1R - 2166

Annual GW Mon. Report

Year: 2011

Basin Environmental Service Technologies, LLC

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Effective Solutions

RECEIVED
APR 2 2012
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

2011
ANNUAL MONITORING REPORT

DCP PLANT TO LEA STATION 6-INCH SECTION 31
Unit Letter "K" (NESW), Section 31, Township 20 South, Range 37 East
Latitude 32.52733° North, Longitude 103.2906° West
Lea County, New Mexico
Plains SRS Number: 2009-084
NMOCD Reference Number: 1RP-2166

Prepared For:

PLAINS

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

Prepared By:

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

March 2012

Ben J. Arguijo
Project Manager

PLAINS ALL AMERICAN

RECEIVED

APR 2 2012

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

March 29, 2012

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

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

Dear Mr. Hansen:

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

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

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

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

Sincerely,

Jason Henry
Remediation Coordinator
Plains All American

CC: Geoff Leking, NMOCD, Hobbs, NM
Enclosures

TABLE OF CONTENTS

INTRODUCTION

Basin Environmental Service Technologies, LLC (Basin), on behalf of Plains Pipeline, LP (Plains), is pleased to submit this *Annual Monitoring Report* in compliance with the New Mexico Oil Conservation Division (NMOCD) letter of May 1998, requiring submittal of an Annual Monitoring Report by April 1st of each year. This report is intended to be viewed as a complete document with text, figures, tables, and appendices. This report presents the results of the quarterly groundwater monitoring events conducted in calendar year 2011 only. For reference, a "Site Location Map" is provided as Figure 1.

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

SITE DESCRIPTION AND BACKGROUND INFORMATION

The legal description of the site is Unit Letter "K" (NESW), Section 31, Township 20 South, Range 37 East, in Lea County, New Mexico. The property affected by the release is owned by The State of New Mexico (ROE permit #1794) and is administered by the New Mexico State Land Office (NMSLO). The geographic coordinates of the release site are 32.52733° North latitude and 103.2906° West longitude.

On April 2, 2009, Plains discovered a crude oil release from a six (6)-inch steel pipeline. During initial response activities, Plains installed a temporary clamp on the pipeline to mitigate the release. The crude oil release resulted in a surface stain measuring approximately six (6) feet in width by eight (8) feet in length. Plains initially classified the release as "non-reportable". Upon further investigation, Plains reclassified the release to "reportable" status and notified the NMOCD Hobbs District Office and submitted a "Release Notification and Corrective Action" (Form C-141) on April 29, 2009. The cause of the release was attributed to external corrosion of the pipeline.. The C-141 indicated approximately twenty (20) barrels of crude oil was released from the pipeline, with no recovery.

On April 15, 2009, one (1) soil boring (SB-1) was advanced approximately ten (10) feet west of the release point to evaluate the vertical extent of soil impact. During advancement of the soil boring, groundwater was encountered at approximately seventy-seven (77) feet below ground surface (bgs). Temporary casing was installed in the boring to obtain a preliminary groundwater sample. On April 16, 2009, a groundwater sample (SB-1) was collected from the temporary casing and submitted to the laboratory for analysis of total dissolved solids (TDS), chlorides, and benzene, toluene, ethylbenzene, and total xylenes (BTEX). Following the collection of the groundwater sample, the temporary casing was removed from the soil boring and the soil boring was plugged with cement and bentonite, as required by the New Mexico Office of the State Engineer (NMOSE). Laboratory analytical results indicated a benzene concentration of 1.915 mg/L, a BTEX concentration of 4.7711 mg/L, a chloride concentration of 54.6 mg/L, and a TDS concentration of 788 mg/L. Based on the analytical results of the submitted groundwater sample, Plains notified NMOCD representatives in the Hobbs District Office and the Santa Fe Office of the laboratory-confirmed impact to groundwater at the release site.

On June 2, 2009, following advancement of the soil boring, excavation of hydrocarbon-impacted soil commenced. Excavated soil was stockpiled on-site on a plastic liner to mitigate the potential leaching of the contaminants into the vadose zone. Approximately 1,400 cubic yards (cy) of soil was stockpiled on-site, pending final disposition. The final dimensions of the excavation were approximately seventy-seven (77) feet in width, approximately eighty (80) feet in length, and fifteen (15) feet in depth.

On September 21 through September 23, 2009, Plains installed and developed four (4) monitor wells (MW-1 through MW-4) at the release site, as approved by the NMOCD. Soil samples were collected at five (5) foot drilling intervals and field screened using a Photo-Ionization Detector (PID). Selected soil samples were submitted to the laboratory for determination of concentrations of BTEX and total petroleum hydrocarbons (TPH) using EPA Methods SW-846 8021b and SW-846 8015M, respectively.

Monitor well MW-1 was installed on the floor of the excavation, at approximately fifteen (15) feet bgs, to a total depth of approximately eighty-six (86) feet bgs. Soil samples collected at twenty-five (25) feet bgs, thirty-five (35) feet bgs, forty-five (45) feet bgs, fifty-five (55) feet bgs, sixty-five (65) feet bgs, and seventy-five (75) feet bgs were submitted to the laboratory for analysis. Laboratory analytical results indicated benzene concentrations were less than the appropriate laboratory method detection limit (MDL) for all of the submitted soil samples. BTEX concentrations ranged from 0.0359 mg/Kg for the soil sample collected at twenty-five (25) feet bgs to 13.444 mg/Kg for the soil sample collected at fifty-five (55) feet bgs. The TPH concentrations ranged from 286 mg/Kg for the soil sample collected at twenty-five (25) feet bgs to 1,538 mg/Kg for the soil sample collected at fifty-five (55) feet bgs.

Monitor well MW-2 is located approximately seventy-five (75) feet northwest (up-gradient) of the release point. The monitor well was installed to a total depth of approximately ninety (90) feet bgs. Soil samples collected at fifteen (15) feet bgs, thirty (30) feet bgs, forty-five (45) feet bgs, sixty (60) feet bgs, and seventy-five (75) feet bgs were submitted to the laboratory for analysis. Laboratory analytical results indicated benzene, BTEX, and TPH concentrations were less than the appropriate laboratory MDL for all of the submitted soil samples.

Monitor well MW-3 is located approximately seventy-five (75) feet to the southwest (cross-gradient) of the release point. The monitor well was installed to a total depth of approximately ninety (90) feet bgs. Soil samples collected at fifteen (15) feet bgs, thirty (30) feet bgs, forty-five (45) feet bgs, and sixty (60) feet bgs were submitted to the laboratory for analysis. Laboratory analytical results indicated benzene concentrations ranged from less than the appropriate laboratory MDL for the soil samples collected at fifteen (15) feet bgs, thirty (30) feet bgs, forty-five (45) feet bgs, and sixty (60) feet bgs to 0.0025 mg/Kg for the soil sample collected at sixty (60) feet bgs. Analytical results indicated BTEX concentrations ranged from less than the appropriate laboratory MDL for the soil samples collected at fifteen (15) feet bgs, thirty (30) feet bgs, and forty-five (45) feet bgs to 0.0052 mg/Kg for the soil sample collected at sixty (60) feet bgs. TPH concentrations were less than the appropriate laboratory MDL for all of the submitted soil samples.

Monitor well MW-4 is located approximately seventy-five (75) feet to the southeast (down-gradient) of the release point. The monitor well was installed to a total depth of approximately eighty-nine (89) feet bgs. Soil samples collected at fifteen (15) feet bgs, thirty (30) feet bgs,

forty-five (45) feet bgs, and sixty (60) feet bgs were submitted to the laboratory for analysis. Laboratory analytical results indicated benzene, BTEX, and TPH concentrations were less than the appropriate laboratory MDL for all of the submitted soil samples.

On January 25, 2011, one (1) additional monitoring well (MW-5) was installed to further monitor the down-gradient migration of the PSH plume. Monitor well MW-5 is located approximately sixty (60) feet to the southeast (down-gradient) of the release point. The monitor well was installed to a total depth of approximately ninety-five (95) feet bgs. Soil samples collected at fifteen (15) feet bgs, twenty-five (25) feet bgs, forty-five (45) feet bgs, sixty-five (65) feet bgs, and seventy-five (75) feet bgs were submitted to the laboratory for analysis. Laboratory analytical results indicated benzene, BTEX, and TPH concentrations were less than the appropriate laboratory MDL for all of the submitted soil samples. PSH was not observed in monitor well MW-5.

Currently, a total of five (5) monitor wells are located at the DCP Plant to Lea Station 6-Inch Section 31 release site. Monitor wells MW-2, MW-3, MW-4, and MW-5 are gauged and sampled on a quarterly schedule, while MW-1 is gauged weekly but not sampled due to the presence of PSH.

FIELD ACTIVITIES

Product Recovery Efforts

A measurable thickness of PSH was detected in monitor well MW-1 during the initial site investigation. Basin began manual, bi-weekly gauging and recovery of PSH from MW-1 in October 2009. Approximately 1,575 gallons (37.5 barrels) of PSH has been recovered from MW-1 since recovery operations began in 2009, and approximately 1,030 gallons (24.5 barrels) of PSH was recovered from MW-1 during the 2011 reporting period. The average PSH thickness measured in MW-1 during the reporting period was 3.57 feet, and the maximum PSH thickness was 3.74 feet on May 17, 2011. All recovered fluids are disposed of at an NMOCD- approved disposal facility near Monument, New Mexico.

Mobile Dual-Phase Extraction (MDPE) events were conducted on May 4 through May 5 and September 7 through 9, 2011, by Talon LPE. Approximately 40.92 equivalent gallons (0.97 barrels) of PSH were removed during the May event, and approximately 706.74 equivalent gallons (17.8 barrels) of PSH were removed during the September event.

Groundwater Monitoring

The on-site monitor wells were gauged and sampled on March 25 (1Q2011), May 26 (2Q2011), August 17 (3Q2011), and November 29, 2011 (4Q2011). During these quarterly sampling events, the monitoring wells were purged of a minimum of three (3) well volumes of water or until the wells were dry using a PVC bailer or electrical Grundfos pump. Groundwater was allowed to recharge, and samples were obtained using disposable Teflon bailers. Water samples were stored in clean, glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a trailer-mounted polystyrene tank and disposed of at an NMOCD-approved disposal facility near Monument, New Mexico.

Yearly monitoring events for polyaromatic hydrocarbons (PAH) were conducted on December 16 and December 21, 2011. Based on sampling criteria provided by the NMOCD, only monitor wells MW-3 and MW-4 were subject to PAH monitoring during the 2011 calendar year.

Locations of the groundwater monitoring wells and the inferred groundwater elevations, which were constructed from the measurements collected during the 2011 quarterly sampling events, are depicted in Figures 2A through 2D. The "Groundwater Gradient Map" from the most recent sampling event (Figure 2D, November 29, 2011) indicates a general gradient of approximately 0.0023 feet/foot to the southeast as measured between groundwater monitor wells MW-2 and MW-4.

On November 29, 2011, the corrected groundwater elevation ranged between 3,456.02 and 3,456.64 feet above mean sea level in monitor wells MW-4 and MW-2, respectively. The "2011 Groundwater Elevation Data" is provided as Table 1.

LABORATORY RESULTS

Groundwater samples collected from the monitor wells during the quarterly sampling events (1Q2011, 2Q2011, 3Q2011, and 4Q2011) were delivered to Xenco Laboratories in Odessa, Texas, for determination of benzene, toluene, ethylbenzene, and total xylenes (BTEX) constituent concentrations by EPA Method SW846-8021b. A summary of benzene and BTEX constituent concentrations is presented in Table 2, "2011 Concentrations of Benzene & BTEX in Groundwater". Laboratory analytical reports are provided as Appendix A. "Groundwater Concentration & Inferred PSH Extent" maps are provided as Figures 3A through 3D.

Laboratory analytical results were compared to NMOCD regulatory limits based on the New Mexico groundwater standards found in section 20.6.2.3103 of the New Mexico Administrative Code (NMAC).

Monitor well MW-1

Monitor well MW-1 was not sampled during the 2011 reporting period due to the presence of PSH in the monitor well.

Monitor well MW-2

Laboratory analytical results indicated benzene concentrations ranged from less than the laboratory MDL in 2Q2011 through 4Q2011 to 0.0072 mg/L in 1Q2011. Toluene concentrations ranged from less than the laboratory MDL in 2Q2011 through 4Q2011 to 0.0068 mg/L in 1Q2011. Ethylbenzene and total xylene concentrations were less than the laboratory MDL during all four quarters of the reporting period. Benzene, toluene, ethylbenzene, and total xylene concentrations were less than NMOCD regulatory standards during all four quarters of the reporting period.

