentration Map
1Q2015
Plains Marketing, LP
Lovington Gathering WTI
SRS # 2006-142
Lea County, New Mexico

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

Drawn By: BJA	Checked By: BRB
April 22, 2015	Scale: 1" = 250'



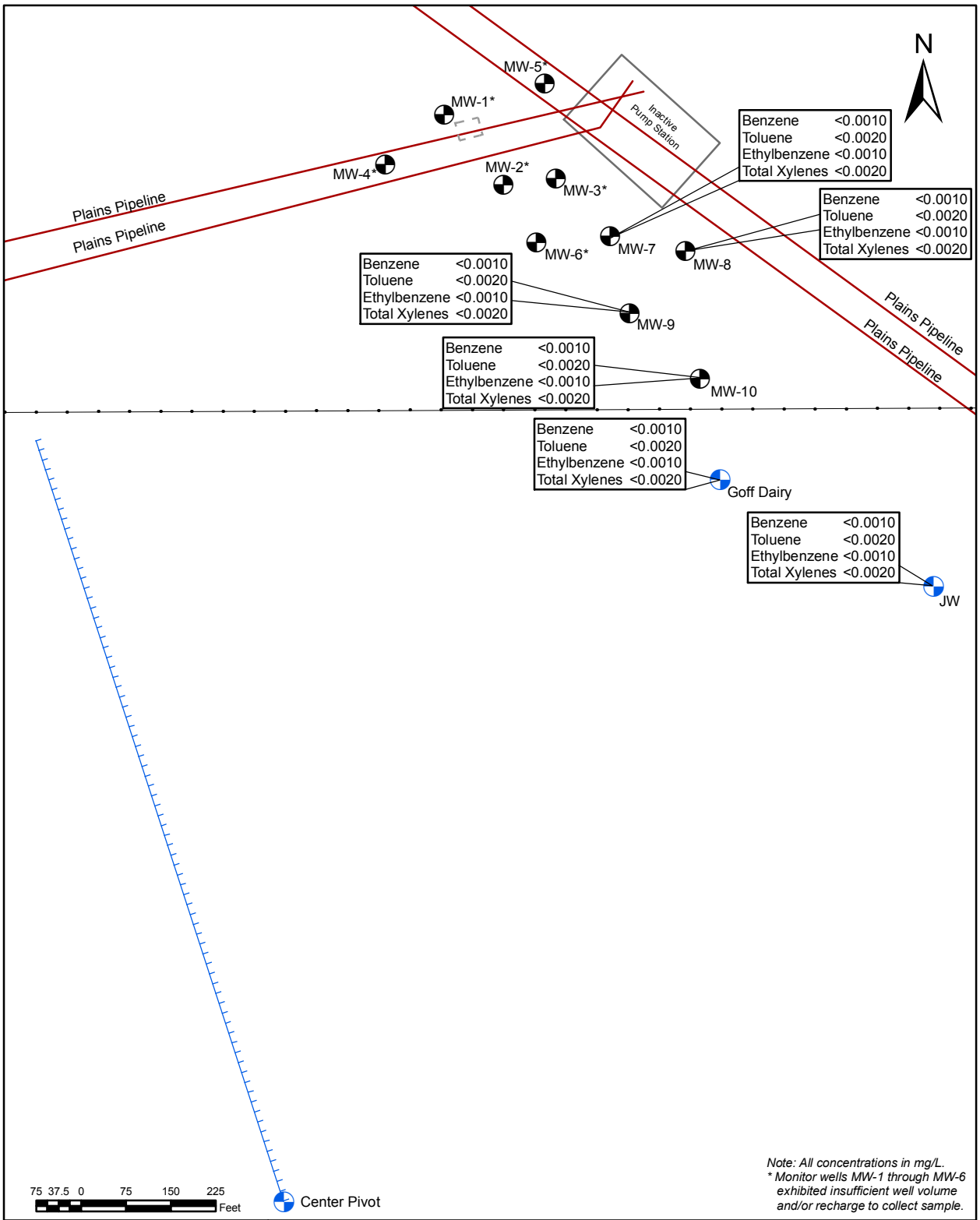
Note: All concentrations in mg/L.
[a] Monitor wells MW-2, MW-3, MW-6 & MW-10 exhibited insufficient well volume/recharge to collect sample.
[b] Monitor wells MW-1, MW-4, MW-5 & MW-8 sampled semi-annually.

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

Figure 3B
Groundwater Concentration Map
2Q2015
Plains Marketing, LP
Lovington Gathering WTI
SRS # 2006-142
Lea County, New Mexico

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

Drawn By: BJA	Checked By: BRB
July 29, 2015	Scale: 1" = 250'

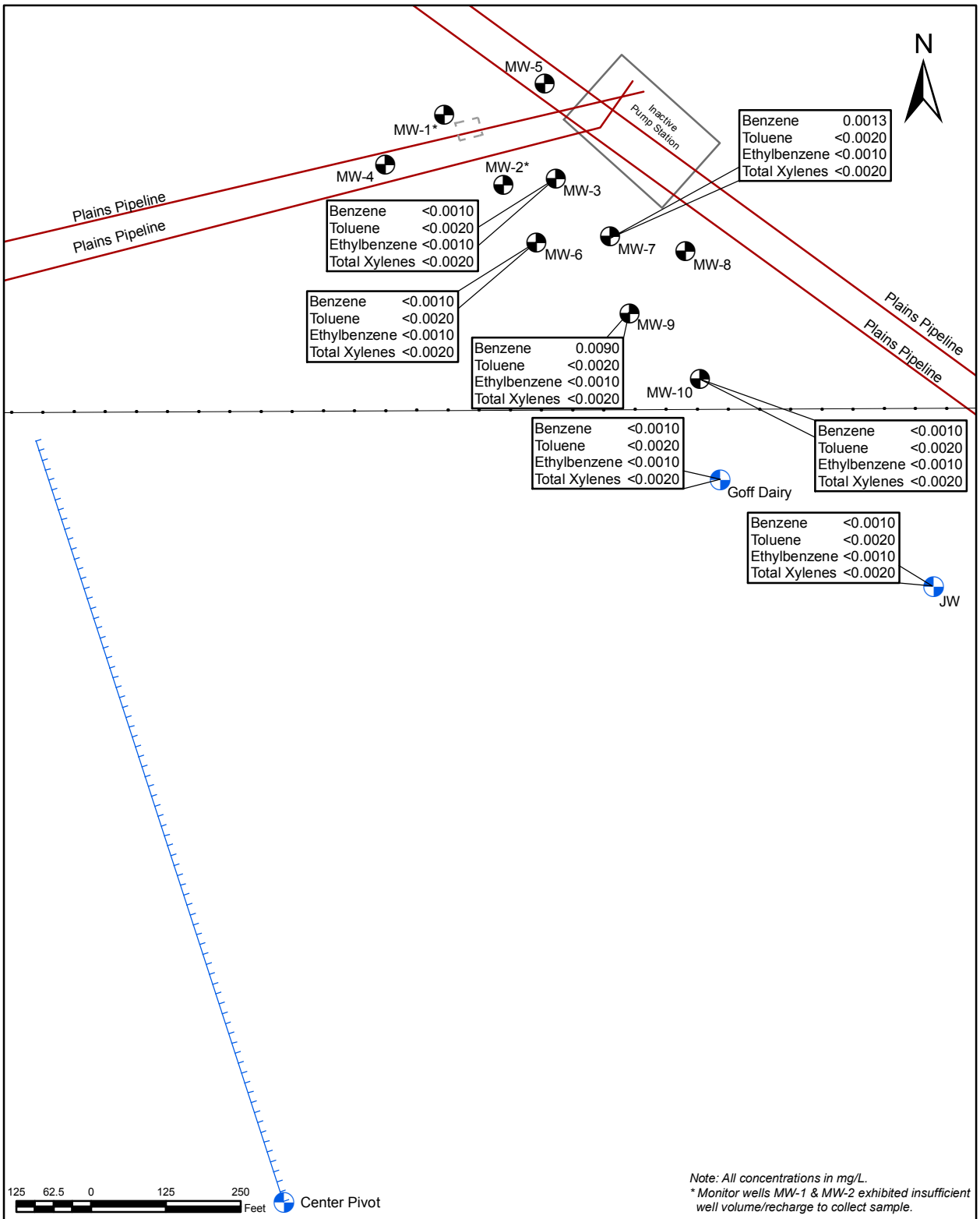


Legend:
- Pipeline
- Excavation Extent
- Fence
- Center Pivot
- Monitor Well
- Irrigation Well

Figure 3C
Groundwater Concentration Map
3Q2015
Plains Marketing, LP
Lovington Gathering WTI
SRS # 2006-142
Lea County, New Mexico

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

Drawn By: BJA	Checked By: BRB
Oct. 21, 2015	Scale: 1" = 250'

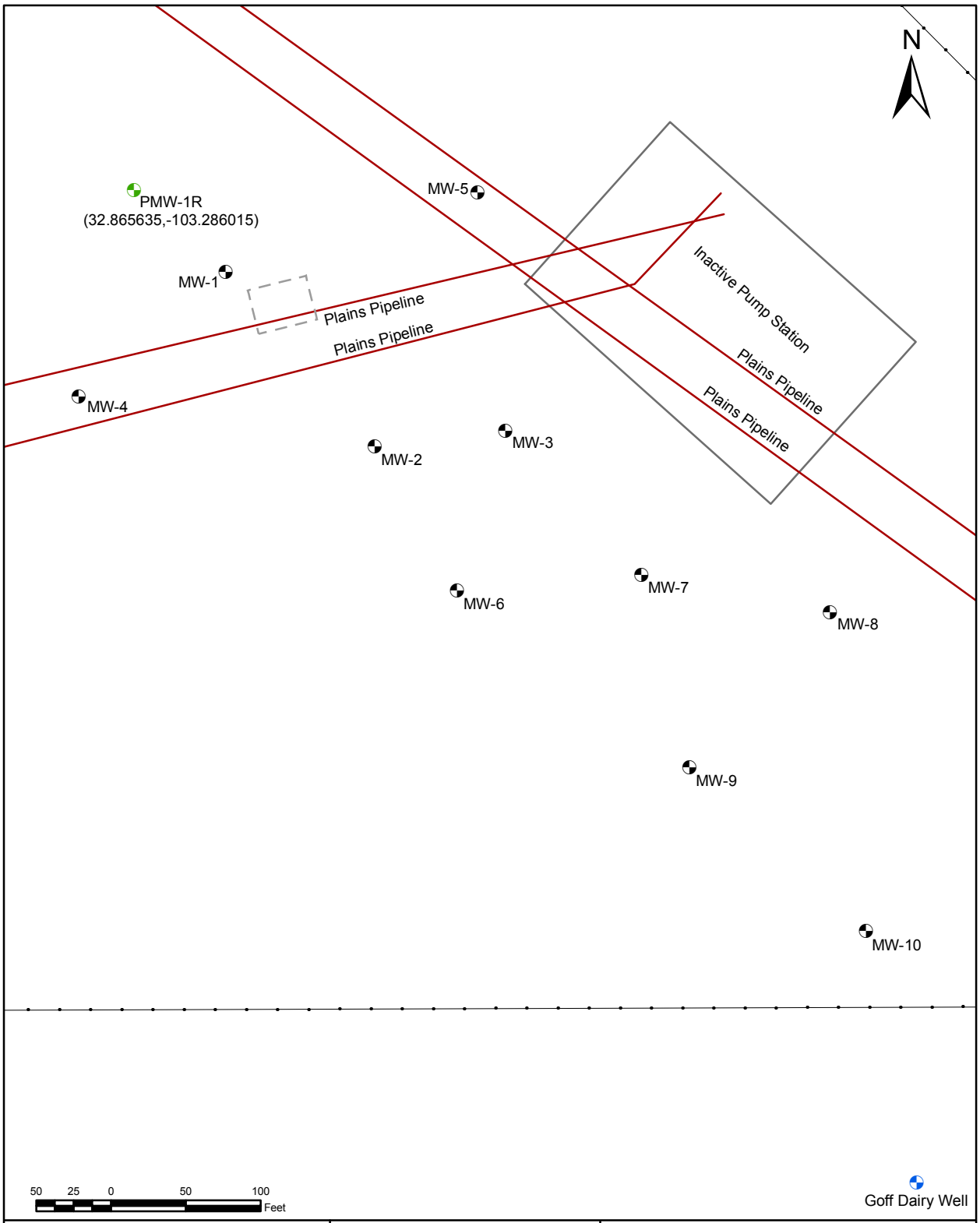


Legend:
- Pipeline
- Excavation Extent
- Fence
- Center Pivot
- Monitor Well
- Irrigation Well

Figure 3D
Groundwater Concentration Map
4Q2015
Plains Marketing, LP
Lovington Gathering WTI
SRS # 2006-142
Lea County, New Mexico

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

Drawn By: BJA	Checked By: BRB
Jan. 21, 2016	Scale: 1" = 250'



Legend:

- Pipeline
- Fence
- Excavation Extent
- Monitor Well
- Irrigation Well
- Proposed Monitor Well

Figure 4
Proposed Monitor Well Location
Plains Marketing, LP Lovington Gathering WTI
SRS # 2006-142
Lea County, New Mexico

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

Drawn By: BJA	Checked By: SDW
Jan. 22, 2016	Scale: 1" = 100'