Monitor well MW-3

Laboratory analytical results indicated benzene concentrations ranged from less than the laboratory MDL in 1Q2011 to 0.0138 mg/L in 3Q2011. Toluene, ethylbenzene, and total xylene

concentrations were less than the laboratory MDL during all four quarters of the reporting period. Benzene concentrations exceeded NMOCD regulatory standards in 3Q2011. Toluene, ethylbenzene, and total xylene concentrations were less than NMOCD regulatory standards during all four quarters of the reporting period.

PAH constituent concentrations were both less than the appropriate laboratory MDL and NMOCD regulatory standards in the groundwater sample collected on December 16, 2011.

Monitor well MW-4

Laboratory analytical results indicated benzene concentrations ranged from less than the laboratory MDL in 2Q2011 through 4Q2011 to 0.0051 mg/L in 1Q2011. Toluene concentrations ranged from less than the laboratory MDL in 2Q2011 through 4Q2011 to 0.0046 mg/L in 1Q2011. Ethylbenzene and total xylene concentrations were less than the appropriate laboratory MDL during all four quarters of the reporting period. Benzene, toluene, ethylbenzene, and total xylene concentrations were less than NMOCD regulatory standards during all four quarters of the reporting period.

PAH constituent concentrations were both less than the appropriate laboratory MDL and NMOCD regulatory standards in the groundwater sample collected on December 21, 2011.

Monitor well MW-5

Laboratory analytical results indicated benzene concentrations ranged from 0.233 mg/L in 4Q2011 to 1.73 mg/L in 3Q2011. Toluene concentrations ranged from less than the laboratory MDL in 1Q2011 to 0.0560 mg/L in 3Q2011. Ethylbenzene concentrations were less than the laboratory MLD during all four quarters of the reporting period. Total xylene concentrations ranged from 0.00388 in 4Q2011 to 0.0275 mg/L in 2Q2011. Benzene concentrations exceeded NMOCD regulatory standards during all four quarters of the reporting period. Toluene, ethylbenzene, and total total xylene concentrations were less than NMOCD regulatory standards during all four quarters of the reporting period.

Baseline sampling of monitor well MW-5 was conducted on March 25, 2011. Laboratory analytical results from the baseline monitoring are summarized in Tables 3 through 6. A Monitor Well Log is provided as Appendix C.

SUMMARY

This report presents the results of the monitoring activities for the 2011 annual monitoring period. Currently, there are five (5) groundwater monitor wells (MW-1, MW-2, MW-3, MW-4, and MW-5) on-site. Monitor well MW-1 was not sampled in 2011 due to the presence of PSH in the monitor well. Monitor wells MW-2, MW-3, MW-4, and MW-5 were sampled during all four quarters of the monitoring period, and the results of these sampling events are summarized above.

The "Groundwater Gradient Map" from the most recent sampling event (Figure 2D, November 29, 2011) indicates a general gradient of approximately 0.0023 feet/foot to the southeast as measured between groundwater monitor wells MW-2 and MW-4.

A measurable thickness of PSH was detected in monitor well MW-1 throughout the 2011 reporting period. The average PSH thickness measured in MW-1 during the reporting period was 3.57 feet, and the maximum PSH thickness was 3.74 feet on May 17, 2011.

During the reporting period, approximately 1,030 gallons (24.5 barrels) of PSH was recovered, by manual recovery, from monitor well MW-1. A total of 747.66 equivalent gallons (17.8 barrels) of PSH was recovered by Mobile Dual-Phase Extraction.

Review of laboratory analytical results generated from analysis of groundwater samples collected in 2011 indicated benzene concentrations were less than NMOCD regulatory standards for monitor wells MW-2 and MW-4. However, benzene concentrations above NMOCD regulatory standards were detected in one groundwater sample from MW-3 (4Q2011).

ANTICIPATED ACTIONS

PSH recovery from monitor well MW-1 will continue on a bi-weekly schedule. All fluids recovered from MW-1 will be disposed of at an NMOCD-permitted disposal facility. Monitor wells MW-2, MW-3, MW-4, and MW-5 will be monitored and sampled quarterly. A yearly PAH monitoring event will be conducted at monitor wells MW-3 and MW-5 during the 2012 calendar year. Results from the 2011 sampling events will be reported in the 2012 *Annual Monitoring Report*, which will be submitted to the NMOCD by April 1, 2013.

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 has examined and relied upon documents referenced in the report and on oral statements made by certain individuals. Basin has not conducted an independent examination of the facts contained in referenced materials and statements. Basin has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Basin has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin notes that the facts and conditions referenced in this report may change over time, and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

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

DISTRIBUTION

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Figures

Figure 1
Site Location Map
Plains Pipeline, LP
DCP Plant to Lea Station 6" Section 31
Lea County, New Mexico
SRS #2009-084
1RP-2166

Basin Environmental Service Technologies, LLC

Drawn By: BJA	Checked By: BRB
March 28, 2011	Scale: 1" = 2000'

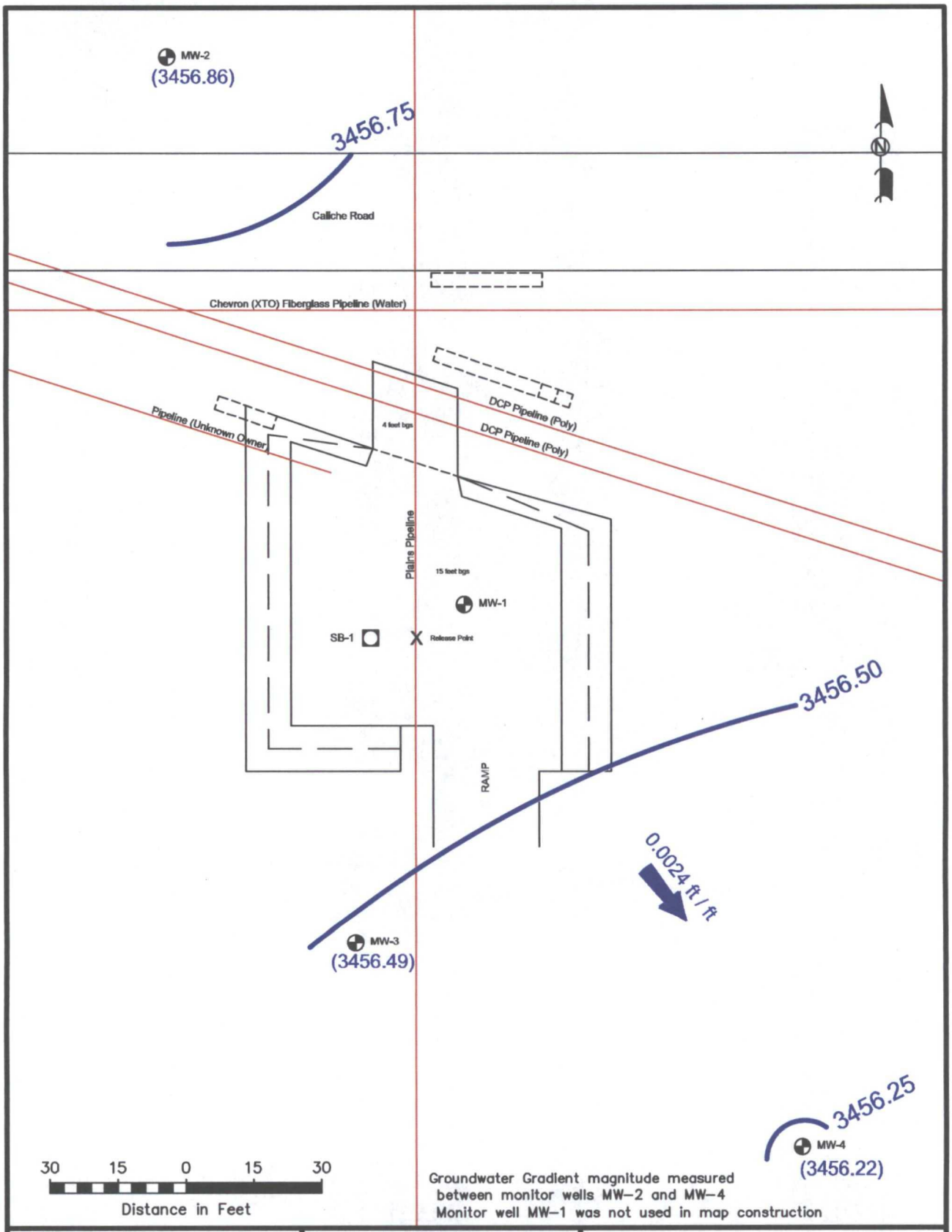

Figure 2A
Inferred Groundwater Gradient Map (3/24/2011)

Plains Marketing, L.P.
DCP Plant to Lea Station 6-Inch Sec 31
Lea County, NM
1RP-2166

Basin Environmental Service Technologies, LLC

Scale: 1" = 30'	Drawn By: BJA	Prepared By: BJA
March 16, 2012		

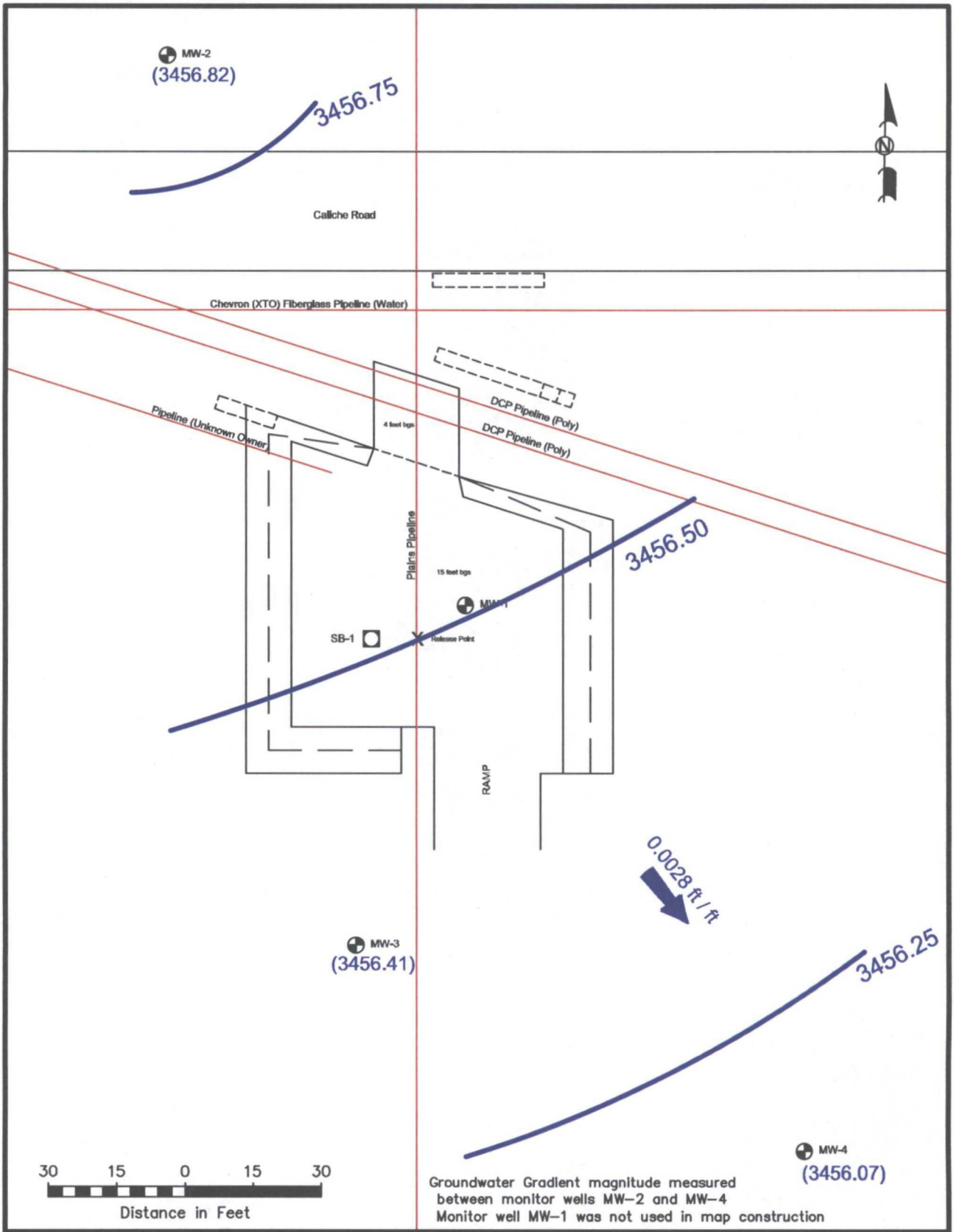

Figure 2B
Inferred Groundwater Gradient Map (5/26/2011)

Plains Marketing, L.P.
DCP Plant to Lea Station 6-Inch Sec 31
Lea County, NM
1RP-2166