Tables

TABLE 1
2015 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: AP-96

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW-1	03/18/15	3,806.60	-	89.76	-	3,716.84
	05/12/15	3,806.60	-	90.02	-	3,716.58
	09/09/15	3,806.60	-	92.18	-	3,714.42
	11/24/15	3,806.60	-	Dry	-	Dry
MW-2	03/18/15	3,806.31	-	Dry	-	Dry
	05/12/15	3,806.31	-	88.20	-	3,718.11
	09/09/15	3,806.31	-	Dry	-	Dry
	11/24/15	3,806.31	-	Dry	-	Dry
MW-3	03/18/15	3,806.19	-	89.78	-	3,716.41
	05/12/15	3,806.19	-	89.84	-	3,716.35
	09/09/15	3,806.19	-	92.45	-	3,713.74
	11/24/15	3,806.19	-	90.75	-	3,715.44
MW-4	03/18/15	3,806.67	-	89.88	-	3,716.79
	05/12/15	3,806.67	-	90.17	-	3,716.50
	09/09/15	3,806.67	-	Dry	-	Dry
	11/24/15	3,806.67	-	Dry	-	Dry
MW-5	03/18/15	3,806.30	-	89.50	-	3,716.80
	05/12/15	3,806.30	-	89.68	-	3,716.62
	09/09/15	3,806.30	-	Dry	-	Dry
	11/24/15	3,806.30	-	Dry	-	Dry
MW-6	03/18/15	3,806.08	-	89.91	-	3,716.17
	05/12/15	3,806.08	-	89.88	-	3,716.20
	09/09/15	3,806.08	-	92.60	-	3,713.48
	11/24/15	3,806.08	-	90.94	-	3,715.14
MW-7	03/18/15	3,806.05	-	90.52	-	3,715.53
	05/12/15	3,806.05	-	90.29	-	3,715.76
	08/11/15	3,806.05	-	Dry	-	Dry
	11/24/15	3,806.05	-	91.16	-	3,714.89

TABLE 1
2015 GROUNDWATER ELEVATION DATA

PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: AP-96

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW-8	03/18/15	3,805.89	-	90.13	-	3,715.76
	05/12/15	3,805.89	-	90.78	-	3,715.11
	09/09/15	3,805.89	-	92.87	-	3,713.02
	11/24/15	3,805.89	-	Dry	-	Dry
MW-9	03/18/15	3,806.02	-	90.80	-	3,715.22
	05/12/15	3,806.02	-	90.11	-	3,715.91
	08/11/15	3,806.02	-	95.15	-	3,710.87
	11/24/15	3,806.02	-	91.50	-	3,714.52
MW-10	03/18/15	3,806.08	-	92.73	-	3,713.35
	05/12/15	3,806.08	-	90.24	-	3,715.84
	09/09/15	3,806.08	-	94.82	-	3,711.26
	11/24/15	3,806.08	-	92.24	-	3,713.84

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

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: AP-96

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1	SW846-6010C
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P-XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENES (mg/L)	TOTAL BTEX (mg/L)	FLUORIDE (mg/L)	CHROMIUM (mg/L)
MW-1	10/05/06	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	12/28/06	<0.0010	<0.0010	<0.0010	0.002	<0.0010	0.0020	0.0020	-	-
	03/16/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	05/31/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	09/25/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/30/07	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/14/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/17/08	**0.0200**	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0200	-	-
	12/02/08	**0.0350**	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0350	-	-
	03/03/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/01/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/04/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/25/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/30/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/11/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/22/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/27/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/24/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/06/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/28/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/22/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/21/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/26/14	**0.0474**	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0474	-	-
	08/07/14	**0.0255**	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0255	-	-
	03/18/15	**0.3280**	<0.0020	<0.0010	0.0021	<0.0010	0.0021	0.3300	-	-
	09/09/15	Dry								
	12/02/15	Dry								
MW-2	10/05/06	0.0100	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0100	-	-
	12/28/06	**0.1610**	<0.0010	<0.0010	0.0240	<0.0010	0.0240	0.1850	-	-
	03/16/07	**0.1540**	<0.0010	<0.0010	0.0150	<0.0010	0.0150	0.1690	-	-
	05/31/07	0.0050	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0050	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: AP-96

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1	SW846-6010C
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P-XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENES (mg/L)	TOTAL BTEX (mg/L)	FLUORIDE (mg/L)	CHROMIUM (mg/L)
MW-2	09/25/07	**0.0500**	<0.0010	<0.0010	0.0030	<0.0010	0.0030	0.0530	-	-
	11/30/07	**0.9280**	<0.0010	<0.005	0.0360	<0.005	0.0360	0.9640	-	-
	03/11/08	**0.0950**	<0.0020	<0.0010	0.0032	<0.0010	0.0032	0.0982	-	-
	06/14/08	0.0030	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0030	-	-
	09/17/08	**0.1590**	<0.0020	<0.0010	0.0040	<0.0010	0.0040	0.1630	-	-
	12/02/08	**0.0500**	0.0020	<0.0010	0.0070	0.0010	0.0080	0.0600	-	-
	03/03/09	**0.0356**	<0.0020	<0.0010	0.0026	<0.0010	0.0026	0.0382	-	-
	06/18/09	0.0097	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0097	-	-
	09/01/09	**0.0842**	<0.0020	<0.0010	0.0083	<0.0010	0.0083	0.0925	-	-
	12/18/09	**0.0129**	<0.0020	<0.0010	0.0095	<0.0010	0.0095	0.0224	-	-
	03/04/10	0.0026	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0026	-	-
	05/25/10	0.0023	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0023	-	-
	08/30/10	**0.0406**	<0.0020	<0.0010	0.0132	<0.0010	0.0132	0.0538	-	-
	11/11/10	0.0087	<0.0020	<0.0010	0.0910	<0.0010	0.0910	0.0997	-	-
	03/22/11	**0.0361**	<0.0020	<0.0010	0.0605	0.0011	0.0616	0.0977	-	-
	05/27/11	0.0022	<0.0020	<0.0010	0.0030	<0.0010	0.0030	0.0052	-	-
	09/30/11	**0.1790**	<0.0020	0.0028	0.0035	0.0021	0.0056	0.1870	-	-
	11/09/11	Dry								
	02/06/12	0.0019	<0.0020	<0.0010	0.0021	0.0010	0.0031	0.0050	-	-
	05/23/12	Dry								
	08/28/12	Dry								
	11/27/12	Dry								
	02/28/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/13	Dry								
	08/21/13	Dry								
	11/08/13	Dry								
	02/13/14	Dry								
	05/09/14	Dry								
	08/07/14	Dry								
	11/17/14	Dry								
	03/18/15	Dry								
	05/12/15	Dry								
	08/11/15	Dry								
	11/24/15	Dry								
MW-3	10/05/06	**6.60**	<0.0010	<0.0010	0.0720	<0.0010	0.0720	6.67	-	-
	12/28/06	**1.02**	<0.0010	0.0050	0.0280	<0.0010	0.0280	1.05	-	-
	03/16/07	**1.48**	<0.0010	0.0130	0.0340	<0.0010	0.0340	1.53	-	-
	05/31/07	**1.66**	0.0100	0.0340	0.0290	0.0120	0.0410	1.75	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: AP-96

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1	SW846-6010C
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P-XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENES (mg/L)	TOTAL BTEX (mg/L)	FLUORIDE (mg/L)	CHROMIUM (mg/L)
MW-3	09/25/07	**0.4940**	0.0230	0.0200	0.0140	0.0070	0.0210	0.56	-	-
	11/30/07	**5.93**	0.0270	0.2730	0.1410	0.0740	0.2150	6.45	-	-
	03/11/08	**1.16**	0.1070	0.1770	0.0660	0.1390	0.2050	1.65	-	-
	06/14/08	**0.2140**	0.0020	0.0070	0.0120	0.0050	0.0170	0.2400	-	-
	09/17/08	**0.0260**	<0.0020	<0.0010	0.0020	<0.0010	0.0020	0.0280	-	-
	12/02/08	**0.0240**	<0.0020	<0.0010	0.0040	0.0010	0.0050	0.0290	-	-
	03/03/09	**1.37**	0.0305	0.0251	0.0173	0.0158	0.0331	1.46	-	-
	06/18/09	0.0031	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/01/09	0.0073	0.0033	<0.0010	0.0028	0.0015	0.0043	0.0149	-	-
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/04/10	0.0011	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0011	-	-
	05/25/10	**0.0109**	0.0033	<0.0010	0.0048	0.0027	0.0075	0.0217	-	-
	08/30/10	0.0092	0.0036	<0.0010	0.0060	0.0033	0.0093	0.0221	-	-
	11/11/10	0.0033	<0.0020	<0.0010	0.0023	0.0013	0.0036	0.0069	-	-
	03/22/11	0.0090	0.0028	<0.0010	0.0082	0.0038	0.0119	0.0238	-	-
	05/27/11	**0.0205**	<0.0020	<0.0010	0.0031	0.0012	0.0042	0.0247	-	-
	08/24/11	**0.0262**	0.0033	<0.0010	0.0083	0.0031	0.0114	0.0409	-	-
	11/09/11	0.0021	<0.0020	<0.0010	0.0023	0.0011	0.0035	0.0056	-	-
	02/06/12	**0.0214**	0.0031	0.0013	0.0075	0.0035	0.0110	0.0367	-	-
	05/23/12	0.0093	0.0020	<0.0010	0.0058	0.0026	0.0085	0.0198	-	-
	08/28/12	0.0075	<0.0020	<0.0010	<0.0020	0.0014	0.0014	0.0088	-	-
	11/27/12	**0.0120**	0.0028	0.0011	0.0071	0.0025	0.0096	0.0256	-	-
	02/22/13	**0.0112**	<0.0020	<0.0010	0.0030	0.0021	0.0051	0.0163	-	-
	05/23/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/21/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/08/13	0.0024	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0024	-	-
	02/13/14	0.0028	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/09/14	0.0089	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0089	-	-
	09/16/14	**0.0164**	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0164	-	-
	11/17/14	**0.1190**	0.0069	<0.0010	0.0367	0.0071	0.0438	0.1700	-	-
	03/18/15	**0.0140**	0.0065	<0.0010	0.0104	0.0050	0.0154	0.0359	-	-
	05/12/15	Dry								
	09/09/15	Dry								
	11/24/15	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: AP-96

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1	SW846-6010C
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P-XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENES (mg/L)	TOTAL BTEX (mg/L)	FLUORIDE (mg/L)	CHROMIUM (mg/L)
MW-4	12/28/06	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	03/16/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	05/30/07	<0.0010	0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	-	-
	09/25/07	<0.0010	0.0010	<0.0010	<0.0020	<0.0010	<0.0020	0.0010	-	-
	11/30/07	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/14/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/17/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/02/08	<0.0010	0.0060	<0.0010	<0.0020	<0.0010	<0.0020	0.0060	-	-
	03/03/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/01/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/04/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/25/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/30/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/11/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/22/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/27/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	**4.76**	<0.0050
	08/24/11	0.0012	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0012	-	-
	11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/06/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/28/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/22/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/21/13	Dry								
	02/26/14	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/07/14	Dry								
	03/18/15	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/09/15	Dry								
MW-5	12/28/06	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	03/16/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	05/30/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	09/25/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/30/07	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: AP-96

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1	SW846-6010C
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P-XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENES (mg/L)	TOTAL BTEX (mg/L)	FLUORIDE (mg/L)	CHROMIUM (mg/L)
MW-5	06/14/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/17/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/02/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/03/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/01/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/04/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/25/10	0.0014	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0014	-	-
	08/30/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/11/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/22/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/27/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/24/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/06/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/28/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/22/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/21/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/13/14	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/07/14	Dry								
	03/18/15	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/09/15	Dry								
MW-6	12/28/06	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	03/16/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	05/30/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	09/25/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/30/07	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/14/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/17/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/02/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/03/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/18/09	0.0044	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0044	-	-
	09/01/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: AP-96

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1	SW846-6010C
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P-XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENES (mg/L)	TOTAL BTEX (mg/L)	FLUORIDE (mg/L)	CHROMIUM (mg/L)
MW-6	12/18/09	**0.0130**	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0130	-	-
	03/04/10	0.0063	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0063	-	-
	05/25/10	0.0059	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0059	-	-
	08/30/10	0.0053	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0053	-	-
	11/11/10	0.0082	<0.0020	<0.0010	0.0035	<0.0010	0.0035	0.0117	-	-
	03/22/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/27/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/24/11	**0.1050**	<0.0020	<0.0010	0.0597	0.0031	0.0628	0.1680	-	-
	11/09/11	0.0036	<0.0020	<0.0010	0.0388	<0.0010	0.0388	0.0424	-	-
	02/06/12	**0.0129**	<0.0020	0.0011	0.1330	<0.0010	0.1330	0.1470	-	-
	05/23/12	0.0077	<0.0010	<0.0010	0.1570	<0.0010	0.1570	0.1650	-	-
	08/28/12	<0.0010	<0.0020	<0.0010	0.0026	<0.0010	0.0026	0.0026	-	-
	11/27/12	0.0012	<0.0020	<0.0010	0.0414	<0.0010	0.0414	0.0426	-	-
	02/22/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/21/13	Dry								
	11/08/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/13/14	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/09/14	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/07/14	Dry								
	11/17/14	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/18/15	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/12/15	Dry								
	09/09/15	Dry								
	11/24/15	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
MW-7	12/28/06	**0.0470**	<0.0010	<0.0010	0.0010	<0.0010	0.0010	0.0480	-	-
	03/16/07	**0.0470**	<0.0010	<0.0010	0.0150	<0.0010	0.0150	0.0620	-	-
	05/31/07	**0.0390**	<0.0010	<0.0010	0.0050	<0.0010	0.0050	0.0440	-	-
	09/25/07	**0.0370**	<0.0010	<0.0010	0.0300	<0.0010	0.0300	0.0670	-	-
	11/30/07	**0.0260**	<0.0020	<0.0010	0.0220	<0.0010	0.0220	0.0480	-	-
	03/11/08	**0.0950**	<0.0020	<0.0010	0.0032	<0.0010	0.0032	0.0982	-	-
	06/14/08	**0.1380**	<0.0020	<0.0010	0.0160	<0.0010	0.0160	0.1540	-	-
	09/17/08	**0.3530**	<0.0020	<0.0010	0.0030	<0.0010	0.0030	0.3560	-	-
	12/02/08	**0.0360**	<0.0020	<0.0010	0.0030	0.0020	0.0050	0.0410	-	-
	03/03/09	**0.0775**	<0.0020	<0.0010	0.0327	<0.0010	0.0327	0.1102	-	-
	06/18/09	**0.0570**	<0.0020	<0.0010	0.0329	<0.0010	0.0329	0.0899	-	-
	09/01/09	**0.0120**	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0120	-	-
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: AP-96