Basin Environmental Service Technologies, LLC

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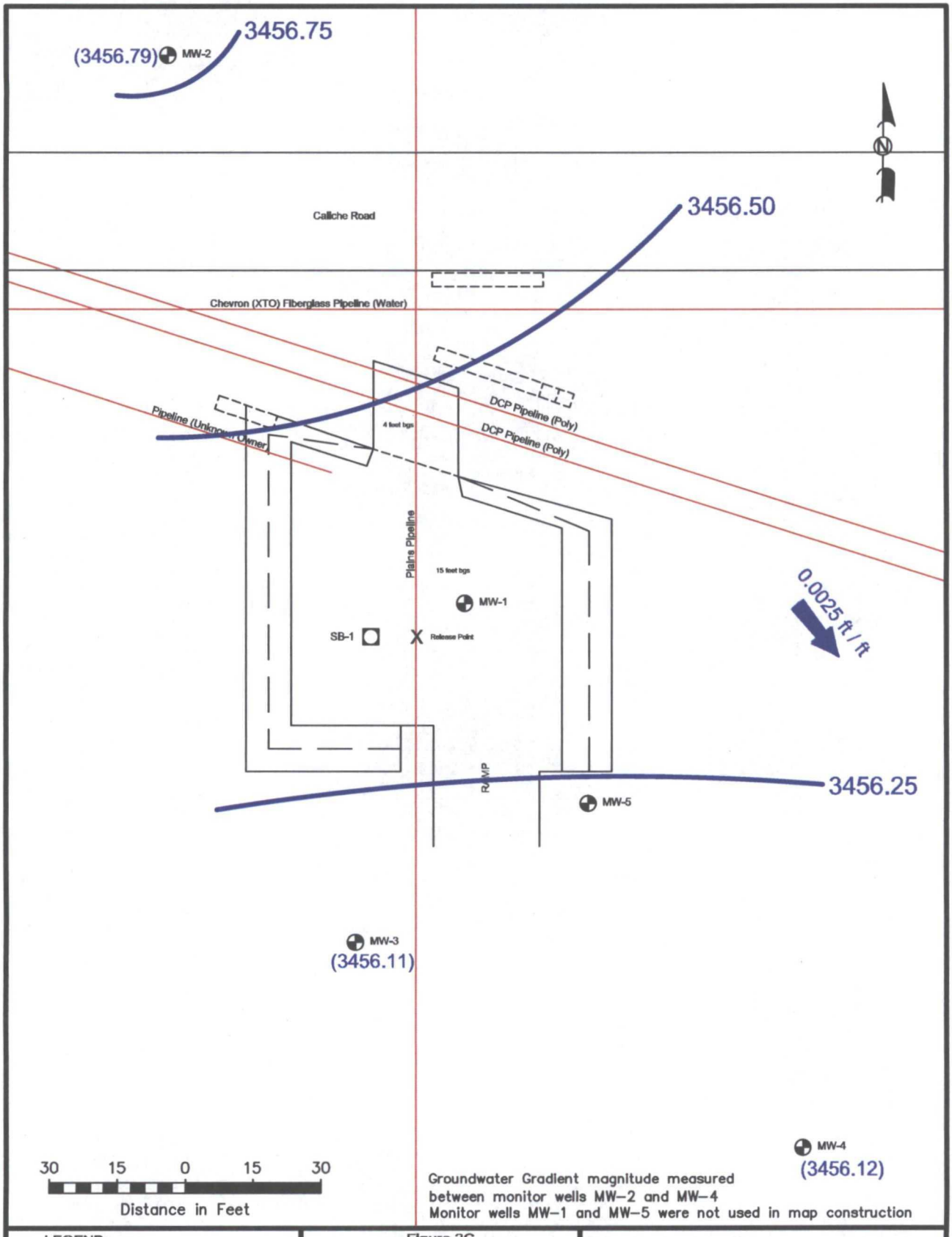

Figure 2C
Inferred Groundwater Gradient Map (8/17/2011)

Plains Marketing, L.P.
DCP Plant to Lea Station 6-Inch Sec 31
Lea County, NM
1RP-2166

Basin Environmental Service Technologies, LLC

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October 18, 2011		

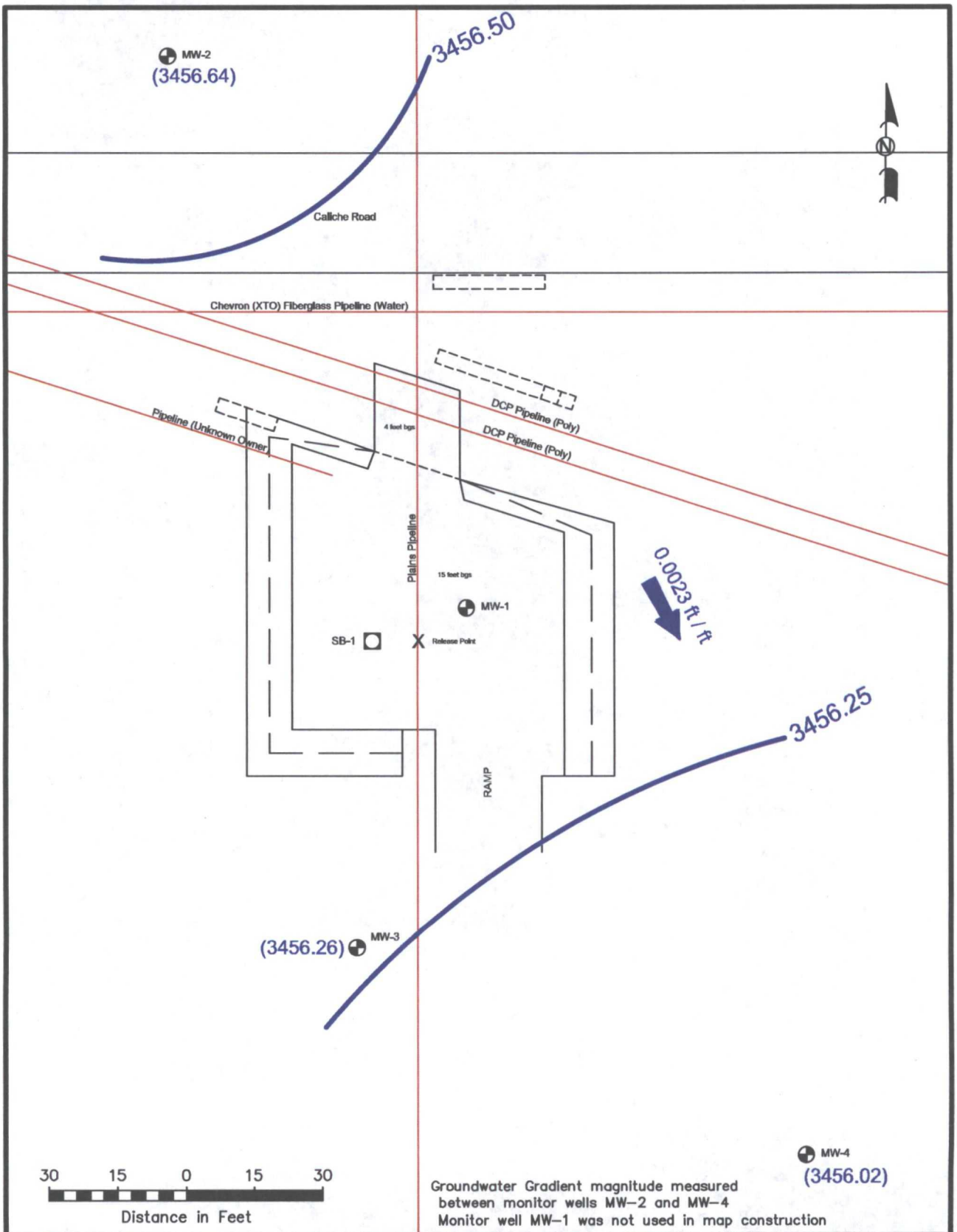

Figure 2D
Inferred Groundwater Gradient Map (11/29/2011)

Plains Marketing, L.P.
DCP Plant to Lea Station 6-Inch Sec 31
Lea County, NM
1RP-2166

Basin Environmental Service Technologies, LLC

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March 16, 2012		

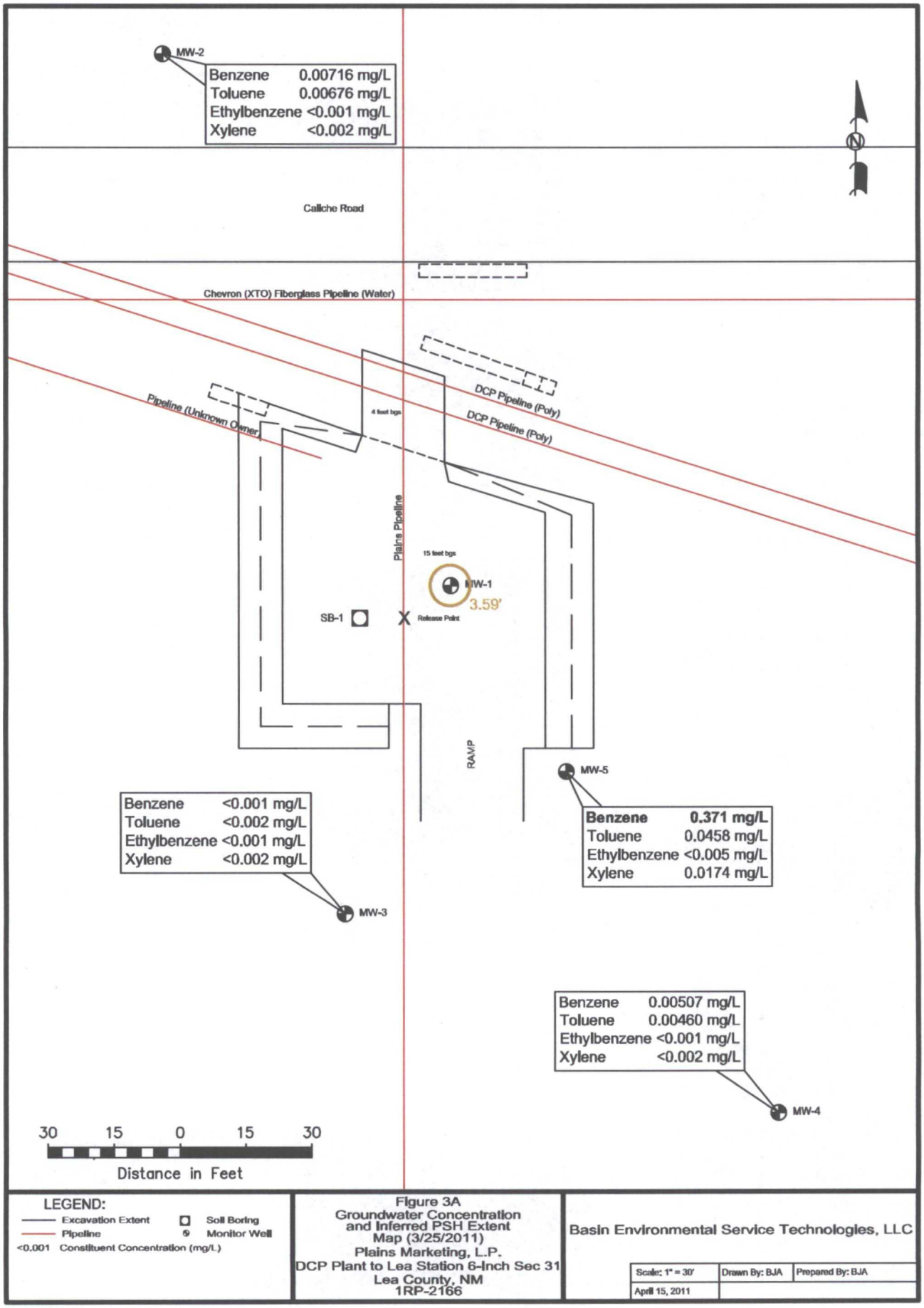

Figure 3A
Groundwater Concentration and Inferred PSH Extent Map (3/25/2011)
Plains Marketing, L.P.
DCP Plant to Lea Station 6-Inch Sec 31
Lea County, NM
1RP-2166