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1	SW846-6010C
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P-XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENES (mg/L)	TOTAL BTEX (mg/L)	FLUORIDE (mg/L)	CHROMIUM (mg/L)
MW-7	03/04/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/25/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/30/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/11/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/22/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/27/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/24/11	0.0019	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0019	-	-
	11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/06/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/28/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/22/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/13	0.0087	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0087	-	-
	08/21/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/08/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/13/14	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/24/14	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/27/14	**0.0480**	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0480	-	-
	11/17/14	**0.1770**	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.1770	-	-
	03/18/15	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/12/15	**0.1420**	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.1420	-	-
	08/11/15	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/24/15	0.0013	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0013	-	-
MW-8	03/16/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	05/31/07	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	-	-
	09/25/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/30/07	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/14/08	0.0080	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0080	-	-
	09/17/08	**0.5680**	<0.0100	<0.005	<0.0100	<0.005	<0.0100	0.5680	-	-
.	12/02/08	**0.2340**	0.0460	0.0080	0.0410	0.0130	0.0540	0.3420	-	-
	03/03/09	**0.0284**	<0.0020	<0.0010	0.0068	<0.0010	0.0068	0.0352	-	-
	06/18/09	0.0045	<0.0020	0.0016	0.0032	<0.0010	0.0032	0.0093	-	-
	09/01/09	0.0013	<0.0020	0.0011	0.0141	<0.0010	0.0141	0.0165	-	-
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/04/10	<0.0010	<0.0020	0.0011	<0.0020	<0.0010	<0.0020	0.0011	-	-
	05/25/10	0.0012	<0.0020	0.0010	<0.0020	<0.0010	<0.0020	0.0022	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: AP-96

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1	SW846-6010C
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P-XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENES (mg/L)	TOTAL BTEX (mg/L)	FLUORIDE (mg/L)	CHROMIUM (mg/L)
MW-8	08/30/10	<0.0010	<0.0020	0.0014	<0.0020	<0.0010	<0.0020	0.0014	-	-
	11/11/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/22/11	<0.0010	<0.0020	<0.0010	<0.0020	0.0015	0.0015	0.0015	-	-
	05/27/11	<0.0010	<0.0020	<0.0010	<0.0020	0.0026	0.0026	0.0026	-	-
	08/24/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/06/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/28/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/22/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/21/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/26/14	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/07/14	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/18/15	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/09/15	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
MW-9	09/25/07	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/30/07	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/11/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/14/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/17/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/02/08	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/03/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/01/09	**0.9717**	0.0641	<0.0100	0.0867	0.0422	0.1289	1.16	-	-
	09/10/09	**1.84**	<0.0200	<0.0100	0.0537	<0.0100	0.0537	1.89	-	-
	10/05/09	**0.9850**	<0.0020	<0.0010	0.0442	<0.0010	0.0442	1.03	-	-
	12/18/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/04/10	**0.0192**	<0.0020	<0.0010	0.0027	<0.0010	0.0027	0.0219	-	-
	05/25/10	**0.0421**	<0.0020	<0.0010	0.0063	<0.0010	0.0063	0.0484	-	-
	08/30/10	**0.1259**	<0.0020	<0.0010	0.0344	<0.0010	0.0344	0.1603	-	-
	11/11/10	**0.0265**	<0.0020	<0.0010	0.0097	<0.0010	0.0097	0.0362	-	-
	03/22/11	0.0034	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0034	-	-
	05/27/11	0.0041	<0.0020	<0.0010	0.0033	<0.0010	0.0033	0.0073	-	-
	08/24/11	<0.0010	<0.0020	<0.0010	0.0024	<0.0010	0.0024	0.0024	-	-
	11/09/11	0.0018	<0.0020	<0.0010	0.0035	<0.0010	0.0035	0.0053	-	-
	12/14/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: AP-96

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1	SW846-6010C
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P-XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENES (mg/L)	TOTAL BTEX (mg/L)	FLUORIDE (mg/L)	CHROMIUM (mg/L)
MW-9	01/05/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/06/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/01/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/18/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/19/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	07/30/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/28/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/11/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/19/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	01/30/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/22/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/27/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/09/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/29/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/25/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	07/16/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/21/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/19/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/23/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/13/14	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/09/14	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/07/14	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/17/14	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/18/15	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/12/15	**0.0268**	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0268	-	-
	08/11/15	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/24/15	0.0090	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0090	-	-
MW-10	11/02/09	<0.005	<0.005	<0.005	<0.010	<0.005	<0.010	<0.010	-	-
	03/04/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/25/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/30/10	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/11/10	**0.0350**	<0.0020	<0.0010	0.0035	<0.0010	0.0035	0.0385	-	-
	03/22/11	**0.0568**	<0.0020	<0.0010	0.00333	<0.0010	0.0033	0.0601	-	-
	05/27/11	**1.52**	<0.0020	0.0011	0.0113	<0.0010	0.0113	1.53	-	-
	07/11/11	**3.00**	0.0027	0.0037	0.0248	0.0023	0.0271	3.03	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: AP-96

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1	SW846-6010C
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P-XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENES (mg/L)	TOTAL BTEX (mg/L)	FLUORIDE (mg/L)	CHROMIUM (mg/L)
MW-10	08/24/11	**0.6540**	<0.0020	0.0016	0.0177	0.0026	0.0203	0.6760	-	-
	10/10/11	**0.1830**	<0.0020	<0.0010	0.121	<0.0010	0.1210	0.3040	-	-
	10/31/11	**0.0530**	<0.0020	0.0014	0.0944	0.0022	0.0966	0.1510	-	-
	11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/14/11	0.0085	0.0023	<0.0010	0.0261	<0.0010	0.0261	0.0368	-	-
	01/05/12	0.0043	<0.0020	<0.0010	0.0126	<0.0010	0.0126	0.0169	-	-
	02/06/12	0.0023	<0.0020	<0.0010	0.0064	<0.0010	0.0064	0.0088	-	-
	03/01/12	0.0013	<0.0020	<0.0010	0.0042	<0.0010	0.0042	0.0056	-	-
	04/18/12	0.0034	<0.0020	<0.0010	0.0175	<0.0010	0.0175	0.0209	-	-
	05/23/12	0.0039	<0.0010	<0.0010	0.1030	<0.0010	0.1030	0.1070	-	-
	06/19/12	<0.0010	<0.0010	<0.0010	0.0157	<0.0010	0.0157	0.0157	-	-
	07/30/12	Dry								
	08/28/12	<0.0010	<0.0020	<0.0010	0.0134	0.0014	0.0148	0.0148	-	-
	09/11/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/12	<0.0010	<0.0020	0.0012	0.0031	0.0015	0.0046	0.0058	-	-
	11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/19/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	01/30/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/22/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/27/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/09/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/25/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	07/16/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/21/13	Dry								
	09/19/13	Dry								
	10/23/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/13/14	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/09/14	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/07/14	Dry								
	11/17/14	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/18/15	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/12/15	Dry								
	09/09/15	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/24/15	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
Goff Dairy Well	05/27/11	0.0013	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0012	-	-
	07/11/11	0.0026	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0026	-	-
	08/24/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: AP-96

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1	SW846-6010C
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P-XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENES (mg/L)	TOTAL BTEX (mg/L)	FLUORIDE (mg/L)	CHROMIUM (mg/L)
Goff Dairy Well	10/10/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/14/11	<0.0010	<0.0020	0.0011	<0.0020	<0.0010	<0.0020	0.0011	-	-
	01/05/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/06/12	<0.0010	<0.0020	0.0011	0.0020	<0.0010	0.0020	0.0031	-	-
	03/01/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/18/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	07/30/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/28/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/11/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/27/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/09/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/25/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	07/16/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/21/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/19/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/23/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/26/14	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/09/14	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/07/14	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/17/14	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/18/15	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/12/15	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/11/15	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/24/15	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
Goff Dairy - Ctr. Pivot Well	07/07/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/24/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/10/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/14/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	01/05/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/06/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/01/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/18/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: AP-96

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1	SW846-6010C
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P-XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENES (mg/L)	TOTAL BTEX (mg/L)	FLUORIDE (mg/L)	CHROMIUM (mg/L)
Goff Dairy - Ctr. Pivot Well	06/19/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	07/30/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/28/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/11/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/19/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/28/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/27/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/09/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/25/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/21/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/08/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/07/14	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/18/15	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
Goff Dairy - Ctr. Pivot Beg.	07/07/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/24/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/10/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/01/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/18/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/19/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	07/30/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/11/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/28/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/27/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/09/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/25/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/21/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/08/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/07/14	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/18/15	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: AP-96

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1	SW846-6010C
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P-XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENES (mg/L)	TOTAL BTEX (mg/L)	FLUORIDE (mg/L)	CHROMIUM (mg/L)
Goff Dairy - Ctr. Pivot End	07/07/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/24/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/10/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/01/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/18/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/19/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	07/30/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/11/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/28/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/27/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/09/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/25/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/21/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/08/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/07/14	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/18/15	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
JW Well	07/14/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/24/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/10/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/09/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/01/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/18/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/23/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/19/12	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	07/30/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/28/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/11/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	10/31/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/27/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/19/12	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	01/31/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/28/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-

TABLE 2
CONCENTRATIONS OF BTEX, FLUORIDE & CHROMIUM IN GROUNDWATER

PLAINS MARKETING, LP
LOVINGTON GATHERING WTI
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2006-142
NMOCD REFERENCE #: AP-96

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021b							300.1	SW846-6010C
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P-XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENES (mg/L)	TOTAL BTEX (mg/L)	FLUORIDE (mg/L)	CHROMIUM (mg/L)
JW Well	03/27/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	04/09/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/29/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	06/25/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	07/16/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/21/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	09/19/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/08/13	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	02/13/14	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/09/14	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/07/14	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	11/17/14	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	03/18/15	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	05/12/15	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	08/11/15	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
	12/02/15	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	-	-
NMOCD REGULATORY STANDARD		**0.01**	**0.75**	**0.75**	**TOTAL XYLENES 0.62**				**1.6**	**0.05**

Note: Monitor wells MW-1, 2, 3, 6, 7, 9 & 10 & Goff Dairy locations sampled quarterly. Monitor wells MW-4, 5 & 8 sampled semi-annually.

Appendices

Appendix A
Laboratory Analytical Reports

Analytical Report 504390

for

PLAINS ALL AMERICAN EH&S

Project Manager: Ben Arguijo

Lovington Gathering WTI

SRS#2006-142

24-MAR-15

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-14-18), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
New Jersey (TX007), North Carolina(681), Oklahoma (9218), Pennsylvania (68-03610)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Texas (T104704477), Louisiana (04176), USDA (P330-07-00105)

Xenco-Lakeland: Florida (E84098)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

24-MAR-15

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

Reference: XENCO Report No(s): **504390**
Lovington Gathering WTI
Project Address: NM

Ben Arguijo:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 504390. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 504390 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 504390

PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-1	W	03-18-15 09:25		504390-001
MW-3	W	03-18-15 10:35		504390-002
MW-4	W	03-18-15 09:55		504390-003
MW-5	W	03-18-15 10:31		504390-004
MW-6	W	03-18-15 11:35		504390-005
MW-7	W	03-18-15 11:50		504390-006
MW-8	W	03-18-15 13:40		504390-007
MW-9	W	03-18-15 13:35		504390-008
MW-10	W	03-18-15 13:20		504390-009
Goff Dairy Well	W	03-18-15 14:35		504390-010
JW Well	W	03-18-15 14:15		504390-011
Goff Dairy- Ctr. Pivot Well	W	03-18-15 15:40		504390-012
Goff Ctr. Pivot Beg	W	03-18-15 15:05		504390-013
Goff Ctr. Pivot End	W	03-18-15 14:45		504390-014

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Hits Summary 504390

PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id : **MW-1**
Lab Sample Id : 504390-001

Matrix : Water
Date Collected : 03.18.15 09.25
Date Received : 03.20.15 11.38

% Moisture :

Analytical Method : BTEX by EPA 8021
Seq Number 964267

Prep Method: SW5030B
Date Prep: 03.20.15 14.00

Parameter	Cas Number	Result	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.328	mg/L	03.20.15 19.52		1
m_p-Xylenes	179601-23-1	0.00209	mg/L	03.20.15 19.52		1
Xylenes, Total	1330-20-7	0.00209	mg/L	03.20.15 19.52		1
Total BTEX		0.330	mg/L	03.20.15 19.52		1

Sample Id : **MW-3**
Lab Sample Id : 504390-002

Matrix : Water
Date Collected : 03.18.15 10.35
Date Received : 03.20.15 11.38

% Moisture :

Analytical Method : BTEX by EPA 8021
Seq Number 964267

Prep Method: SW5030B
Date Prep: 03.20.15 14.00

Parameter	Cas Number	Result	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.0140	mg/L	03.20.15 20.40		1
Toluene	108-88-3	0.00651	mg/L	03.20.15 20.40		1
m_p-Xylenes	179601-23-1	0.0104	mg/L	03.20.15 20.40		1
o-Xylene	95-47-6	0.00502	mg/L	03.20.15 20.40		1
Xylenes, Total	1330-20-7	0.0154	mg/L	03.20.15 20.40		1
Total BTEX		0.0359	mg/L	03.20.15 20.40		1

Certificate of Analysis Summary 504390

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI

Project Id: SRS#2006-142
Contact: Ben Arguijo
Project Location: NM

Date Received in Lab: Fri Mar-20-15 11:38 am
Report Date: 24-MAR-15
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	504390-001		504390-002		504390-003		504390-004		504390-005		504390-006	
	Field Id:	MW-1		MW-3		MW-4		MW-5		MW-6		MW-7	
	Depth:												
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	Sampled:	Mar-18-15 09:25		Mar-18-15 10:35		Mar-18-15 09:55		Mar-18-15 10:31		Mar-18-15 11:35		Mar-18-15 11:50	
BTEX by EPA 8021	***Extracted:***	Mar-20-15 14:00		Mar-20-15 14:00		Mar-20-15 14:00		Mar-20-15 14:00		Mar-20-15 14:00		Mar-20-15 14:00	
	Analyzed:	Mar-20-15 19:52		Mar-20-15 20:40		Mar-20-15 20:57		Mar-20-15 21:13		Mar-20-15 21:30		Mar-20-15 21:45	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		0.328	0.00100	0.0140	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100
Toluene		ND	0.00200	0.00651	0.00200	ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200
Ethylbenzene		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100
m_p-Xylenes		0.00209	0.00200	0.0104	0.00200	ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200
o-Xylene		ND	0.00100	0.00502	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100
Xylenes, Total		0.00209	0.00100	0.0154	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100
Total BTEX		0.330	0.00100	0.0359	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 504390

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI

Project Id: SRS#2006-142
Contact: Ben Arguijo
Project Location: NM

Date Received in Lab: Fri Mar-20-15 11:38 am
Report Date: 24-MAR-15
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	504390-007		504390-008		504390-009		504390-010		504390-011		504390-012	
	Field Id:	MW-8		MW-9		MW-10		Goff Dairy Well		JW Well		Goff Dairy- Ctr. Pivot Well	
	Depth:												
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	Sampled:	Mar-18-15 13:40		Mar-18-15 13:35		Mar-18-15 13:20		Mar-18-15 14:35		Mar-18-15 14:15		Mar-18-15 15:40	
BTEX by EPA 8021	***Extracted:***	Mar-20-15 14:00		Mar-20-15 14:00		Mar-20-15 14:00		Mar-20-15 14:00		Mar-20-15 14:00		Mar-20-15 14:00	
	Analyzed:	Mar-20-15 22:01		Mar-20-15 22:18		Mar-20-15 22:34		Mar-20-15 18:31		Mar-20-15 18:46		Mar-20-15 19:02	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100
Toluene		ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200
Ethylbenzene		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100
m_p-Xylenes		ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200
o-Xylene		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100
Xylenes, Total		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100
Total BTEX		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 504390

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI

Project Id: SRS#2006-142
Contact: Ben Arguijo
Project Location: NM

Date Received in Lab: Fri Mar-20-15 11:38 am
Report Date: 24-MAR-15
Project Manager: Kelsey Brooks

Analysis Requested							
	Lab Id:	504390-013	504390-014				
	Field Id:	Goff Ctr. Pivot Beg	Goff Ctr. Pivot End				
	Depth:						
	Matrix:	WATER	WATER				
	Sampled:	Mar-18-15 15:05	Mar-18-15 14:45				
BTEX by EPA 8021	***Extracted:***	Mar-20-15 14:00	Mar-20-15 14:00				
	Analyzed:	Mar-20-15 19:19	Mar-20-15 19:36				
	Units/RL:	mg/L RL	mg/L RL				
Benzene		ND 0.00100	ND 0.00100				
Toluene		ND 0.00200	ND 0.00200				
Ethylbenzene		ND 0.00100	ND 0.00100				
m_p-Xylenes		ND 0.00200	ND 0.00200				
o-Xylene		ND 0.00100	ND 0.00100				
Xylenes, Total		ND 0.00100	ND 0.00100				
Total BTEX		ND 0.00100	ND 0.00100				

Kelsey Brooks
Project Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

\+ NELAC certification not offered for this compound.

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

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 504390,

Project ID: SRS#2006-142

Lab Batch #: 964267 **Sample:** 504390-010 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/20/15 18:31

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0337	0.0300	112	80-120	

Lab Batch #: 964267 **Sample:** 504390-011 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/20/15 18:46

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0327	0.0300	109	80-120	

Lab Batch #: 964267 **Sample:** 504390-012 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/20/15 19:02

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0310	0.0300	103	80-120	
4-Bromofluorobenzene	0.0329	0.0300	110	80-120	

Lab Batch #: 964267 **Sample:** 504390-013 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/20/15 19:19

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0309	0.0300	103	80-120	
4-Bromofluorobenzene	0.0329	0.0300	110	80-120	

Lab Batch #: 964267 **Sample:** 504390-014 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/20/15 19:36

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0312	0.0300	104	80-120	
4-Bromofluorobenzene	0.0343	0.0300	114	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 : 504390,

Project ID: SRS#2006-142

Lab Batch #: 964267 **Sample:** 504390-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/20/15 19:52

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0330	0.0300	110	80-120	
4-Bromofluorobenzene	0.0310	0.0300	103	80-120	

Lab Batch #: 964267 **Sample:** 504390-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/20/15 20:40

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0319	0.0300	106	80-120	

Lab Batch #: 964267 **Sample:** 504390-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/20/15 20:57

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0317	0.0300	106	80-120	
4-Bromofluorobenzene	0.0343	0.0300	114	80-120	

Lab Batch #: 964267 **Sample:** 504390-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/20/15 21:13

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0316	0.0300	105	80-120	
4-Bromofluorobenzene	0.0329	0.0300	110	80-120	

Lab Batch #: 964267 **Sample:** 504390-005 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/20/15 21:30

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0314	0.0300	105	80-120	
4-Bromofluorobenzene	0.0338	0.0300	113	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 : 504390,

Project ID: SRS#2006-142

Lab Batch #: 964267 **Sample:** 504390-006 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/20/15 21:45

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0310	0.0300	103	80-120	
4-Bromofluorobenzene	0.0336	0.0300	112	80-120	

Lab Batch #: 964267 **Sample:** 504390-007 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/20/15 22:01

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0316	0.0300	105	80-120	
4-Bromofluorobenzene	0.0336	0.0300	112	80-120	

Lab Batch #: 964267 **Sample:** 504390-008 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/20/15 22:18

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0316	0.0300	105	80-120	
4-Bromofluorobenzene	0.0345	0.0300	115	80-120	

Lab Batch #: 964267 **Sample:** 504390-009 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/20/15 22:34

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0317	0.0300	106	80-120	
4-Bromofluorobenzene	0.0337	0.0300	112	80-120	

Lab Batch #: 964267 **Sample:** 690094-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/20/15 15:47

SURROGATE RECOVERY STUDY

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

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 504390,

Project ID: SRS#2006-142

Lab Batch #: 964267 **Sample:** 690094-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/20/15 16:04

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0340	0.0300	113	80-120	
4-Bromofluorobenzene	0.0311	0.0300	104	80-120	

Lab Batch #: 964267 **Sample:** 690094-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/20/15 16:20

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0350	0.0300	117	80-120	
4-Bromofluorobenzene	0.0310	0.0300	103	80-120	

Lab Batch #: 964267 **Sample:** 504390-010 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/20/15 16:37

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0343	0.0300	114	80-120	
4-Bromofluorobenzene	0.0302	0.0300	101	80-120	

Lab Batch #: 964267 **Sample:** 504390-010 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/20/15 16:53

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0349	0.0300	116	80-120	
4-Bromofluorobenzene	0.0312	0.0300	104	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BSD Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 504390 **Project ID:** SRS#2006-142

Analyst: ARM **Date Prepared:** 03/20/2015 **Date Analyzed:** 03/20/2015

Lab Batch ID: 964267 **Sample:** 690094-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.105	105	0.100	0.107	107	2	70-125	25	
Toluene	<0.00200	0.100	0.106	106	0.100	0.109	109	3	70-125	25	
Ethylbenzene	<0.00100	0.100	0.113	113	0.100	0.116	116	3	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.222	111	0.200	0.227	114	2	70-131	25	
o-Xylene	<0.00100	0.100	0.111	111	0.100	0.113	113	2	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 # : 504390 **Project ID:** SRS#2006-142

Lab Batch ID: 964267 **QC- Sample ID:** 504390-010 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 03/20/2015 **Date Prepared:** 03/20/2015 **Analyst:** ARM

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.105	105	0.100	0.108	108	3	70-125	25	
Toluene	<0.00200	0.100	0.106	106	0.100	0.109	109	3	70-125	25	
Ethylbenzene	<0.00100	0.100	0.113	113	0.100	0.115	115	2	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.220	110	0.200	0.225	113	2	70-131	25	
o-Xylene	<0.00100	0.100	0.109	109	0.100	0.112	112	3	71-133	25	

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

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

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: PLAINS ALL AMERICAN EH&S

Date/ Time Received: 03/20/2015 11:38:00 AM

Work Order #: 504390

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

Temperature Measuring device used :

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

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

Analyst:

PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 03/20/2015

Checklist reviewed by: Julian Martinez Date: 03/20/2015

CHAIN OF CUSTODY RECORD

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

LAB W.O#: 560390

Field billable Hrs :

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

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

Std (5-7D) 5Hrs 1D 2D 3D 4D **5D 7D** 10D 14D Other_____

Sampler Name: Daley Saxton

Circle One Event: Daily Weekly Monthly Quarterly Semi-Annual Annual N/A

ANALYSES REQUESTED

Sample #	Sample ID	Collect Date	Collect Time	Matrix Code ^	Field Filtered	Integrity OK (Y/N)	Total # of containers	Cont Type * VC	Pres Type** E, I	Example Volatiles by 8260	BTEX	VP	E,I								Hold Sample (CALL) Run PAH on Highest TPH Only If
								# Cont													
1	MW-1	3/18/15	0925	GW			3				X										
2	MW-3	3/18/15	1035	GW			3				X										
3	MW-4	3/18/15	0955	GW			3				X										
4	MW-5	3/18/15	1031	GW			3				X										
5	MW-6	3/18/15	1135	GW			3				X										
6	MW-7	3/18/15	1150	GW			3				X										
7	MW-8	3/18/15	1340	GW			3				X										
8	MW-9	3/18/15	1335	GW			3				X										
9	MW-10	3/18/15	1320	GW			3				X										
0																					

* Container Type Codes

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

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

** Preservative Type Codes

A. None E. HCL I. Ice
B. HNO_3 F. MeOH J. MCAA C.
H_2SO_4 G. $Na_2S_2O_3$ K. ZnAc&NaOH
D. NaOH H. $NaHSO_4$ L Asbc Acid&NaOH
O. _____

^ Matrix Type Codes

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

REMARKS

Reg. Program / Clean-up Std	STATE for Certs & Regs	QA/QC Level & Certification	EDDs	COC & Labels	Coolers Temp °C
CTLs TRRP DW NPDES LPST DryCln Other:	FL TX GA NC SC NJ PA OK LA AL NM Other:	1 **2** 3 4 CLP AFCEE QAPP NELAC DoD-ELAP Other:	ADaPT SEDD ERPIMS XLS Other:	Match Incomplete Absent Unclear	17.1 2 1 3

	Relinquished by	Affiliation	Date	Time	Received by	Affiliation	Date	Time
1	D Saxton	Basin Env	3-19-15	17:00		Basin Env	3/19/15	1700
2		Basin Env.	3/19/15	1510			3/19/15	
3							3/20/15	1138
4								

Lab Use Only

	YES	NO	N/A
Non-Conformances found?			
Samples intact upon arrival?			
Received on Wet Ice?			
Labeled with proper preservatives?			
Received within holding time?			
Custody seals intact?			
VOCs rec'd w/o headspace?			
Proper containers used?			
pH verified-acceptable, excl VOCs?			
Received on time to meet HTs?			