Basin Environmental Service Technologies, LLC

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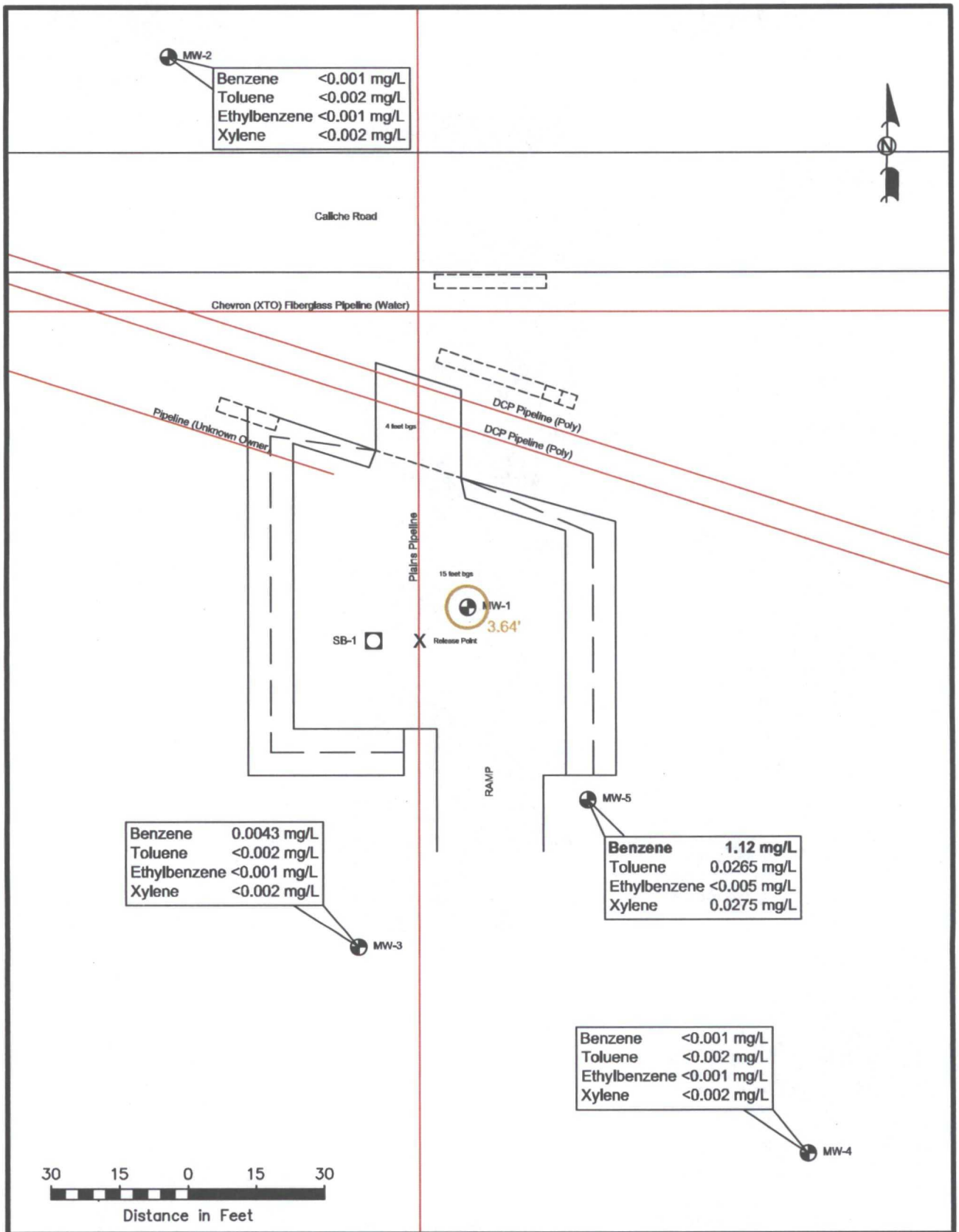
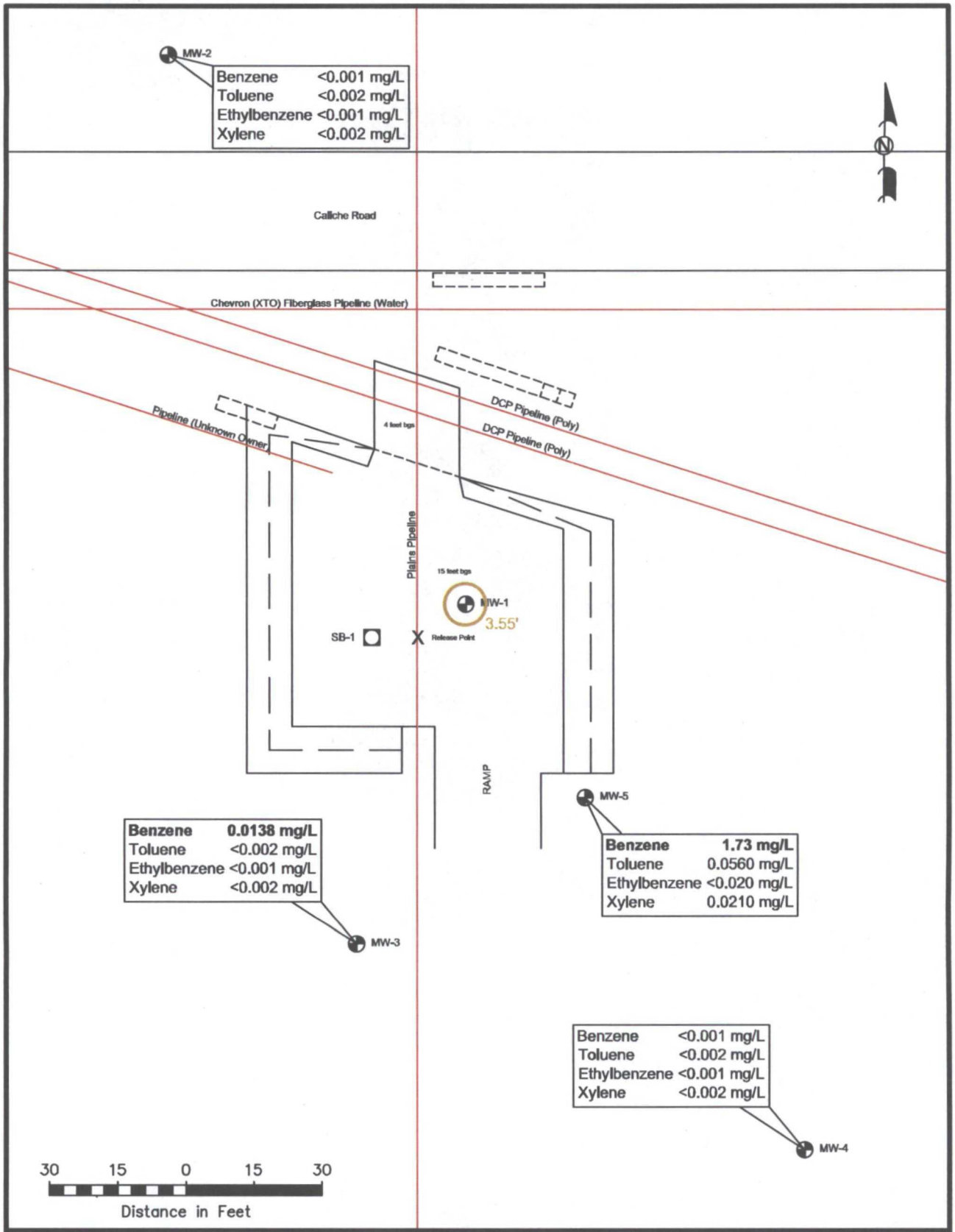


LEGEND:
Excavation Extent
Pipeline
Soil Boring
Monitor Well
<0.001 Constituent Concentration (mg/L)

Figure 3B
Groundwater Concentration and Inferred PSH Extent Map (5/26/2011)
Plains Marketing, L.P.
DCP Plant to Lea Station 6-Inch Sec 31
Lea County, NM
1RP-2166

Basin Environmental Service Technologies, LLC

Scale: 1" = 30'	Drawn By: BJA	Prepared By: BJA
July 18, 2011		

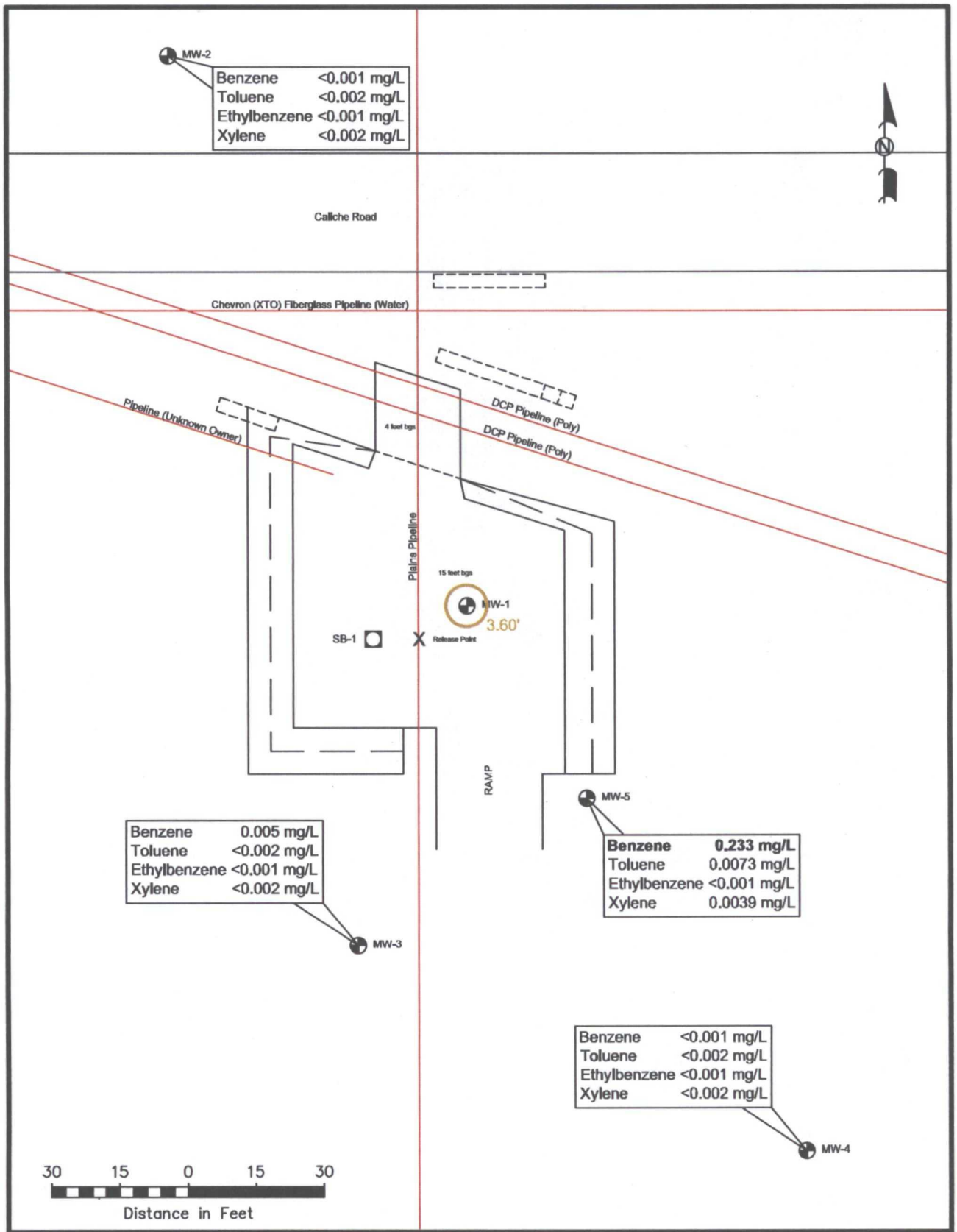


LEGEND:
Excavation Extent
Pipeline
Soil Boring
Monitor Well
<0.001 Constituent Concentration (mg/L)

Figure 3C
Groundwater Concentration and Inferred PSH Extent Map (8/17/2011)
Plains Marketing, L.P.
DCP Plant to Lea Station 6-Inch Sec 31
Lea County, NM
1RP-2166

Basin Environmental Service Technologies, LLC

Scale: 1" = 30'	Drawn By: BJA	Prepared By: BJA
October 17, 2011		



LEGEND:

Excavation Extent
Pipeline
Soil Boring
Monitor Well
<0.001 Constituent Concentration (mg/L)

Figure 3D
Groundwater Concentration and Inferred PSH Extent Map (11/29/2011)
Plains Marketing, L.P.
DCP Plant to Lea Station 6-Inch Sec 31
Lea County, NM
1RP-2166

Basin Environmental Service Technologies, LLC

Scale: 1" = 30'	Drawn By: BJA	Prepared By: BJA
January 17, 2012		

Tables

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
DCP PLANT TO LEA STATION 6-INCH SEC. 31
LEA COUNTY, NEW MEXICO
PLAINS SRS NO: 2009-084
NMOCD REF NO: 1RP-2166