C.O.C. Serial #

 Revision Date: Nov 12, 2009

CHAIN OF CUSTODY RECORD

XENCO Laboratories — Environmental Asbestos Radiochemistry

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

LAB W.O#: 504390 (504389 N/C)

Field billable Hrs :

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

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

Std (5-7D) 5Hrs 1D 2D 3D 4D **5D 7D** 10D 14D Other_____

ANALYSES REQUESTED

Sample #	Sample ID	Collect Date	Collect Time	Matrix Code ^	Field Filtered	Integrity OK (Y/N)	Total # of containers	Cont Type * VC	Pres Type** E, I	Example Volatiles by 8260	BTEX	VP	E,I								Hold Sample (CALL ___) Run PAH on Highest TPH ___ Only if
								# Cont													
1	Goff Dairy Well	3/18/15	1435	GW			3			X											
2	JW Well	3/18/15	1415	GW			3			X											
3	Goff Dairy - Ctr. Pivot Well	3/18/15	1540	GW			3			X											
4	Goff Dairy - Ctr. Pivot Beg.	3/18/15	1505	GW			3			X											
5	Goff Dairy - Ctr. Pivot End	3/18/15	1445	GW			3			X											
6																					
7																					
8																					
9																					
0																					

* Container Type Codes

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

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

** Preservative Type Codes

A. None E. HCL I. Ice
B. HNO_3 F. MeOH J. MCAA C.
H_2SO_4 G. $Na_2S_2O_3$ K. ZnAc&NaOH
D. NaOH H. $NaHSO_4$ L Asbc Acid&NaOH
O. _____

^ Matrix Type Codes

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

REMARKS

Reg. Program / Clean-up Std	STATE for Certs & Regs	QA/QC Level & Certification	EDDs	COC & Labels	Coolers Temp °C
CTLs TRRP DW NPDES LPST DryCln Other:	FL TX GA NC SC NJ PA OK LA AL NM Other:	1 **2** 3 4 CLP AFCEE QAPP NELAC DoD-ELAP Other:	ADaPT SEDD ERPIMS XLS Other:	Match Incomplete Absent Unclear	1 2 1 3

	Relinquished by	Affiliation	Date	Time	Received by	Affiliation	Date	Time
1	D Saxton	Basin Env	3-18-15	17:00		Basin Env.	3/18/15	1700
2		Basin Env.	3/19/15	1510		MS	3/19/15	
3						XENCO	3/20/15	1133
4								

Lab Use Only

	YES	NO	N/A
Non-Conformances found?			
Samples intact upon arrival?			
Received on Wet Ice?			
Labeled with proper preservatives?			
Received within holding time?			
Custody seals intact?			
VOCs rec'd w/o headspace?			
Proper containers used?			
pH verified-acceptable, excl VOCs?			
Received on time to meet HTs?			

C.O.C. Serial #

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

 Revision Date: Nov 12, 2009

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: PLAINS ALL AMERICAN EH&S

Date/ Time Received: 03/20/2015 11:38:00 AM

Work Order #: 504390

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

Temperature Measuring device used :

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

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

Analyst: PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 03/20/2015

Checklist reviewed by: Julian Martinez Date: 03/20/2015

Analytical Report 507922

for

PLAINS ALL AMERICAN EH&S

Project Manager: Ben Arguijo

Lovington Gathering WTI

SRS#2006-142

21-MAY-15

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-14-18), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
Oklahoma (9218)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Texas (T104704477), Louisiana (04176), USDA (P330-07-00105)

Xenco-Lakeland: Florida (E84098)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

21-MAY-15

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

Reference: XENCO Report No(s): **507922**
Lovington Gathering WTI
Project Address: NM

Ben Arguijo:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 507922. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 507922 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 507922

PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-7	W	05-12-15 10:35		507922-001
MW-9	W	05-12-15 09:00		507922-002
Goff Dairy Well	W	05-12-15 12:05		507922-003
JW Well	W	05-12-15 11:50		507922-004

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 507922

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI

Project Id: SRS#2006-142
Contact: Ben Arguijo
Project Location: NM

Date Received in Lab: Fri May-15-15 10:30 am
Report Date: 21-MAY-15
Project Manager: Kelsey Brooks

Analysis Requested									
	Lab Id:	507922-001		507922-002		507922-003		507922-004			
	Field Id:	MW-7		MW-9		Goff Dairy Well		JW Well			
	Depth:										
	Matrix:	WATER		WATER		WATER		WATER			
	Sampled:	May-12-15 10:35		May-12-15 09:00		May-12-15 12:05		May-12-15 11:50			
BTEX by EPA 8021	***Extracted:***	May-20-15 15:00		May-20-15 15:00		May-20-15 15:00		May-20-15 15:00			
	Analyzed:	May-20-15 19:26		May-20-15 19:43		May-20-15 20:00		May-20-15 20:16			
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL		
Benzene		0.142	0.00100	0.0268	0.00100	ND	0.00100	ND	0.00100		
Toluene		ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200		
Ethylbenzene		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100		
m_p-Xylenes		ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200		
o-Xylene		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100		
Xylenes, Total		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100		
Total BTEX		0.142	0.00100	0.0268	0.00100	ND	0.00100	ND	0.00100		

Kelsey Brooks
Project Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

\+ NELAC certification not offered for this compound.

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

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 507922,

Project ID: SRS#2006-142

Lab Batch #: 968569 **Sample:** 507922-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/15 19:26

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0271	0.0300	90	80-120	

Lab Batch #: 968569 **Sample:** 507922-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/15 19:43

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0311	0.0300	104	80-120	
4-Bromofluorobenzene	0.0292	0.0300	97	80-120	

Lab Batch #: 968569 **Sample:** 507922-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/15 20:00

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0285	0.0300	95	80-120	
4-Bromofluorobenzene	0.0281	0.0300	94	80-120	

Lab Batch #: 968569 **Sample:** 507922-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/15 20:16

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0297	0.0300	99	80-120	
4-Bromofluorobenzene	0.0305	0.0300	102	80-120	

Lab Batch #: 968569 **Sample:** 692832-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/15 17:47

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0276	0.0300	92	80-120	
4-Bromofluorobenzene	0.0272	0.0300	91	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 507922, **Project ID:** SRS#2006-142

Lab Batch #: 968569 **Sample:** 692832-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/15 18:04

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0312	0.0300	104	80-120	
4-Bromofluorobenzene	0.0284	0.0300	95	80-120	

Lab Batch #: 968569 **Sample:** 692832-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/15 18:20

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0279	0.0300	93	80-120	

Lab Batch #: 968569 **Sample:** 507922-003 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/15 18:37

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0310	0.0300	103	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

Lab Batch #: 968569 **Sample:** 507922-003 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 05/20/15 18:53

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0314	0.0300	105	80-120	
4-Bromofluorobenzene	0.0301	0.0300	100	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BSD Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 507922 **Project ID:** SRS#2006-142

Analyst: ARM **Date Prepared:** 05/20/2015 **Date Analyzed:** 05/20/2015

Lab Batch ID: 968569 **Sample:** 692832-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0918	92	0.100	0.0923	92	1	70-125	25	
Toluene	<0.00200	0.100	0.0965	97	0.100	0.0963	96	0	70-125	25	
Ethylbenzene	<0.00100	0.100	0.101	101	0.100	0.101	101	0	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.203	102	0.200	0.203	102	0	70-131	25	
o-Xylene	<0.00100	0.100	0.101	101	0.100	0.100	100	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 # : 507922 **Project ID:** SRS#2006-142

Lab Batch ID: 968569 **QC- Sample ID:** 507922-003 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 05/20/2015 **Date Prepared:** 05/20/2015 **Analyst:** ARM

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0947	95	0.100	0.0962	96	2	70-125	25	
Toluene	<0.00200	0.100	0.0992	99	0.100	0.101	101	2	70-125	25	
Ethylbenzene	<0.00100	0.100	0.105	105	0.100	0.107	107	2	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.209	105	0.200	0.214	107	2	70-131	25	
o-Xylene	<0.00100	0.100	0.104	104	0.100	0.107	107	3	71-133	25	

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

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

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: PLAINS ALL AMERICAN EH&S

Date/ Time Received: 05/15/2015 10:30:00 AM

Work Order #: 507922

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

Temperature Measuring device used :

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

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

Analyst:

PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 05/15/2015

Checklist reviewed by: Kelsey Brooks Date: 05/20/2015

CHAIN OF CUSTODY RECORD

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

LAB W.O#: 507922

Field billable Hrs :

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

Sampler Name: Bill Wooley

Circle One Event: Daily Weekly Monthly Quartely Semi-Annual Annual N/A

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

Std (5-7D) 5Hrs 1D 2D 3D 4D **5D 7D** 10D 14D Other_____

ANALYSES REQUESTED

Sample #	Sample ID	Collect Date	Collect Time	Matrix Code ^	Field Filtered	Integrity OK (Y/N)	Total # of containers	Cont Type * VC	Pres Type** E, I	Example Volatiles by 8260	BTEX	VP	E,I	Hold Sample (CALL___) Run PAH on Highest TPH___ Only if
							# Cont							
1	MW-2			GW			3				X			
2	MW-3			GW			3				X			
3	MW-6			GW			3				X			
4	MW-7	5-12-15	1035	GW			3				X			
5	MW-9	5-12-15	9:00	GW			3				X			
6	MW-10			GW			3				X			
7														
8														
9														
10														

* Container Type Codes

VA Vial Amber, VC Vial Clear, VP Vial Pre-preserved, GA Glass Amber, GC Glass Clear, PA Plastic Amber, PC Plastic Clear, Other _____
ES Encore Sampler, TS TerraCore Sampler, AC Air Canister, TB Tedlar Bag, ZB Zip Lock Bag, PC Plastic Clear
Size(s): 2oz, 4oz, 8oz, 16oz, 32oz , 1Gal 40ml, 125 ml, 250 ml, 500 ml, 1L, Other _____

** Preservative Type Codes

A. None, B. HNO_3, C. H_2SO_4, D. NaOH, E. HCL, F. MeOH, G. $Na_2S_2O_3$, H. $NaHSO_4$, I. Ice, J. MCAA, K. ZnAc&NaOH, L. Asbc Acid&NaOH, O. _____

^ Matrix Type Codes

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

REMARKS

Reg. Program / Clean-up Std	STATE for Certs & Regs	QA/QC Level & Certification	EDDs	COC & Labels	Coolers Temp °C
CTLs TRRP DW NPDES LPST DryCln Other:	FL TX GA NC SC NJ PA OK LA AL NM Other:	1 **2** 3 4 CLP AFCEE QAPP NELAC DoD-ELAP Other:	ADaPT SEDD ERPIMS XLS Other:	Match Incomplete Absent Unclear	1 1 2 6 3

	Relinquished by	Affiliation	Date	Time	Received by	Affiliation	Date	Time
1	Bill Wooley	Basin Env	5-14-15	1414	Yvette Cg	Mail Services	5-14-15	1414
2					MRios	Xenco	5/15/15	1030
3								
4								

Lab Use Only

	YES	NO	N/A
Non-Conformances found?			
Samples intact upon arrival?			
Received on Wet Ice?			
Labeled with proper preservatives?			
Received within holding time?			
Custody seals intact?			
VOCs rec'd w/o headspace?			
Proper containers used?			
pH verified-acceptable, excl VOCs?			
Received on time to meet HTs?			

C.O.C. Serial #

 Revision Date: Nov 12, 2009

CHAIN OF CUSTODY RECORD

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

LAB W.O#: 507922

Field billable Hrs :

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

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

Std (5-7D) 5Hrs 1D 2D 3D 4D **5D 7D** 10D 14D Other_____

Sampler Name: Bill Wooley

Circle One Event: Daily Weekly Monthly Quartely Semi-Annual Annual N/A

ANALYSES REQUESTED

Cont Type * VC

Pres Type** E, I

Example Volatiles by 8260

BTEX

VP

E,I

Hold Sample (CALL___) Run PAH on Highest TPH___ Only If

Cont

Sample #	Sample ID	Collect Date	Collect Time	Matrix Code ^	Field Filtered	Integrity OK (Y/N)	Total # of containers	Example Volatiles by 8260	BTEX	VP	E,I	Hold Sample / Run PAH
1	Goff Dairy Well	5-12-15	1205	GW			3		X			
2	JW Well	5-12-15	1150	GW			3		X			
3	~~Goff Dairy - Ctr. Pivot Well~~			GW			3		X			
4	~~Goff Dairy - Ctr. Pivot Beg.~~			GW			3		X			
5	~~Goff Dairy - Ctr. Pivot End~~			GW			3		X			
6												
7												
8												
9												
10												

* Container Type Codes

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

Other _____

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

** Preservative Type Codes

A. None E. HCL I. Ice
B. HNO_3 F. MeOH J. MCAA C.
H_2SO_4 G. $Na_2S_2O_3$ K. ZnAc&NaOH
D. NaOH H. $NaHSO_4$ L Asbc Acid&NaOH
O. _____

^ Matrix Type Codes

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

REMARKS

Reg. Program / Clean-up Std	STATE for Certs & Regs	QA/QC Level & Certification	EDDs	COC & Labels	Coolers Temp °C
CTLs TRRP DW NPDES LPST DryCln Other:	FL TX GA NC SC NJ PA OK LA AL NM Other:	1 2 3 4 CLP AFCEE QAPP NELAC DoD-ELAP Other:	ADaPT SEDD ERPIMS XLS Other:	Match Incomplete Absent Unclear	1 1 2 1 3

	Relinquished by	Affiliation	Date	Time	Received by	Affiliation	Date	Time
1	Bill Wooley	Basin Env	5-14-15	1414	Yvette Cox	Mail Services	5-14-15	1414
2					M Rios	Xenco	5/15/15	1030
3								
4								

Lab Use Only

	YES	NO	N/A
Non-Conformances found?			
Samples intact upon arrival?			
Received on Wet Ice?			
Labeled with proper preservatives?			
Received within holding time?			
Custody seals intact?			
VOCs rec'd w/o headspace?			
Proper containers used?			
pH verified-acceptable, excl VOCs?			
Received on time to meet HTs?			

C.O.C. Serial #

 Revision Date: Nov 12, 2009

Final 1.000

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: PLAINS ALL AMERICAN EH&S

Date/ Time Received: 05/15/2015 10:30:00 AM

Work Order #: 507922

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

Temperature Measuring device used :

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

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

Analyst:

PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 05/15/2015

Checklist reviewed by: Kelsey Brooks Date: 05/20/2015

Analytical Report 513532

for

PLAINS ALL AMERICAN EH&S

Project Manager: Ben Arguijo

Lovington Gathering WTI

2006-142

20-AUG-15

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-15-19), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
Oklahoma (9218)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Texas (T104704477), Louisiana (04176), USDA (P330-07-00105)

Xenco-Lakeland: Florida (E84098)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

20-AUG-15

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

Reference: XENCO Report No(s): **513532**
Lovington Gathering WTI
Project Address:

Ben Arguijo:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 513532. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 513532 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 513532

PLAINS ALL AMERICAN EH&S, Midland, TX

Lovington Gathering WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-7	W	08-11-15 11:40		513532-001
MW-9	W	08-11-15 11:20		513532-002
GOFF DAIRY WELL	W	08-11-15 13:30		513532-003
JW WELL	W	08-11-15 13:40		513532-004

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 513532

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Lovington Gathering WTI

Project Id: 2006-142
Contact: Ben Arguijo
Project Location:

Date Received in Lab: Fri Aug-14-15 03:30 pm
Report Date: 20-AUG-15
Project Manager: Kelsey Brooks

Analysis Requested									
	Lab Id:	513532-001		513532-002		513532-003		513532-004			
	Field Id:	MW-7		MW-9		GOFF DAIRY WELL		JW WELL			
	Depth:										
	Matrix:	GROUND WATER		GROUND WATER		GROUND WATER		GROUND WATER			
	Sampled:	Aug-11-15 11:40		Aug-11-15 11:20		Aug-11-15 13:30		Aug-11-15 13:40			
BTEX by EPA 8021	***Extracted:***	Aug-18-15 18:00		Aug-18-15 18:00		Aug-18-15 18:00		Aug-18-15 18:00			
	Analyzed:	Aug-19-15 01:00		Aug-19-15 01:16		Aug-19-15 01:33		Aug-19-15 01:50			
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL		
Benzene		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100		
Toluene		ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200		
Ethylbenzene		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100		
m_p-Xylenes		ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200		
o-Xylene		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100		
Xylenes, Total		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100		
Total BTEX		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100		

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

\+ NELAC certification not offered for this compound.

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

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 513532,

Project ID: 2006-142

Lab Batch #: 975019 **Sample:** 513532-001 / SMP **Batch:** 1 **Matrix:** Ground Water

Units: mg/L **Date Analyzed:** 08/19/15 01:00

SURROGATE RECOVERY STUDY

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

Lab Batch #: 975019 **Sample:** 513532-002 / SMP **Batch:** 1 **Matrix:** Ground Water

Units: mg/L **Date Analyzed:** 08/19/15 01:16

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0298	0.0300	99	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

Lab Batch #: 975019 **Sample:** 513532-003 / SMP **Batch:** 1 **Matrix:** Ground Water

Units: mg/L **Date Analyzed:** 08/19/15 01:33

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0286	0.0300	95	80-120	
4-Bromofluorobenzene	0.0285	0.0300	95	80-120	

Lab Batch #: 975019 **Sample:** 513532-004 / SMP **Batch:** 1 **Matrix:** Ground Water

Units: mg/L **Date Analyzed:** 08/19/15 01:50

SURROGATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0287	0.0300	96	80-120	
4-Bromofluorobenzene	0.0288	0.0300	96	80-120	

Lab Batch #: 975019 **Sample:** 696928-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/19/15 12:41

SURROGATE RECOVERY STUDY

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

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: Lovington Gathering WTI

Work Orders : 513532, **Project ID:** 2006-142

Lab Batch #: 975019 **Sample:** 696928-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/18/15 23:36

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0306	0.0300	102	80-120	
4-Bromofluorobenzene	0.0301	0.0300	100	80-120	

Lab Batch #: 975019 **Sample:** 696928-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/18/15 23:52

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

Lab Batch #: 975019 **Sample:** 513532-001 S / MS **Batch:** 1 **Matrix:** Ground Water

Units: mg/L **Date Analyzed:** 08/19/15 00:09

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0313	0.0300	104	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 #: 513532 **Project ID:** 2006-142

Analyst: PJB **Date Prepared:** 08/18/2015 **Date Analyzed:** 08/18/2015

Lab Batch ID: 975019 **Sample:** 696928-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0933	93	0.100	0.0938	94	1	70-125	25	
Toluene	<0.00200	0.100	0.0935	94	0.100	0.0952	95	2	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0967	97	0.100	0.0994	99	3	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.197	99	0.200	0.202	101	3	70-131	25	
o-Xylene	<0.00100	0.100	0.0973	97	0.100	0.101	101	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

Version: 1.%

Form 3 - MS Recoveries

Project Name: Lovington Gathering WTI

Work Order #: 513532

Lab Batch #: 975019 **Project ID:** 2006-142

Date Analyzed: 08/19/2015 **Date Prepared:** 08/18/2015 **Analyst:** PJB

QC- Sample ID: 513532-001 S **Batch #:** 1 **Matrix:** Ground Water

Reporting Units: mg/L

BTEX by EPA 8021B	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Benzene	<0.00100	0.100	0.0935	94	70-125	
Toluene	<0.00200	0.100	0.0948	95	70-125	
Ethylbenzene	<0.00100	0.100	0.0989	99	71-129	
m_p-Xylenes	<0.00200	0.200	0.201	101	70-131	
o-Xylene	<0.00100	0.100	0.0992	99	71-133	

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

BRL - Below Reporting Limit

Version: 1.%

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: PLAINS ALL AMERICAN EH&S

Date/ Time Received: 08/14/2015 03:30:00 PM

Work Order #: 513532

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

Temperature Measuring device used :

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

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

Analyst:

PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 08/17/2015

Checklist reviewed by: Kelsey Brooks Date: 08/17/2015

CHAIN OF CUSTODY RECORD

XENCO Laboratories — Environmental Asbestos Radiochemistry

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

Page 1 of 1

LAB W.O#: 513582

Field billable Hrs :

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

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

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

ANALYSES REQUESTED

Sample #	Sample ID	Collect Date	Collect Time	Matrix Code ^	Field Filtered	Integrity OK (Y/N)	Total # of containers	Cont Type * VC	Pres Type** E, I	Example Volatiles by 8260	BTEX								Hold Sample (CALL ___) Run PAH on Highest TPH Only if	REMARKS
								# Cont												
1	MW-7	8/11/15	1140	GW			3			X	X									Rush 30d
2	MW-9	↓	1120	GW			3			X	X		X							Sample MW-9
3	Goff Dairy Well	↓	1330	GW			3			X	X									For BTEX
4	JW Well	↓	1340	GW			3			X	X									
5																				
6																				
7																				
8																				
9																				
10																				

* Container Type Codes

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

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

** Preservative Type Codes

A. None, E. HCL, I. Ice, B. HNO_3, F. MeOH, J. MCAA, C. H_2SO_4, G. $Na_2S_2O_3$, K. ZnAc&NaOH, D. NaOH, H. $NaHSO_4$, L Asbc Acid&NaOH, O. _____

^ Matrix Type Codes

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

Reg. Program / Clean-up Std	STATE for Certs & Regs	QA/QC Level & Certification	EDDs	COC & Labels	Coolers Temp °C	Lab Use Only	YES	NO	N/A
CTLs TRRP DW NPDES LPST DryCln Other:	FL TX GA NC SC NJ PA OK LA AL NM Other:	1 2 3 4 CLP AFCEE QAPP NELAC DoD-ELAP Other:	ADaPT SEDD ERPIMS XLS Other:	Match Incomplete Absent Unclear	1 2°c 2 3	Non-Conformances found?			
						Samples intact upon arrival?			
						Received on Wet Ice?			
						Labeled with proper preservatives?			
						Received within holding time?			
						Custody seals intact?			
						VOCs rec'd w/o headspace?			
						Proper containers used?			
						pH verified-acceptable, excl VOCs?			
						Received on time to meet HTs?			

	Relinquished by	Affiliation	Date	Time	Received by	Affiliation	Date	Time
1	B. Wooley					Basin Env.	8/11/15	1700
2		Basin Env.	8/14/15	1525	Paul		08/14/15	15:30
3								
4								

C.O.C. Serial #

 Revision Date: Nov 12, 2009

Final 1.000

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: PLAINS ALL AMERICAN EH&S

Date/ Time Received: 08/14/2015 03:30:00 PM

Work Order #: 513532

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

Temperature Measuring device used :

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

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

Analyst:

PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 08/17/2015

Checklist reviewed by: Kelsey Brooks Date: 08/17/2015

Analytical Report 515356

for

PLAINS ALL AMERICAN EH&S

Project Manager: Ben Arguijo

LOVINGTON GATHERING WTI

2006-142

17-SEP-15

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-15-19), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
Oklahoma (9218)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Texas (T104704477), Louisiana (04176), USDA (P330-07-00105)

Xenco-Lakeland: Florida (E84098)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

17-SEP-15

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

Reference: XENCO Report No(s): **515356**
LOVINGTON GATHERING WTI
Project Address:

Ben Arguijo:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 515356. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 515356 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,

Julian Martinez
Odessa Laboratory Director

Sample Cross Reference 515356

PLAINS ALL AMERICAN EH&S, Midland, TX

LOVINGTON GATHERING WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-8	W	09-09-15 10:00		515356-001
MW-10	W	09-09-15 10:30		515356-002

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 515356

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: LOVINGTON GATHERING WTI

Project Id: 2006-142
Contact: Ben Arguijo
Project Location:

Draft

Date Received in Lab: Fri Sep-11-15 02:56 pm
Report Date: 17-SEP-15
Project Manager: Kelsey Brooks

Analysis Requested							
	Lab Id:	515356-001	515356-002				
	Field Id:	MW-8	MW-10				
	Depth:						
	Matrix:	GROUND WATER	GROUND WATER				
	Sampled:	Sep-09-15 10:00	Sep-09-15 10:30				
BTEX by EPA 8021B	***Extracted:***	Sep-15-15 10:00	Sep-15-15 10:00				
	Analyzed:	Sep-15-15 15:32	Sep-15-15 15:15				
	Units/RL:	mg/L RL	mg/L RL				
Benzene		ND 0.00100	ND 0.00100				
Toluene		ND 0.00200	ND 0.00200				
Ethylbenzene		ND 0.00100	ND 0.00100				
m_p-Xylenes		ND 0.00200	ND 0.00200				
o-Xylene		ND 0.00100	ND 0.00100				
Total Xylenes		ND 0.00100	ND 0.00100				
Total BTEX		ND 0.00100	ND 0.00100				

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

\+ NELAC certification not offered for this compound.