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW-1	3/24/2011	-	79.25	82.84	3.59	-
	5/25/2011	-	79.29	82.89	3.60	-
	8/17/2011	-	79.10	82.65	3.55	-
	11/29/2011	-	79.40	83.00	3.60	-
MW-2	3/24/2011	3,539.39	-	82.53	0.00	3,456.86
	5/25/2011	3,539.39	-	82.57	0.00	3,456.82
	8/17/2011	3,539.39	-	82.60	0.00	3,456.79
	11/29/2011	3,539.39	-	82.75	0.00	3,456.64
MW-3	3/24/2011	3,539.31	-	82.82	0.00	3,456.49
	5/25/2011	3,539.31	-	82.90	0.00	3,456.41
	8/17/2011	3,539.31	-	83.20	0.00	3,456.11
	11/29/2011	3,539.31	-	83.05	0.00	3,456.26
MW-4	3/24/2011	3,540.12	-	83.90	0.00	3,456.22
	5/25/2011	3,540.12	-	84.05	0.00	3,456.07
	8/17/2011	3,540.12	-	84.00	0.00	3,456.12
	11/29/2011	3,540.12	-	84.10	0.00	3,456.02
MW-5	3/24/2011	-	-	83.52	0.00	-
	5/25/2011	-	-	83.57	0.00	-
	8/17/2011	-	-	83.60	0.00	-
	11/29/2011	-	-	83.75	0.00	-

TABLE 2

2011 CONCENTRATIONS OF BENZENE & BTEX IN GROUNDWATER

PLAINS MARKETING, L.P.
DCP PLANT TO LEA STATION 6-INCH SEC. 31
LEA COUNTY, NEW MEXICO
PLAINS SRS NO. 2009-084
NMOCD REFERENCE NO: 1RP-2166

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8260b						
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P-XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL XYLENE (mg/L)	TOTAL BTEX (mg/L)
MW-2	03/25/11	0.0072	0.0068	<0.0010	<0.0020	<0.0010	<0.0020	0.0139
	5/26/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020
	8/17/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020
	11/29/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020
MW-3	03/25/11	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020
	5/26/2011	0.00425	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.00425
	8/17/2011	**0.0138**	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0138
	11/29/2011	0.0050	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	0.0050
MW-4	03/25/11	0.0051	0.0046	<0.0010	<0.0020	<0.0010	<0.0020	0.0097
	5/26/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020
	8/17/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020
	11/29/2011	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020
MW-5	03/25/11	**0.371**	<0.0020	<0.0050	0.0115	0.0060	0.0175	0.3885
	5/26/2011	**1.12**	0.0265	<0.0010	0.0137	0.0138	0.0275	1.17
	8/17/2011	**1.73**	0.0560	<0.0020	<0.0040	0.0210	0.0210	1.81
	11/29/2011	**0.233**	0.0073	<0.0010	0.0020	0.00188	0.00388	0.244
NMOCD CRITERIA		**0.01**	**0.75**	**0.75**	**TOTAL XYLENES 0.62**			

TABLE 3

CONCENTRATIONS OF RCRA & NMWQCC METALS IN GROUNDWATER

PLAINS PIPELINE, L.P.

DCP PLANT TO LEA STATION 6-INCH SEC. 31

LEA COUNTY, NEW MEXICO

NMOCD REFERENCE NUMBER 1RP-2166

All water concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE		EPA SW846-6020A, EPA 7470A															
		Aluminum	Arsenic	Barium	Boron	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Molybdenum	Nickel	Selenium	Silver	Zinc	Mercury
MW-5	3/25/2011	1.34	<0.010	0.0941	1.60	<0.0050	<0.0050	<0.010	<0.010	**1.13**	<0.0120	0.120	0.00502	<0.010	0.0505	<0.040	0.0112	<0.00025
Maximum Contaminant Levels from NM WQCC Drinking water standards Sections 1-101.UU and 3-103.A.		5.0 mg/L	0.1 mg/L	1.0 mg/L	0.75 mg/L	0.01 mg/L	0.05 mg/L	0.05 mg/L	1.0 mg/L	1.0 mg/L	0.05 mg/L	0.2 mg/L	1.0 mg/L	0.2 mg/L	0.05 mg/L	0.05 mg/L	10 mg/L	0.002 mg/L

Table 4

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER
PLAINS PIPELINE, LP
DCP PLANT TO LEA STATION 6-INCH SEC. 31
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER 1R9-2136

All water concentrations are in mg/L

Date Sampled	Sample Location	Acetone	Acrylonitrile	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	2-Butanone	MTBE	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane
3/25/2011	MW-5	<0.1	<0.05	**0.371**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.01
Maximum Contaminant Levels from NMWQCC Drinking water standards Sections 1-101.UU and 3-103.A.		-	-	0.01 mg/L	-	-	-	-	-	-	-	-	-	-	-	0.01 mg/L	-	-

Table 4

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER
PLAINS PIPELINE, LP
DCP PLANT TO LEA STATION 6-INCH SEC. 31
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER 1RP-2166

All water concentrations are in mg/L

Date Sampled	Sample Location	2-Chloroethyl vinyl ether	Chloroform	Chloromethane	2-Chlorotoluene	4-Chlorotoluene	p-Cymene(p-Isopropyltoluene)	Dibromochloromethane	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane (EDB)	Dibromomethane (methylene bromide)	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Dichlorodifluormethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene
3/25/2011	MW-5	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Maximum Contaminant Levels from NMWQCC Drinking water standards Sections 1-101.UU and 3-103.A.		-	0.1mg/L	-	-	-	-	-	-	0.0001 mg/L	-	-	-	-	-	0.005 mg/L	0.01 mg/L	0.005 mg/L	0.1mg/L

Table 4

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER
PLAINS PIPELINE, LP
DCP PLANT TO LEA STATION 6-INCH SEC. 31
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER 1RP-2166

All water concentrations are in mg/L

Date Sampled	Sample Location	trans-1,2-Dichloroethene	1,2-Dichloropropane	1,3-Dichloropropane	2,2-Dichloropropane	1,1-Dichloropropane	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene	Ethylbenzene	Hexachlorobutadiene	2-Hexanone	Isopropylbenzene	Methylene chloride	4-Methyl-2-pentanone (MIBK)	Naphthalene	n-Propylbenzene	Styrene	1,1,1,2-Tetrachloroethane
3/25/2011	MW-5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.05	<0.01	<0.005	<0.005	<0.005
Maximum Contaminant Levels from NMWQCC Drinking water standards Sections 1-101.UU and 3-103.A.		-	-	-	-	-	-	-	0.75 mg/L	-	-	-	0.1mg/L	-	0.03 mg/L	-	-	-

Table 4

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER
PLAINS PIPELINE, LP
DCP PLANT TO LEA STATION 6-INCH SEC. 31
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER 1RP-2166

All water concentrations are in mg/L

Date Sampled	Sample Location	1,1,2,2-Tetrachloroethane	Tetrachloroethene (PCE)	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene (TCE)	Trichlorofluoromethane	1,2,3-Trichloropropane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	o-Xylene	m,p-Xylene	Vinyl Chloride
3/25/2011	MW-5	<0.005	<0.005	0.0458	<0.0099	<0.0099	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.00597	0.0115	<0.0020
Maximum Contaminant Levels from NMWQCC Drinking water standards Sections 1-101.UU and 3-103.A.		0.02 mg/L	-	0.75 mg/L	-	-	0.06 mg/L	-	0.01 mg/ L	-	-	-	-	Total Xylene 0.62 mg/L		0.001 mg/L

TABLE 5

CONCENTRATIONS OF SEMI-VOLATILE COMPOUNDS IN GROUNDWATER

PLAINS PIPELINE, L.P.

DCP PLANT TO LEA STATION 6-INCH SEC. 31

LEA COUNTY, NEW MEXICO

NMOCD REFERENCE NUMBER 1RP-2166

All water concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW846-8270C, 3510															
		Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	Naphthalene	Phenanthrene	Pyrene
MW-5	3/25/2011	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-3	12/16/2011	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-4	12/21/2011	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

TABLE 6
CONCENTRATIONS OF ANIONS/CATIONS IN GROUNDWATER
PLAINS PIPELINE, L.P.
DCP PLANT TO LEA STATION 6-INCH SEC. 31
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER 1RP-2166

All water concentrations are reported in mg/L

SAMPLE DATE	SAMPLE LOCATION	EPA SW375.4, 325,3, 310, 160.1 SW846 6010B										
		Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Bicarbonate	Carbonate	Nitrate	Phosphate	Flouride
3/25/2011	MW-5	118	37.1	9.36	346	**392**	288	318	<4.00	4.17	3.09	**30.5**
Maximum Contaminant Levels from NM WQCC Drinking water standards Sections 1-101.UU and 3-103.A.		-	-	-	-	**250 mg/L**	**600 mg/L**	-	-	**10 mg/L**	-	**1.6 mg/L**

Appendices

Appendix A

Laboratory Analytical Reports

Analytical Report 411097

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

DCP Plant to Lea Station 6" Section 31

2009-084

05-APR-11

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

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

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

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

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

05-APR-11

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

Reference: XENCO Report No: **411097**
DCP Plant to Lea Station 6" Section 31
Project Address: Lea County, NM

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 411097. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 411097 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

XENCO Laboratories

Sample Cross Reference 411097

PLAINS ALL AMERICAN EH&S, Midland, TX

DCP Plant to Lea Station 6" Section 31

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-2	W	Mar-25-11 08:45		411097-001
MW-3	W	Mar-25-11 08:55		411097-002
MW-4	W	Mar-25-11 09:00		411097-003
MW-5	W	Mar-25-11 09:10		411097-004

CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S
Project Name: DCP Plant to Lea Station 6" Section 31

Project ID:	*2009-084*	*Report Date:*	*05-APR-11*
Work Order Number:	*411097*	*Date Received:*	*03/25/2011*

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-849659 Anions by E300
E300MI

Batch 849659, Fluoride recovered below QC limits in the Matrix Spike.
Samples affected are: 411097-004.
The Laboratory Control Sample for Fluoride is within laboratory Control Limits

Batch: LBA-849661 Mercury by EPA 7470A
SW7470A

Batch 849661, Mercury recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.
Samples affected are: 411097-004.
The Laboratory Control Sample for Mercury is within laboratory Control Limits

Batch: LBA-849832 Alkalinity by SM2320B

Batch: LBA-849858 TCLP SVOCs by EPA 8270C
SW8270C

Batch 849858, Pyridine recovered below QC limits in the Blank Spike Duplicate. However, analyte was recovered within QC limits in Blank Spike.
Samples affected are: 411097-004.

SW8270C

Batch 849858, 4-Nitrophenol, Benzoic Acid, Phenol recovered above QC limits in the Matrix Spike.
Samples affected are: 411097-004.
The Laboratory Control Sample for Benzoic Acid, 4-Nitrophenol, Phenol is within laboratory Control Limits

Project ID: 2009-084 *Report Date:* 05-APR-11
Work Order Number: 411097 *Date Received:* 03/25/2011

Batch: LBA-849979 BTEX by EPA 8021B

Batch: LBA-850035 Metals per ICP by SW846 6010B
SW6010B_IC

Batch 850035, Magnesium recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Calcium, Potassium, Sodium recovered above QC limits in the Matrix Spike Duplicate.

Samples affected are: 411097-004.
The Laboratory Control Sample for Magnesium, Calcium, Sodium, Potassium is within laboratory Control Limits

Batch: LBA-850041 VOAs by SW-846 8260B
SW8260B

Batch 850041, Ethylbenzene, isopropylbenzene, n-Butylbenzene, tert-Butylbenzene recovered below QC limits in the Matrix Spike. 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Naphthalene, Styrene, Vinyl Chloride, m,p-Xylenes, o-Xylene, p-Cymene (p-Isopropyltoluene) recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.
Trichlorofluoromethane recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. 1,1,1-Trichloroethane, 1,2-Dibromo-3-Chloropropane, Bromodichloromethane, Bromoform, Carbon Tetrachloride, MTBE recovered above QC limits in the Matrix Spike Duplicate.
Samples affected are: 411097-004.
The Laboratory Control Sample for Bromodichloromethane, Carbon Tetrachloride, m,p-Xylenes, tert-Butylbenzene, Naphthalene, 1,3,5-Trimethylbenzene, 1,2,4-Trimethylbenzene, n-Butylbenzene, Ethylbenzene, o-Xylene, Trichlorofluoromethane, 1,1,1-Trichloroethane, Styrene, p-Cymene (p-Isopropyltoluene), isopropylbenzene, Vinyl Chloride, Bromoform, 1,2-Dibromo-3-Chloropropane is within laboratory Control Limits

SW8260B

Batch 850041, MTBE recovered above QC limits in the laboratory control sample.
Samples affected are: 411097-004.