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

Form 2 - Surrogate Recoveries

Project Name: LOVINGTON GATHERING WTI

Work Orders : 515356, **Project ID:** 2006-142

Lab Batch #: 977028 **Sample:** 515356-002 / SMP **Batch:** 1 **Matrix:** Ground Water

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

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0283	0.0300	94	80-120	
4-Bromofluorobenzene	0.0294	0.0300	98	80-120	

Lab Batch #: 977028 **Sample:** 515356-001 / SMP **Batch:** 1 **Matrix:** Ground Water

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

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0303	0.0300	101	80-120	

Lab Batch #: 977028 **Sample:** 698204-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/15/15 14:59

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	0.0296	0.0300	99	80-120	

Lab Batch #: 977028 **Sample:** 698204-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/15/15 13:19

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0309	0.0300	103	80-120	
4-Bromofluorobenzene	0.0319	0.0300	106	80-120	

Lab Batch #: 977028 **Sample:** 698204-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 09/15/15 14:25

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0332	0.0300	111	80-120	
4-Bromofluorobenzene	0.0345	0.0300	115	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 : 515356, **Project ID:** 2006-142

Lab Batch #: 977028 **Sample:** 515356-001 S / MS **Batch:** 1 **Matrix:** Ground Water

Units: mg/L **Date Analyzed:** 09/15/15 16:06

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0306	0.0300	102	80-120	
4-Bromofluorobenzene	0.0300	0.0300	100	80-120	

Lab Batch #: 977028 **Sample:** 515356-001 SD / MSD **Batch:** 1 **Matrix:** Ground Water

Units: mg/L **Date Analyzed:** 09/15/15 16:23

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0295	0.0300	98	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 #: 515356 **Project ID:** 2006-142

Analyst: SYG **Date Prepared:** 09/15/2015 **Date Analyzed:** 09/15/2015

Lab Batch ID: 977028 **Sample:** 698204-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0810	81	0.100	0.0830	83	2	70-125	25	
Toluene	<0.00200	0.100	0.0819	82	0.100	0.0894	89	9	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0895	90	0.100	0.100	100	11	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.183	92	0.200	0.204	102	11	70-131	25	
o-Xylene	<0.00100	0.100	0.0904	90	0.100	0.101	101	11	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

Version: 1.%

Form 3 - MS / MSD Recoveries

Project Name: LOVINGTON GATHERING WTI

Work Order # : 515356 **Project ID:** 2006-142

Lab Batch ID: 977028 **QC- Sample ID:** 515356-001 S **Batch #:** 1 **Matrix:** Ground Water

Date Analyzed: 09/15/2015 **Date Prepared:** 09/15/2015 **Analyst:** SYG

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0803	80	0.100	0.0830	83	3	70-125	25	
Toluene	<0.00200	0.100	0.0839	84	0.100	0.0879	88	5	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0907	91	0.100	0.0963	96	6	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.185	93	0.200	0.196	98	6	70-131	25	
o-Xylene	<0.00100	0.100	0.0907	91	0.100	0.0957	96	5	71-133	25	

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

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

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

CHAIN OF CUSTODY RECORD

XENCO Laboratories — Environmental Asbestos Radiochemistry

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

LAB W.O#: 515354
Field billable Hrs: 515356

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

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

Sampler Name: Bill Wooley

Circle One Event: Daily Weekly Monthly Quarterly Semi-Annual Annual N/A

ANALYSES REQUESTED

Sample #	Sample ID	Collect Date	Collect Time	Matrix Code ^	Field Filtered	Integrity OK (Y/N)	Total # of containers	Cont Type * VC	Pres Type** E, I	Example Volatiles by 8260	BTEX									Hold Sample (CALL___) Run PAH on Highest TPH___ Only if
							# Cont			VP	E,I									
1	MW-8	9/9/15	1000	GW			3			X										
2	MW-10	9/9/15	1030	GW			3			X										
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				

* Container Type Codes

VA Vial Amber, VC Vial Clear, VP Vial Pre-preserved, GA Glass Amber, GC Glass Clear, PA Plastic Amber, PC Plastic Clear, ES Encore Sampler, TS TerraCore Sampler, AC Air Canister, TB Tedlar Bag, ZB Zip Lock Bag, PC Plastic Clear
Other _____
Size(s): 2oz, 4oz, 8oz, 16oz, 32oz , 1Gal 40ml, 125 ml, 250 ml, 500 ml, 1L, Other _____

** Preservative Type Codes

A. None, E. HCL, I. Ice, B. HNO_3, F. MeOH, J. MCAA, C. H_2SO_4, G. $Na_2S_2O_3$, K. ZnAc&NaOH, D. NaOH, H. $NaHSO_4$, L Asbc Acid&NaOH, O. _____

^ Matrix Type Codes

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

REMARKS

Reg. Program / Clean-up Std	STATE for Certs & Regs	QA/QC Level & Certification	EDDs	COC & Labels	Coolers Temp °C
CTLs TRRP DW NPDES LPST DryCln Other:	FL TX GA NC SC NJ PA OK LA AL NM Other:	1 2 3 4 CLP AFCEE QAPP NELAC DoD-ELAP Other:	ADaPT SEDD ERPIMS XLS Other:	Match Incomplete Absent Unclear	1 2 3

	^Relinquished by	Affiliation	Date	Time	Received by	Affiliation	Date	Time
1	Bill Wooley	Basin	9/9/15	1700		Basin Env.	9/9/15	1700
2		Basin Env.	9/10/15	1605		Mail Service	9/10/15	1629
3							9/11/15	14:56
4								

Lab Use Only	YES	NO	N/A
Non-Conformances found?			
Samples intact upon arrival?			
Received on Wet Ice?			
Labeled with proper preservatives?			
Received within holding time?			
Custody seals intact?			
VOCs rec'd w/o headspace?			
Proper containers used?			
pH verified-acceptable, excl VOCs?			
Received on time to meet HTs?			

C.O.C. Serial #

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

 Revision Date: Nov 12, 2009

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: PLAINS ALL AMERICAN EH&S

Date/ Time Received: 09/11/2015 02:56:00 PM

Work Order #: 515356

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

Temperature Measuring device used :

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

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

Analyst:

PH Device/Lot#:

Checklist completed by: Caroline Dugan Date: 09/11/2015

Checklist reviewed by: Julian Martinez Date: 09/14/2015

Analytical Report 520513

for

PLAINS ALL AMERICAN EH&S

Project Manager: Ben Arguijo

LOVINGTON GATHERING WTI

2006-142

10-DEC-15

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-15-19), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
Oklahoma (9218)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Texas (T104704477), Louisiana (04176), USDA (P330-07-00105)

Xenco-Lakeland: Florida (E84098)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

10-DEC-15

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

Reference: XENCO Report No(s): **520513**
LOVINGTON GATHERING WTI
Project Address:

Ben Arguijo:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 520513. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 520513 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 520513

PLAINS ALL AMERICAN EH&S, Midland, TX

LOVINGTON GATHERING WTI

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-3	W	11-24-15 12:25		520513-001
MW-6	W	11-24-15 10:35		520513-002
MW-7	W	11-24-15 11:15		520513-003
MW-9	W	11-24-15 00:00		520513-004
MW-10	W	11-24-15 11:20		520513-005
Goff Dairy Well	W	11-24-15 00:00		520513-006
JW Well	W	12-02-15 00:00		520513-007

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Hits Summary 520513

PLAINS ALL AMERICAN EH&S, Midland, TX

LOVINGTON GATHERING WTI

Sample Id : **MW-7**
Lab Sample Id : 520513-003

Matrix : Ground Water
Date Collected : 11.24.15 11.15
Date Received : 12.03.15 10.45

% Moisture :

Analytical Method : BTEX by EPA 8021B
Seq Number 983027

Prep Method: SW5030B
Date Prep: 12.08.15 10.00

Parameter	Cas Number	Result	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00133	mg/L	12.08.15 11.39		1
Total BTEX		0.00133	mg/L	12.08.15 11.39		1

Sample Id : **MW-9**
Lab Sample Id : 520513-004

Matrix : Ground Water
Date Collected : 11.24.15 00.00
Date Received : 12.03.15 10.45

% Moisture :

Analytical Method : BTEX by EPA 8021B
Seq Number 983027

Prep Method: SW5030B
Date Prep: 12.08.15 10.00

Parameter	Cas Number	Result	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00899	mg/L	12.08.15 11.56		1
Total BTEX		0.00899	mg/L	12.08.15 11.56		1

Certificate of Analysis Summary 520513

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: LOVINGTON GATHERING WTI

Project Id: 2006-142
Contact: Ben Arguijo
Project Location:

Date Received in Lab: Thu Dec-03-15 10:45 am
Report Date: 10-DEC-15
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	520513-001		520513-002		520513-003		520513-004		520513-005		520513-006	
	Field Id:	MW-3		MW-6		MW-7		MW-9		MW-10		Goff Dairy Well	
	Depth:												
	Matrix:	GROUND WATER		GROUND WATER		GROUND WATER		GROUND WATER		GROUND WATER		GROUND WATER	
	Sampled:	Nov-24-15 12:25		Nov-24-15 10:35		Nov-24-15 11:15		Nov-24-15 00:00		Nov-24-15 11:20		Nov-24-15 00:00	
BTEX by EPA 8021B	***Extracted:***	Dec-03-15 15:00		Dec-03-15 15:00		Dec-08-15 10:00		Dec-08-15 10:00		Dec-08-15 10:00		Dec-08-15 10:00	
	Analyzed:	Dec-03-15 16:11		Dec-03-15 16:28		Dec-08-15 11:39		Dec-08-15 11:56		Dec-08-15 12:13		Dec-08-15 12:30	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		ND	0.00100	ND	0.00100	0.00133	0.00100	0.00899	0.00100	ND	0.00100	ND	0.00100
Toluene		ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200
Ethylbenzene		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100
m_p-Xylenes		ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200	ND	0.00200
o-Xylene		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100
Xylenes, Total		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100	ND	0.00100
Total BTEX		ND	0.00100	ND	0.00100	0.00133	0.00100	0.00899	0.00100	ND	0.00100	ND	0.00100

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 520513

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: LOVINGTON GATHERING WTI

Project Id: 2006-142
Contact: Ben Arguijo
Project Location:

Date Received in Lab: Thu Dec-03-15 10:45 am
Report Date: 10-DEC-15
Project Manager: Kelsey Brooks

Analysis Requested							
	Lab Id:	520513-007					
	Field Id:	JW Well					
	Depth:						
	Matrix:	GROUND WATER					
	Sampled:	Dec-02-15 00:00					
BTEX by EPA 8021B	***Extracted:***	Dec-08-15 10:00					
	Analyzed:	Dec-09-15 09:37					
	Units/RL:	mg/L RL					
Benzene		ND 0.00100					
Toluene		ND 0.00200					
Ethylbenzene		ND 0.00100					
m_p-Xylenes		ND 0.00200					
o-Xylene		ND 0.00100					
Xylenes, Total		ND 0.00100					
Total BTEX		ND 0.00100					

Kelsey Brooks
Project Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

\+ NELAC certification not offered for this compound.

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

Form 2 - Surrogate Recoveries

Project Name: LOVINGTON GATHERING WTI

Work Orders : 520513, **Project ID:** 2006-142

Lab Batch #: 982913 **Sample:** 520513-001 / SMP **Batch:** 1 **Matrix:** Ground Water

Units: mg/L **Date Analyzed:** 12/03/15 16:11

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0331	0.0300	110	80-120	
4-Bromofluorobenzene	0.0264	0.0300	88	80-120	

Lab Batch #: 982913 **Sample:** 520513-002 / SMP **Batch:** 1 **Matrix:** Ground Water

Units: mg/L **Date Analyzed:** 12/03/15 16:28

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0330	0.0300	110	80-120	
4-Bromofluorobenzene	0.0299	0.0300	100	80-120	

Lab Batch #: 983027 **Sample:** 520513-003 / SMP **Batch:** 1 **Matrix:** Ground Water

Units: mg/L **Date Analyzed:** 12/08/15 11:39

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0343	0.0300	114	80-120	
4-Bromofluorobenzene	0.0302	0.0300	101	80-120	

Lab Batch #: 983027 **Sample:** 520513-004 / SMP **Batch:** 1 **Matrix:** Ground Water

Units: mg/L **Date Analyzed:** 12/08/15 11:56

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0342	0.0300	114	80-120	
4-Bromofluorobenzene	0.0289	0.0300	96	80-120	

Lab Batch #: 983027 **Sample:** 520513-005 / SMP **Batch:** 1 **Matrix:** Ground Water

Units: mg/L **Date Analyzed:** 12/08/15 12:13

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0341	0.0300	114	80-120	
4-Bromofluorobenzene	0.0302	0.0300	101	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: LOVINGTON GATHERING WTI

Work Orders : 520513,

Project ID: 2006-142

Lab Batch #: 983027 **Sample:** 520513-006 / SMP **Batch:** 1 **Matrix:** Ground Water

Units: mg/L **Date Analyzed:** 12/08/15 12:30

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0347	0.0300	116	80-120	
4-Bromofluorobenzene	0.0317	0.0300	106	80-120	

Lab Batch #: 983027 **Sample:** 520513-007 / SMP **Batch:** 1 **Matrix:** Ground Water

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

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0345	0.0300	115	80-120	
4-Bromofluorobenzene	0.0343	0.0300	114	80-120	

Lab Batch #: 982913 **Sample:** 701821-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/03/15 22:53

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0336	0.0300	112	80-120	
4-Bromofluorobenzene	0.0284	0.0300	95	80-120	

Lab Batch #: 983027 **Sample:** 701892-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/08/15 11:20

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0352	0.0300	117	80-120	
4-Bromofluorobenzene	0.0307	0.0300	102	80-120	

Lab Batch #: 982913 **Sample:** 701821-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/03/15 22:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0313	0.0300	104	80-120	
4-Bromofluorobenzene	0.0295	0.0300	98	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: LOVINGTON GATHERING WTI

Work Orders : 520513, **Project ID:** 2006-142

Lab Batch #: 983027 **Sample:** 701892-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/07/15 20:49

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0342	0.0300	114	80-120	
4-Bromofluorobenzene	0.0324	0.0300	108	80-120	

Lab Batch #: 982913 **Sample:** 701821-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/03/15 22:20

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	0.0264	0.0300	88	80-120	

Lab Batch #: 983027 **Sample:** 701892-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/07/15 21:06

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0327	0.0300	109	80-120	
4-Bromofluorobenzene	0.0318	0.0300	106	80-120	

Lab Batch #: 983027 **Sample:** 520513-003 S / MS **Batch:** 1 **Matrix:** Ground Water

Units: mg/L **Date Analyzed:** 12/08/15 13:04

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	0.0296	0.0300	99	80-120	

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

BS / BSD Recoveries

Project Name: LOVINGTON GATHERING WTI

Work Order #: 520513 **Project ID:** 2006-142

Analyst: SYG **Date Prepared:** 12/03/2015 **Date Analyzed:** 12/03/2015

Lab Batch ID: 982913 **Sample:** 701821-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0878	88	0.100	0.0801	80	9	70-125	25	
Toluene	<0.00200	0.100	0.0877	88	0.100	0.0830	83	6	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0916	92	0.100	0.0883	88	4	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.188	94	0.200	0.183	92	3	70-131	25	
o-Xylene	<0.00100	0.100	0.0915	92	0.100	0.0877	88	4	71-133	25	