SW8260B

Batch 850041, 1,1,1,2-Tetrachloroethane, 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, 1,2-Dibromoethane, 2-Chlorotoluene, MTBE RPD was outside QC limits.
Samples affected are: 411097-004

Batch: LBA-850255 VOAs by SW-846 8260B
SW8260B

Batch 850255, Vinyl Chloride recovered below QC limits in the Matrix Spike. MTBE recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate.
Samples affected are: 411097-004.
The Laboratory Control Sample for MTBE, Vinyl Chloride is within laboratory Control Limits

Certificate of Analys ummary 411097

PLAINS ALL AMERICA H&S, Midland, TX

Project Name: DCP Plant to Lea Station 6" Section 31

Project Id: 2009-084
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Fri Mar-25-11 04:50 pm
Report Date: 05-APR-11
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	411097-001		411097-002		411097-003		411097-004					
	Field Id:	MW-2		MW-3		MW-4		MW-5					
	Depth:												
	Matrix:	WATER		WATER		WATER		WATER					
	Sampled:	Mar-25-11 08:45		Mar-25-11 08:55		Mar-25-11 09:00		Mar-25-11 09:10					
Alkalinity by SM2320B	*Extracted:*												
	Analyzed:							Mar-29-11 13:40					
	Units/RL:							mg/L	RL				
Alkalinity, Total (as CaCO3)								318	4.00				
Alkalinity, Bicarbonate (as CaCO3)								318	4.00				
Alkalinity, Carbonate (as CaCO3)								ND	4.00				
Anions by E300	*Extracted:*												
	Analyzed:							Mar-28-11 15:15					
	Units/RL:							mg/L	RL				
Fluoride								30.5	5.00				
Chloride								392	12.5				
Sulfate								288	12.5				
BTEX by EPA 8021B	*Extracted:*	Mar-29-11 12:45		Mar-29-11 12:45		Mar-29-11 12:45							
	Analyzed:	Mar-29-11 23:10		Mar-29-11 23:33		Mar-29-11 23:55							
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL						
Benzene		0.00716	0.0010	ND	0.0010	0.00507	0.0010						
Toluene		0.00676	0.0020	ND	0.0020	0.00460	0.0020						
Ethylbenzene		ND	0.0010	ND	0.0010	ND	0.0010						
m_p-Xylenes		ND	0.0020	ND	0.0020	ND	0.0020						
o-Xylene		ND	0.0010	ND	0.0010	ND	0.0010						
Total Xylenes		ND	0.0010	ND	0.0010	ND	0.0010						
Total BTEX		0.0139	0.0010	ND	0.0010	0.00967	0.0010						
Mercury by EPA 7470A	*Extracted:*							Mar-29-11 07:45					
	Analyzed:							Mar-29-11 10:57					
	Units/RL:							mg/L	RL				
Mercury								ND	0.00025				

Brent Barron, II
Odessa Laboratory Manager

Final 1.000

Certificate of Analysis Summary 411097

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: DCP Plant to Lea Station 6" Section 31

Project Id: 2009-084
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Fri Mar-25-11 04:50 pm
Report Date: 05-APR-11
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	411097-001	411097-002	411097-003	411097-004		
	Field Id:	MW-2	MW-3	MW-4	MW-5		
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER		
	Sampled:	Mar-25-11 08:45	Mar-25-11 08:55	Mar-25-11 09:00	Mar-25-11 09:10		
Metals per ICP by SW846 6010B SUB: T104704295-TX	*Extracted:*				Mar-31-11 07:00		
	Analyzed:				Mar-31-11 13:23		
	Units/RL:				mg/L	RL	
Aluminum					1.34	0.0500	
Arsenic					ND	0.0100	
Barium					0.0941	0.0100	
Boron					1.60	0.100	
Cadmium					ND	0.0050	
Calcium					118	0.100	
Chromium					ND	0.0050	
Cobalt					ND	0.0100	
Copper					ND	0.0100	
Iron					1.13	0.0300	
Lead					ND	0.0120	
Magnesium					37.1	0.0100	
Manganese					0.120	0.0100	
Molybdenum					0.0502	0.0100	
Nickel					ND	0.0100	
Potassium					9.36	0.500	
Selenium					0.0505	0.0100	
Silver					ND	0.0040	
Sodium					346	0.500	
Zinc					0.0112	0.0100	

Brent Barron, II
Odessa Laboratory Manager

Certificate of Analysis Summary 411097

PLAINS ALL AMERICA, H&S, Midland, TX

Project Name: DCP Plant to Lea Station 6" Section 31

Project Id: 2009-084
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Fri Mar-25-11 04:50 pm
Report Date: 05-APR-11
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	411097-001	411097-002	411097-003	411097-004		
	Field Id:	MW-2	MW-3	MW-4	MW-5		
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER		
	Sampled:	Mar-25-11 08:45	Mar-25-11 08:55	Mar-25-11 09:00	Mar-25-11 09:10		
SVOAs by EPA 8270C	*Extracted:*				Mar-29-11 14:39		
SUB: T104704215-TX	*Analyzed:*				Mar-30-11 15:19		
	Units/RL:				mg/L RL		
1,2,4-Trichlorobenzene					ND 0.0100		
1,2-Dichlorobenzene					ND 0.0100		
1,3-Dichlorobenzene					ND 0.0100		
1,4-Dichlorobenzene					ND 0.0100		
2,4,5-Trichlorophenol					ND 0.0100		
2,4,6-Trichlorophenol					ND 0.0100		
2,4-Dichlorophenol					ND 0.0100		
2,4-Dimethylphenol					ND 0.0100		
2,4-Dinitrophenol					ND 0.0199		
2,4-Dinitrotoluene					ND 0.0100		
2,6-Dinitrotoluene					ND 0.0100		
2-Chloronaphthalene					ND 0.0100		
2-Chlorophenol					ND 0.0100		
2-Methylnaphthalene					ND 0.0100		
2-methylphenol					ND 0.0100		
2-Nitroaniline					ND 0.0199		
2-Nitrophenol					ND 0.0100		
3&4-Methylphenol					ND 0.0100		
3,3-Dichlorobenzidine					ND 0.0100		
3-Nitroaniline					ND 0.0199		
4,6-dinitro-2-methyl phenol					ND 0.0100		
4-Bromophenyl-phenylether					ND 0.0100		
4-chloro-3-methylphenol					ND 0.0100		
4-Chloroaniline					ND 0.0199		
4-Chlorophenyl Phenyl Ether					ND 0.0100		

Brent Barron, II
Odessa Laboratory Manager

Final 1.000

Certificate of Analysis Summary 411097

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: DCP Plant to Lea Station 6" Section 31

Project Id: 2009-084
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Fri Mar-25-11 04:50 pm
Report Date: 05-APR-11
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	411097-001	411097-002	411097-003	411097-004		
	Field Id:	MW-2	MW-3	MW-4	MW-5		
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER		
	Sampled:	Mar-25-11 08:45	Mar-25-11 08:55	Mar-25-11 09:00	Mar-25-11 09:10		
SVOAs by EPA 8270C	*Extracted:*				Mar-29-11 14:39		
SUB: T104704215-TX	*Analyzed:*				Mar-30-11 15:19		
	Units/RL:				mg/L RL		
4-Nitroaniline					ND 0.0199		
4-Nitrophenol					ND 0.0100		
Acenaphthene					ND 0.0100		
Acenaphthylene					ND 0.0100		
Aniline (Phenylamine, Aminobenzene)					ND 0.0199		
Anthracene					ND 0.0100		
Benzo(a)anthracene					ND 0.0100		
Benzo(a)pyrene					ND 0.0100		
Benzo(b)fluoranthene					ND 0.0100		
Benzo(g,h,i)perylene					ND 0.0100		
Benzo(k)fluoranthene					ND 0.0100		
Benzoic Acid					ND 0.0498		
Benzyl Butyl Phthalate					ND 0.0100		
bis(2-chloroethoxy) methane					ND 0.0100		
bis(2-chloroethyl) ether					ND 0.0100		
bis(2-chloroisopropyl) ether					ND 0.0100		
bis(2-ethylhexyl) phthalate					ND 0.0100		
Chrysene					ND 0.0100		
Dibenz(a,h)Anthracene					ND 0.0100		
Dibenzofuran					ND 0.0100		
Diethyl Phthalate					ND 0.0100		
Dimethyl Phthalate					ND 0.0100		
di-n-Butyl Phthalate					ND 0.0100		
di-n-Octyl Phthalate					ND 0.0100		
Fluoranthene					ND 0.0100		

Brent Barron, II
Odessa Laboratory Manager

Certificate of Analys ummary 411097

PLAINS ALL AMERICA H&S, Midland, TX

Project Name: DCP Plant to Lea Station 6" Section 31

Project Id: 2009-084
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Fri Mar-25-11 04:50 pm
Report Date: 05-APR-11
Project Manager: Brent Barron, II

Analysis Requested							
	Lab Id:	411097-001	411097-002	411097-003	411097-004		
	Field Id:	MW-2	MW-3	MW-4	MW-5		
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER		
	Sampled:	Mar-25-11 08:45	Mar-25-11 08:55	Mar-25-11 09:00	Mar-25-11 09:10		
SVOAs by EPA 8270C SUB: T104704215-TX	*Extracted:*				Mar-29-11 14:39		
	Analyzed:				Mar-30-11 15:19		
	Units/RL:				mg/L	RL	
Fluorene					ND	0.0100	
Hexachlorobenzene					ND	0.0100	
Hexachlorobutadiene					ND	0.0100	
Hexachlorocyclopentadiene					ND	0.0100	
Hexachloroethane					ND	0.0100	
Indeno(1,2,3-c,d)Pyrene					ND	0.0100	
Isophorone					ND	0.0100	
Naphthalene					ND	0.0100	
Nitrobenzene					ND	0.0100	
N-Nitrosodi-n-Propylamine					ND	0.0100	
N-Nitrosodiphenylamine					ND	0.0100	
Pentachlorophenol					ND	0.0100	
Phenanthrene					ND	0.0100	
Phenol					ND	0.0100	
Pyrene					ND	0.0100	
Pyridine					ND	0.0199	

Brent Barron, II
Odessa Laboratory Manager

Final 1.000

Certificate of Analysis Summary 411097

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: DCP Plant to Lea Station 6" Section 31

Project Id: 2009-084
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Fri Mar-25-11 04:50 pm
Report Date: 05-APR-11
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	411097-001	411097-002	411097-003	411097-004		
	Field Id:	MW-2	MW-3	MW-4	MW-5		
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER		
	Sampled:	Mar-25-11 08:45	Mar-25-11 08:55	Mar-25-11 09:00	Mar-25-11 09:10		
VOAs by SW-846 8260B SUB: T104704215-TX	*Extracted:*				Mar-30-11 13:20		
	Analyzed:				Mar-30-11 21:14		
	Units/RL:				mg/L	RL	
1,1,1,2-Tetrachloroethane					ND	0.0050	
1,1,1-Trichloroethane					ND	0.0050	
1,1,2,2-Tetrachloroethane					ND	0.0050	
1,1,2-Trichloroethane					ND	0.0050	
1,1-Dichloroethane					ND	0.0050	
1,1-Dichloroethene					ND	0.0050	
1,1-Dichloropropene					ND	0.0050	
1,2,3-Trichlorobenzene					ND	0.0050	
1,2,3-Trichloropropane					ND	0.0050	
1,2,4-Trichlorobenzene					ND	0.0050	
1,2,4-Trimethylbenzene					ND	0.0050	
1,2-Dibromo-3-Chloropropane					ND	0.0050	
1,2-Dibromoethane					ND	0.0050	
1,2-Dichlorobenzene					ND	0.0050	
1,2-Dichloroethane					ND	0.0050	
1,2-Dichloropropane					ND	0.0050	
1,3,5-Trimethylbenzene					ND	0.0050	
1,3-Dichlorobenzene					ND	0.0050	
1,3-Dichloropropane					ND	0.0050	
1,4-Dichlorobenzene					ND	0.0050	
2,2-Dichloropropane					ND	0.0050	
2-Chlorotoluene					ND	0.0050	
4-Chlorotoluene					ND	0.0050	
Benzene					0.371 D	0.0250	
Bromobenzene					ND	0.0050	

Brent Barron, II
Odessa Laboratory Manager

Certificate of Analys ummary 411097

PLAINS ALL AMERIC H&S, Midland, TX

Project Name: DCP Plant to Lea Station 6" Section 31

Project Id: 2009-084
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Fri Mar-25-11 04:50 pm
Report Date: 05-APR-11
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	411097-001	411097-002	411097-003	411097-004		
	Field Id:	MW-2	MW-3	MW-4	MW-5		
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER		
	Sampled:	Mar-25-11 08:45	Mar-25-11 08:55	Mar-25-11 09:00	Mar-25-11 09:10		
VOAs by SW-846 8260B	*Extracted:*				Mar-30-11 13:20		
SUB: T104704215-TX	*Analyzed:*				Mar-30-11 21:14		
	Units/RL:				mg/L RL		
Bromochloromethane					ND 0.0050		
Bromodichloromethane					ND 0.0050		
Bromoform					ND 0.0050		
Bromomethane					ND 0.0050		
Carbon Tetrachloride					ND 0.0050		
Chlorobenzene					ND 0.0050		
Chloroethane					ND 0.0100		
Chloroform					ND 0.0050		
Chloromethane					ND 0.0100		
cis-1,2-Dichloroethene					ND 0.0050		
cis-1,3-Dichloropropene					ND 0.0050		
Dibromochloromethane					ND 0.0050		
Dibromomethane					ND 0.0050		
Dichlorodifluoromethane					ND 0.0050		
Ethylbenzene					ND 0.0050		
Hexachlorobutadiene					ND 0.0050		
isopropylbenzene					ND 0.0050		
m,p-Xylenes					0.0115 0.0100		
Methylene Chloride					ND 0.0050		
MTBE					ND 0.0050		
Naphthalene					ND 0.0100		
n-Butylbenzene					ND 0.0050		
n-Propylbenzene					ND 0.0050		
o-Xylene					0.00597 0.0050		
p-Cymene (p-Isopropyltoluene)					ND 0.0050		

Brent Barron, II
Odessa Laboratory Manager

Final 1.000

Certificate of Analysis Summary 411097

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: DCP Plant to Lea Station 6" Section 31

Project Id: 2009-084
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Fri Mar-25-11 04:50 pm
Report Date: 05-APR-11
Project Manager: Brent Barron, II

Analysis Requested							
	Lab Id:	411097-001	411097-002	411097-003	411097-004		
	Field Id:	MW-2	MW-3	MW-4	MW-5		
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER		
	Sampled:	Mar-25-11 08:45	Mar-25-11 08:55	Mar-25-11 09:00	Mar-25-11 09:10		
VOAs by SW-846 8260B	***Extracted:***				Mar-30-11 13:20		
SUB: T104704215-TX	***Analyzed:***				Mar-30-11 21:14		
	Units/RL:				mg/L	RL	
Sec-Butylbenzene					ND	0.0050	
Styrene					ND	0.0050	
tert-Butylbenzene					ND	0.0050	
Tetrachloroethylene					ND	0.0050	
Toluene					0.0458	0.0050	
trans-1,2-dichloroethene					ND	0.0050	
trans-1,3-dichloropropene					ND	0.0050	
Trichloroethene					ND	0.0050	
Trichlorofluoromethane					ND	0.0050	
Vinyl Chloride					ND	0.0020	

Brent Barron, II
Odessa Laboratory Manager

XENCO Laboratories

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit

PQL Practical Quantitation Limit

* Outside XENCO's scope of NELAC Accreditation.

Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Orders : 411097, **Project ID:** 2009-084

Lab Batch #: 849979 **Sample:** 599342-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/29/11 19:23

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0307	0.0300	102	80-120	

Lab Batch #: 849979 **Sample:** 599342-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/29/11 19:46

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0298	0.0300	99	80-120	

Lab Batch #: 849979 **Sample:** 599342-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/29/11 20:54

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0281	0.0300	94	80-120	
4-Bromofluorobenzene	0.0284	0.0300	95	80-120	

Lab Batch #: 849979 **Sample:** 411097-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/29/11 23:10

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

Lab Batch #: 849979 **Sample:** 411097-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/29/11 23:33

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0277	0.0300	92	80-120	
4-Bromofluorobenzene	0.0279	0.0300	93	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

rk Orders : 411097, **Project ID:** 2009-084

Lab Batch #: 849979 **Sample:** 411097-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/29/11 23:55

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0280	0.0300	93	80-120	
4-Bromofluorobenzene	0.0288	0.0300	96	80-120	

Lab Batch #: 849979 **Sample:** 410846-003 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/30/11 01:03

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0307	0.0300	102	80-120	

Lab Batch #: 849979 **Sample:** 410846-003 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/30/11 01:26

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Difluorobenzene	0.0302	0.0300	101	80-120	
4-Bromofluorobenzene	0.0307	0.0300	102	80-120	

Lab Batch #: 849858 **Sample:** 599181-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/29/11 16:30

SVOAs by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.0400	0.0500	80	43-116	
2-Fluorophenol	0.0346	0.0500	69	21-100	
Nitrobenzene-d5	0.0418	0.0500	84	35-114	
Phenol-d6	0.0252	0.0500	50	10-94	
Terphenyl-D14	0.0426	0.0500	85	33-141	
2,4,6-Tribromophenol	0.0372	0.0500	74	10-123	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

esults are based on MDL and validated for QC purposes.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Orders : 411097, **Project ID:** 2009-084

Lab Batch #: 849858 **Sample:** 599181-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/29/11 16:54

SVOAs by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.0421	0.0500	84	43-116	
2-Fluorophenol	0.0369	0.0500	74	21-100	
Nitrobenzene-d5	0.0440	0.0500	88	35-114	
Phenol-d6	0.0297	0.0500	59	10-94	
Terphenyl-D14	0.0453	0.0500	91	33-141	
2,4,6-Tribromophenol	0.0423	0.0500	85	10-123	

Lab Batch #: 849858 **Sample:** 599181-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/29/11 17:18

SVOAs by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.0403	0.0500	81	43-116	
2-Fluorophenol	0.0357	0.0500	71	21-100	
Nitrobenzene-d5	0.0430	0.0500	86	35-114	
Phenol-d6	0.0299	0.0500	60	10-94	
Terphenyl-D14	0.0430	0.0500	86	33-141	
2,4,6-Tribromophenol	0.0402	0.0500	80	10-123	

Lab Batch #: 849858 **Sample:** 410972-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/L **Date Analyzed:** 03/30/11 01:57

SVOAs by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.234	0.250	94	43-116	
2-Fluorophenol	0.212	0.250	85	21-100	
Nitrobenzene-d5	0.233	0.250	93	35-114	
Phenol-d6	0.206	0.250	82	10-94	
Terphenyl-D14	0.242	0.250	97	33-141	
2,4,6-Tribromophenol	0.240	0.250	96	10-123	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

rk Orders : 411097,

Project ID: 2009-084

Lab Batch #: 849858 **Sample:** 411097-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/30/11 15:19

SVOAs by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.0399	0.0498	80	43-116	
2-Fluorophenol	0.0193	0.0498	39	21-100	
Nitrobenzene-d5	0.0395	0.0498	79	35-114	
Phenol-d6	0.0112	0.0498	22	10-94	
Terphenyl-D14	0.0421	0.0498	85	33-141	
2,4,6-Tribromophenol	0.0424	0.0498	85	10-123	

Lab Batch #: 850041 **Sample:** 599371-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/30/11 14:23

VOAs by SW-846 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0482	0.0500	96	74-124	
Dibromofluoromethane	0.0527	0.0500	105	75-131	
1,2-Dichloroethane-D4	0.0530	0.0500	106	63-144	
Toluene-D8	0.0534	0.0500	107	80-117	

ıb Batch #: 850041 **Sample:** 599371-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/30/11 15:18

VOAs by SW-846 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0486	0.0500	97	74-124	
Dibromofluoromethane	0.0602	0.0500	120	75-131	
1,2-Dichloroethane-D4	0.0572	0.0500	114	63-144	
Toluene-D8	0.0499	0.0500	100	80-117	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

esults are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Orders : 411097, **Project ID:** 2009-084

Lab Batch #: 850041 **Sample:** 411082-008 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/30/11 16:12

VOAs by SW-846 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0473	0.0500	95	74-124	
Dibromofluoromethane	0.0548	0.0500	110	75-131	
1,2-Dichloroethane-D4	0.0549	0.0500	110	63-144	
Toluene-D8	0.0545	0.0500	109	80-117	

Lab Batch #: 850041 **Sample:** 411082-008 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/30/11 16:40

VOAs by SW-846 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0453	0.0500	91	74-124	
Dibromofluoromethane	0.0552	0.0500	110	75-131	
1,2-Dichloroethane-D4	0.0563	0.0500	113	63-144	
Toluene-D8	0.0509	0.0500	102	80-117	

Lab Batch #: 850041 **Sample:** 411097-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/30/11 21:14

VOAs by SW-846 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0518	0.0500	104	74-124	
Dibromofluoromethane	0.0568	0.0500	114	75-131	
1,2-Dichloroethane-D4	0.0579	0.0500	116	63-144	
Toluene-D8	0.0481	0.0500	96	80-117	

Lab Batch #: 850255 **Sample:** 599477-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/31/11 11:00

VOAs by SW-846 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0492	0.0500	98	74-124	
Dibromofluoromethane	0.0492	0.0500	98	75-131	
1,2-Dichloroethane-D4	0.0489	0.0500	98	63-144	
Toluene-D8	0.0500	0.0500	100	80-117	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

rk Orders : 411097,

Project ID: 2009-084

Lab Batch #: 850255 **Sample:** 599477-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/31/11 11:44

VOAs by SW-846 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0506	0.0500	101	74-124	
Dibromofluoromethane	0.0472	0.0500	94	75-131	
1,2-Dichloroethane-D4	0.0509	0.0500	102	63-144	
Toluene-D8	0.0495	0.0500	99	80-117	

Lab Batch #: 850255 **Sample:** 411256-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/31/11 14:46

VOAs by SW-846 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0508	0.0500	102	74-124	
Dibromofluoromethane	0.0506	0.0500	101	75-131	
1,2-Dichloroethane-D4	0.0510	0.0500	102	63-144	
Toluene-D8	0.0498	0.0500	100	80-117	

Lab Batch #: 850255 **Sample:** 411256-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/31/11 15:08

VOAs by SW-846 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0508	0.0500	102	74-124	
Dibromofluoromethane	0.0490	0.0500	98	75-131	
1,2-Dichloroethane-D4	0.0483	0.0500	97	63-144	
Toluene-D8	0.0497	0.0500	99	80-117	

Lab Batch #: 850255 **Sample:** 411097-004 / DL **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 03/31/11 19:52

VOAs by SW-846 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0506	0.0500	101	74-124	
Dibromofluoromethane	0.0470	0.0500	94	75-131	
1,2-Dichloroethane-D4	0.0477	0.0500	95	63-144	
Toluene-D8	0.0488	0.0500	98	80-117	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

esults are based on MDL and validated for QC purposes.

Blank Spike Recovery

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order #: 411097 **Project ID:** 2009-084

Lab Batch #: 850041 **Sample:** 599371-1-BKS **Matrix:** Water

Date Analyzed: 03/30/2011 **Date Prepared:** 03/30/2011 **Analyst:** CYE

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

VOAs by SW-846 8260B Analytes	Blank Result [A]	BLANK /BLANK SPIKE RECOVERY STUDY Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
1,1,1,2-Tetrachloroethane	<0.00500	0.0500	0.0516	103	75-125	
1,1,1-Trichloroethane	<0.00500	0.0500	0.0565	113	75-125	
1,1,2,2-Tetrachloroethane	<0.00500	0.0500	0.0511	102	50-130	
1,1,2-Trichloroethane	<0.00500	0.0500	0.0567	113	75-127	
1,1-Dichloroethane	<0.00500	0.0500	0.0556	111	60-130	
1,1-Dichloroethene	<0.00500	0.0500	0.0506	101	59-172	
1,1-Dichloropropene	<0.00500	0.0500	0.0490	98	75-125	
1,2,3-Trichlorobenzene	<0.00500	0.0500	0.0526	105	75-137	
1,2,3-Trichloropropane	<0.00500	0.0500	0.0570	114	75-125	
1,2,4-Trichlorobenzene	<0.00500	0.0500	0.0489	98	75-135	
1,2,4-Trimethylbenzene	<0.00500	0.0500	0.0477	95	75-125	
1,2-Dibromo-3-Chloropropane	<0.00500	0.0500	0.0585	117	59-125	
1,2-Dibromoethane	<0.00500	0.0500	0.0522	104	73-125	
1,2-Dichlorobenzene	<0.00500	0.0500	0.0496	99	75-125	
1,2-Dichloroethane	<0.00500	0.0500	0.0574	115	68-127	
1,2-Dichloropropane	<0.00500	0.0500	0.0505	101	74-125	
1,3,5-Trimethylbenzene	<0.00500	0.0500	0.0539	108	70-125	
1,3-Dichlorobenzene	<0.00500	0.0500	0.0500	100	75-125	
1,3-Dichloropropane	<0.00500	0.0500	0.0560	112	75-125	
1,4-Dichlorobenzene	<0.00500	0.0500	0.0495	99	75-125	
2,2-Dichloropropane	<0.00500	0.0500	0.0547	109	60-140	
2-Chlorotoluene	<0.00500	0.0500	0.0529	106	73-125	
4-Chlorotoluene	<0.00500	0.0500	0.0511	102	74-125	
Benzene	<0.00500	0.0500	0.0517	103	66-142	
Bromobenzene	<0.00500	0.0500	0.0504	101	60-130	
Bromochloromethane	<0.00500	0.0500	0.0509	102	73-125	
Bromodichloromethane	<0.00500	0.0500	0.0596	119	75-125	
Bromoform	<0.00500	0.0500	0.0547	109	75-125	
Bromomethane	<0.00500	0.0500	0.0515	103	70-130	
Carbon Tetrachloride	<0.00500	0.0500	0.0565	113	62-125	
Chlorobenzene	<0.00500	0.0500	0.0488	98	60-133	
Chloroethane	<0.0100	0.0500	0.0562	112	70-130	
Chloroform	<0.00500	0.0500	0.0535	107	74-125	