Analyst: SYG **Date Prepared:** 12/08/2015 **Date Analyzed:** 12/07/2015

Lab Batch ID: 983027 **Sample:** 701892-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0930	93	0.100	0.0942	94	1	70-125	25	
Toluene	<0.00200	0.100	0.101	101	0.100	0.103	103	2	70-125	25	
Ethylbenzene	<0.00100	0.100	0.106	106	0.100	0.107	107	1	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.221	111	0.200	0.224	112	1	70-131	25	
o-Xylene	<0.00100	0.100	0.105	105	0.100	0.107	107	2	71-133	25	

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

Form 3 - MS Recoveries

Project Name: LOVINGTON GATHERING WTI

Work Order #: 520513

Lab Batch #: 983027 **Project ID:** 2006-142

Date Analyzed: 12/08/2015 **Date Prepared:** 12/08/2015 **Analyst:** SYG

QC- Sample ID: 520513-003 S **Batch #:** 1 **Matrix:** Ground Water

Reporting Units: mg/L

BTEX by EPA 8021B	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Benzene	0.00133	0.100	0.0885	87	70-125	
Toluene	<0.00200	0.100	0.0957	96	70-125	
Ethylbenzene	<0.00100	0.100	0.0952	95	71-129	
m_p-Xylenes	<0.00200	0.200	0.210	105	70-131	
o-Xylene	<0.00100	0.100	0.0966	97	71-133	

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

BRL - Below Reporting Limit

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: PLAINS ALL AMERICAN EH&S

Date/ Time Received: 12/03/2015 10:45:00 AM

Work Order #: 520513

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

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.1
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6 *Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 Sample instructions complete on Chain of Custody?	**Yes**
#9 Any missing/extra samples?	**No**
#10 Chain of Custody signed when relinquished/ received?	**Yes**
#11 Chain of Custody agrees with sample label(s)?	**Yes**
#12 Container label(s) legible and intact?	**Yes**
#13 Sample matrix/ properties agree with Chain of Custody?	**Yes**
#14 Samples in proper container/ bottle?	**Yes**
#15 Samples properly preserved?	**Yes**
#16 Sample container(s) intact?	**Yes**
#17 Sufficient sample amount for indicated test(s)?	**Yes**
#18 All samples received within hold time?	**Yes**
#19 Subcontract of sample(s)?	**No**
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	**Yes**
#21 <2 for all samples preserved with HNO3,HCL, H2SO4? Except for samples for the analysis of HEM or HEM-SGT which are verified by the analysts.	**Yes**
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**N/A**

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

Analyst:

PH Device/Lot#:

Checklist completed by: Carley Owens — Date: 12/03/2015
Carley Owens

Checklist reviewed by: Kelsey Brooks — Date: 12/04/2015
Kelsey Brooks

520513

XENCO Laboratories

CHAIN OF CUSTODY RECORD

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

Page 1 of 1

LAB W.O #: ~~520512~~

Field billable Hrs :

Container Type Codes
VA Vial Amber, VC Vial Clear, VP Vial Pre-preserved, GA Glass Amber, GC Glass Clear, PA Plastic Amber, PC Plastic Clear, ES Encore Sampler, TS TerraCore Sampler, AC Air Canister, TB Tedlar Bag, ZB Zip Lock Bag, PC Plastic Clear, Other
Size(s): 2oz, 4oz, 8oz, 16oz, 32oz, 1Gal, 40ml, 125 ml, 250 ml, 500 ml, 1L, Other

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

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

ANALYSES REQUESTED
Cont Type: VP; Pres Type: E,I; Analysis: BTEX

** Preservative Type Codes
A. None, B. HNO_3, C. H_2SO_4, D. NaOH, E. HCL, F. MeOH, G. $Na_2S_2O_3$, H. $NaHSO_4$, I. Ice, J. MCAA, K. ZnAc&NaOH, L. Asbc Acid&NaOH, O.

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

Sample #	Sample ID	Collect Date	Collect Time	Matrix Code^	Field Filtered	Total # of containers	BTEX	REMARKS
1	JW Well	12/2/15		GW		3	X	
2								
3								
4								
5								
6								
7								
8								
9								
0								

Reg Program / Clean-up Std: CTLs TRRP DW NPDES LPST DryCln Other:
STATE for Certs & Regs: FL TX GA NC SC NJ PA OK LA AL NM Other:
QA/QC Level & Certification: 1 2 3 4 CLP AFCEE QAPP NELAC DoD-ELAP Other:
EDDs: ADaPT SEDD ERPIMS XLS Other:
COC & Labels: Match Incomplete Absent Unclear
Coolers Temp °C: 3.1°C / 2 — 3

	Relinquished by	Affiliation	Date	Time	Received by	Affiliation	Date	Time
1	Bill Wooley	Basin	12-2-15	1417	[signature]	MS	12-2-15	1417
2					[signature]	Xenco	12/3/15	10:45
3								
4								

Lab Use Only — YES NO N/A
Non-Conformances found?
Samples intact upon arrival?
Received on Wet Ice?
Labeled with proper preservatives?
Received within holding time?
Custody seals intact?
VOCs rec'd w/o headspace?
Proper containers used?
pH verified-acceptable, excl VOCs?
Received on time to meet HTs?

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

C.O.C. Serial #

XENCO Laboratories

Environmental Asbestos Radiochemistry

CHAIN OF CUSTODY RECORD

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

LAB W.O #: 520513

Field billable Hrs :

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

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

Std (5-7D) 5Hrs 1D 2D 3D 4D **5D 7D** 10D 14D Other________

ANALYSES REQUESTED

Sample #	Sample ID	Collect Date	Collect Time	Matrix Code ^	Field Filtered	Integrity OK (Y/N)	Total # of Containers	Example Volatiles by 8260 (Cont Type* VC, Pres Type** E,I)	BTEX (VP, E,I)								Hold Sample (CALL) Run PAH on Highest TPH Only if	REMARKS
[redacted]									X									
[redacted]									X									
3	MW-3	11-24-15	1225	GW			3		X									
[redacted]									X									
[redacted]									X									
6	MW-6	11-24-15	1035	GW			3		X									
7	MW-7	11-24-15	1115	GW			3		X									
[redacted]									X									
9	MW-9	11-24-15		GW			3		X									
0	MW-10	11-24-15	1120	GW			3		X									

*** Container Type Codes**

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

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

**** Preservative Type Codes**

A. None, B. HNO_3, C. H_2SO_4, D. NaOH, E. HCL, F. MeOH, G. $Na_2S_2O_3$, H. $NaHSO_4$, I. Ice, J. MCAA, K. ZnAc&NaOH, L. Asbc Acid&NaOH, O. ________

^ Matrix Type Codes

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

Reg. Program / Clean-up Std	STATE for Certs & Regs	QA/QC Level & Certification	EDDs	COC & Labels	Coolers Temp °C
CTLs TRRP DW NPDES LPST DryCln Other:	FL TX GA NC SC NJ PA OK LA AL NM Other:	1 <u>2</u> 3 4 CLP AFCEE QAPP NELAC DoD-ELAP Other:	ADaPT SEDD ERPIMS XLS Other:	Match Incomplete Absent Unclear	1 3.1°C 2 ____ 3 9.9

	Relinquished by	Affiliation	Date	Time	Received by	Affiliation	Date	Time
1	Bill Wooley	Basin	12-2-15	9:00	Perla Resendis	MS	12-2-15	9:00
2					[illegible signature]	Xenco	12/3/15	10:45
3								
4								

Lab Use Only	YES	NO	N/A
Non-Conformances found?			
Samples intact upon arrival?			
Received on Wet Ice?			
Labeled with proper preservatives?			
Received within holding time?			
Custody seals intact?			
VOCs rec'd w/o headspace?			
Proper containers used?			
pH verified-acceptable, excl VOCs?			
Received on time to meet HTs?			

C.O.C. Serial #

B&A Laboratories: Hobbs 575-392-7550 Dallas 214-902-0300 Houston 281-242-4200 Odessa 432-563-1800 San Antonio 210-509-3334 Phoenix 602-437-0330

FTS Service Centers: Atlanta 770-449-8800 Lakeland 863-646-8526 Tampa 803-543-8099 Philadelphia 610-955-5649 South Carolina 803-543-8099

CHAIN OF CUSTODY RECORD

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

LAB W.O#: 520513

Field billable Hrs :

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

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

Std (5-7D) 5Hrs 1D 2D 3D 4D **5D 7D** 10D 14D Other_____

Sampler Name:

Circle One Event: Daily Weekly Monthly Quartely Semi-Annual Annual N/A

ANALYSES REQUESTED

Sample #	Sample ID	Collect Date	Collect Time	Matrix Code*	Field Filtered	Lab Filtered	Total # of containers	Cont Type* VC	Pres Type** E,I	Volatiles by 8260 BTEX									Hold Sample (CALL ___ on Highest Test Only !!)
								# Cont		VP	E,I	BTEX							
1	Goff Dairy Well			GW			3			X									
2	~~JW Well~~			GW			3			X									
3	~~Goff Dairy - Ctr. Pivot Well~~			GW			3			X									
4	~~Goff Dairy - Ctr. Pivot Reg~~			GW			3			X									
5	~~Goff Dairy - Ctr. Pivot End~~			GW			3			X									
6																			
7																			
8							4												
9																			
10																			

* Container Type Codes

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

Other _____

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

** Preservative Type Codes

A. None E. HCL I. Ice
B. HNO_3 F. MeOH J. MCAA C.
H_2SO_4 G. $Na_2S_2O_3$ K. ZnAc&NaOH
D. NaOH H. $NaHSO_4$ L Asbc Acid&NaOH
O. _____

^ Matrix Type Codes

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

Other

REMARKS

Reg. Program / Clean-up Std	STATE for Carts & Regs	QA/QC Level & Certification	EDDs	COC & Labels	Coolers Temp °C	Lab Use Only	YES	NO	N/A
CTLs TRRP DW NPDES LPST DryCln Other:	FL TX GA NC SC NJ PA OK LA AL NM Other:	1 **2** 3 4 CLP AFCEE QAPP NELAC DoD-ELAP Other:	ADaPT SEDD ERPIMS XLS Other:	Match Incomplete Absent Unclear	B1 °C2 3 9.9	Non-Conformances found?			
						Samples intact upon arrival?			
						Received on Wet Ice?			
						Labeled with proper preservatives?			
						Received within holding time?			
						Custody seals intact?			
						VOCs rec'd w/o headspace?			
						Proper containers used?			
						pH verified-acceptable, excl VOCs?			
						Received on time to meet HTs?			

	Relinquished by	Affiliation	Date	Time	Received by	Affiliation	Date	Time
1	Bill Wooley	Basin	12-2-15	6:00	Perla Resendiz	MS	12-2-15	9:00
2					[signature]	Xenco	12/3/15	10:45
3								
4								

C.O.C. Serial #

 Revision Date: Nov 12, 2009

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: PLAINS ALL AMERICAN EH&S

Date/ Time Received: 12/03/2015 10:45:00 AM

Work Order #: 520513

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

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.1
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6 *Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 Sample instructions complete on Chain of Custody?	**Yes**
#9 Any missing/extra samples?	**No**
#10 Chain of Custody signed when relinquished/ received?	**Yes**
#11 Chain of Custody agrees with sample label(s)?	**Yes**
#12 Container label(s) legible and intact?	**Yes**
#13 Sample matrix/ properties agree with Chain of Custody?	**Yes**
#14 Samples in proper container/ bottle?	**Yes**
#15 Samples properly preserved?	**Yes**
#16 Sample container(s) intact?	**Yes**
#17 Sufficient sample amount for indicated test(s)?	**Yes**
#18 All samples received within hold time?	**Yes**
#19 Subcontract of sample(s)?	**No**
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	**Yes**
#21 <2 for all samples preserved with HNO3,HCL, H2SO4? Except for samples for the analysis of HEM or HEM-SGT which are verified by the analysts.	**Yes**
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**N/A**

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

Analyst:

PH Device/Lot#:

Checklist completed by: Carley Owens — Date: 12/03/2015

Carley Owens

Checklist reviewed by: Kelsey Brooks — Date: 12/04/2015

Kelsey Brooks

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

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

x Initial Report ☐ Final Report

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

Surface Owner Robert Rice	Mineral Owner	Lease No.

LOCATION OF RELEASE

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

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

NATURE OF RELEASE

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

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken Internal corrosion while purging the line resulted in release of sweet crude oil. The line has been purged. The line is an idle 6-inch steel gathering line. The pressure on the line was approximately 50 psi and the gravity of the sweet crude oil was 34. The sweet crude has an H_2S content of <10 ppm. The line was approximately 1.5 feet bgs at the release point.

Describe Area Affected and Cleanup Action Taken.* The impacted soil was excavated and stockpiled on plastic. Aerial extent of surface impact was approximately 1,500 ft^2.

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

Signature: Camille Reynolds	OIL CONSERVATION DIVISION
Printed Name: Camille Reynolds	Approved by District Supervisor:
Title: Remediation Coordinator	Approval Date: / Expiration Date:
E-mail Address: cjreynolds@paalp.com	Conditions of Approval: / Attached ☐
Date: 4/26/2006 Phone:505-441-0965	