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

XENCO Laboratories

Blank Spike Recovery

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order #: 411097 **Project ID:** 2009-084

Lab Batch #: 850041 **Sample:** 599371-1-BKS **Matrix:** Water

Date Analyzed: 03/30/2011 **Date Prepared:** 03/30/2011 **Analyst:** CYE

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

VOAs by SW-846 8260B Analytes	BLANK /BLANK SPIKE RECOVERY STUDY					
	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloromethane	<0.0100	0.0500	0.0560	112	70-130	
cis-1,2-Dichloroethene	<0.00500	0.0500	0.0508	102	60-130	
cis-1,3-Dichloropropene	<0.00500	0.0500	0.0484	97	60-140	
Dibromochloromethane	<0.00500	0.0500	0.0539	108	60-130	
Dibromomethane	<0.00500	0.0500	0.0537	107	69-127	
Dichlorodifluoromethane	<0.00500	0.0500	0.0518	104	70-130	
Ethylbenzene	<0.00500	0.0500	0.0514	103	75-125	
Hexachlorobutadiene	<0.00500	0.0500	0.0489	98	75-125	
isopropylbenzene	<0.00500	0.0500	0.0470	94	75-125	
m,p-Xylenes	<0.0100	0.100	0.108	108	75-125	
Methylene Chloride	<0.00500	0.0500	0.0524	105	75-125	
MTBE	<0.00500	0.0500	0.0653	131	75-125	H
Naphthalene	<0.0100	0.0500	0.0557	111	65-135	
tylbenzene	<0.00500	0.0500	0.0506	101	75-125	
opylbenzene	<0.00500	0.0500	0.0515	103	75-125	
o-Xylene	<0.00500	0.0500	0.0498	100	75-125	
p-Cymene (p-Isopropyltoluene)	<0.00500	0.0500	0.0478	96	75-125	
Sec-Butylbenzene	<0.00500	0.0500	0.0533	107	75-125	
Styrene	<0.00500	0.0500	0.0476	95	60-130	
tert-Butylbenzene	<0.00500	0.0500	0.0466	93	75-125	
Tetrachloroethylene	<0.00500	0.0500	0.0483	97	60-130	
Toluene	<0.00500	0.0500	0.0539	108	59-139	
trans-1,2-dichloroethene	<0.00500	0.0500	0.0509	102	60-130	
trans-1,3-dichloropropene	<0.00500	0.0500	0.0553	111	66-125	
Trichloroethene	<0.00500	0.0500	0.0494	99	62-137	
Trichlorofluoromethane	<0.00500	0.0500	0.0601	120	67-125	
Vinyl Chloride	<0.00200	0.0500	0.0404	81	75-125	

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

Final 1.000

XENCO Laboratories

Blank Spike Recovery

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order #: 411097 **Project ID:** 2009-084

Lab Batch #: 850255 **Sample:** 599477-1-BKS **Matrix:** Water

Date Analyzed: 03/31/2011 **Date Prepared:** 03/31/2011 **Analyst:** CYE

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

VOAs by SW-846 8260B Analytes	BLANK /BLANK SPIKE RECOVERY STUDY					
	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
1,1,1,2-Tetrachloroethane	<0.00500	0.0500	0.0557	111	75-125	
1,1,1-Trichloroethane	<0.00500	0.0500	0.0532	106	75-125	
1,1,2,2-Tetrachloroethane	<0.00500	0.0500	0.0544	109	50-130	
1,1,2-Trichloroethane	<0.00500	0.0500	0.0520	104	75-127	
1,1-Dichloroethane	<0.00500	0.0500	0.0526	105	60-130	
1,1-Dichloroethene	<0.00500	0.0500	0.0518	104	59-172	
1,1-Dichloropropene	<0.00500	0.0500	0.0509	102	75-125	
1,2,3-Trichlorobenzene	<0.00500	0.0500	0.0557	111	75-137	
1,2,3-Trichloropropane	<0.00500	0.0500	0.0541	108	75-125	
1,2,4-Trichlorobenzene	<0.00500	0.0500	0.0566	113	75-135	
1,2,4-Trimethylbenzene	<0.00500	0.0500	0.0558	112	75-125	
1,2-Dibromo-3-Chloropropane	<0.00500	0.0500	0.0496	99	59-125	
1,2-Dibromoethane	<0.00500	0.0500	0.0538	108	73-125	
1,2-Dichlorobenzene	<0.00500	0.0500	0.0522	104	75-125	
1,2-Dichloroethane	<0.00500	0.0500	0.0490	98	68-127	
1,2-Dichloropropane	<0.00500	0.0500	0.0523	105	74-125	
1,3,5-Trimethylbenzene	<0.00500	0.0500	0.0552	110	70-125	
1,3-Dichlorobenzene	<0.00500	0.0500	0.0520	104	75-125	
1,3-Dichloropropane	<0.00500	0.0500	0.0522	104	75-125	
1,4-Dichlorobenzene	<0.00500	0.0500	0.0510	102	75-125	
2,2-Dichloropropane	<0.00500	0.0500	0.0563	113	60-140	
2-Chlorotoluene	<0.00500	0.0500	0.0536	107	73-125	
4-Chlorotoluene	<0.00500	0.0500	0.0522	104	74-125	
Benzene	<0.00500	0.0500	0.0511	102	66-142	
Bromobenzene	<0.00500	0.0500	0.0517	103	60-130	
Bromochloromethane	<0.00500	0.0500	0.0521	104	73-125	
Bromodichloromethane	<0.00500	0.0500	0.0551	110	75-125	
Bromoform	<0.00500	0.0500	0.0461	92	75-125	
Bromomethane	<0.00500	0.0500	0.0446	89	70-130	
Carbon Tetrachloride	<0.00500	0.0500	0.0537	107	62-125	
Chlorobenzene	<0.00500	0.0500	0.0521	104	60-133	
Chloroethane	<0.0100	0.0500	0.0454	91	70-130	
Chloroform	<0.00500	0.0500	0.0504	101	74-125	

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

XENCO Laboratories

Blank Spike Recovery

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order #: 411097 **Project ID:** 2009-084

Lab Batch #: 850255 **Sample:** 599477-1-BKS **Matrix:** Water

Date Analyzed: 03/31/2011 **Date Prepared:** 03/31/2011 **Analyst:** CYE

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

VOAs by SW-846 8260B Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
			BLANK /BLANK SPIKE RECOVERY STUDY			
Chloromethane	<0.0100	0.0500	0.0475	95	70-130	
cis-1,2-Dichloroethene	<0.00500	0.0500	0.0510	102	60-130	
cis-1,3-Dichloropropene	<0.00500	0.0500	0.0460	92	60-140	
Dibromochloromethane	<0.00500	0.0500	0.0472	94	60-130	
Dibromomethane	<0.00500	0.0500	0.0504	101	69-127	
Dichlorodifluoromethane	<0.00500	0.0500	0.0503	101	70-130	
Ethylbenzene	<0.00500	0.0500	0.0528	106	75-125	
Hexachlorobutadiene	<0.00500	0.0500	0.0532	106	75-125	
isopropylbenzene	<0.00500	0.0500	0.0539	108	75-125	
m,p-Xylenes	<0.0100	0.100	0.107	107	75-125	
Methylene Chloride	<0.00500	0.0500	0.0521	104	75-125	
MTBE	<0.00500	0.0500	0.0595	119	75-125	
Naphthalene	<0.0100	0.0500	0.0524	105	65-135	
itylbenzene	<0.00500	0.0500	0.0546	109	75-125	
opylbenzene	<0.00500	0.0500	0.0543	109	75-125	
o-Xylene	<0.00500	0.0500	0.0553	111	75-125	
p-Cymene (p-Isopropyltoluene)	<0.00500	0.0500	0.0519	104	75-125	
Sec-Butylbenzene	<0.00500	0.0500	0.0551	110	75-125	
Styrene	<0.00500	0.0500	0.0562	112	60-130	
tert-Butylbenzene	<0.00500	0.0500	0.0556	111	75-125	
Tetrachloroethylene	<0.00500	0.0500	0.0518	104	60-130	
Toluene	<0.00500	0.0500	0.0506	101	59-139	
trans-1,2-dichloroethene	<0.00500	0.0500	0.0508	102	60-130	
trans-1,3-dichloropropene	<0.00500	0.0500	0.0459	92	66-125	
Trichloroethene	<0.00500	0.0500	0.0509	102	62-137	
Trichlorofluoromethane	<0.00500	0.0500	0.0523	105	67-125	
Vinyl Chloride	<0.00200	0.0500	0.0439	88	75-125	

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

Final 1.000

BS / BSD Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order #: 411097 **Project ID:** 2009-084

Analyst: ALA **Date Prepared:** 03/29/2011 **Date Analyzed:** 03/29/2011

Lab Batch ID: 849832 **Sample:** 849832-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Alkalinity by SM2320B 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
Alkalinity, Total (as CaCO3)	<4.00	250	260	104	250	260	104	0	80-120	20	
Alkalinity, Bicarbonate (as CaCO3)	<4.00	250	260	104	250	260	104	0	80-117	20	
Alkalinity, Carbonate (as CaCO3)	<4.00	250	260	104	250	260	104	0	80-120	20	

Analyst: ASA **Date Prepared:** 03/29/2011 **Date Analyzed:** 03/29/2011

Lab Batch ID: 849979 **Sample:** 599342-1-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	0.116	116	0.100	0.113	113	3	70-125	25	
Toluene	<0.00200	0.100	0.117	117	0.100	0.114	114	3	70-125	25	
Ethylbenzene	<0.00100	0.100	0.116	116	0.100	0.113	113	3	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.231	116	0.200	0.224	112	3	70-131	25	
o-Xylene	<0.00100	0.100	0.117	117	0.100	0.114	114	3	71-133	25	

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

BS / BSD Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order #: 411097 **Project ID:** 2009-084

Analyst: LATCOR **Date Prepared:** 03/28/2011 **Date Analyzed:** 03/28/2011

Lab Batch ID: 849659 **Sample:** 849659-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

Anions by E300 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Fluoride	<0.200	2.00	2.18	109	2.00	2.25	113	3	80-120	20	
Chloride	<0.500	10.0	10.2	102	10.0	10.5	105	3	80-120	20	
Sulfate	<0.500	10.0	10.3	103	10.0	10.6	106	3	80-120	20	

Analyst: LATCOR **Date Prepared:** 03/29/2011 **Date Analyzed:** 03/29/2011

Lab Batch ID: 849661 **Sample:** 599146-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

Mercury by EPA 7470A Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Mercury	<0.000250	0.00100	0.00102	102	0.00100	0.00104	104	2	75-125	20	

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

XENCO Laboratories

BS / BSD Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order #: 411097 **Project ID:** 2009-084

Analyst: DAT **Date Prepared:** 03/31/2011 **Date Analyzed:** 03/31/2011

Lab Batch ID: 850035 **Sample:** 599312-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Metals per ICP by SW846 6010B 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
Aluminum	<0.0500	1.00	1.11	111	1.00	1.12	112	1	85-115	20	
Arsenic	<0.0100	1.00	1.09	109	1.00	1.10	110	1	85-115	20	
Barium	<0.0100	1.00	0.992	99	1.00	0.983	98	1	85-115	20	
Boron	<0.100	1.00	1.02	102	1.00	1.04	104	2	85-115	20	
Cadmium	<0.00500	1.00	1.12	112	1.00	1.13	113	1	85-115	20	
Calcium	<0.100	1.00	1.11	111	1.00	1.13	113	2	85-115	20	
Chromium	<0.00500	1.00	1.10	110	1.00	1.10	110	0	85-115	20	
Cobalt	<0.0100	1.00	1.12	112	1.00	1.13	113	1	85-115	20	
Copper	<0.0100	1.00	1.06	106	1.00	1.07	107	1	85-115	20	
Iron	<0.0300	1.00	1.15	115	1.00	1.09	109	5	85-115	20	
Lead	<0.0120	1.00	1.12	112	1.00	1.12	112	0	85-115	20	
Magnesium	<0.0100	1.00	1.11	111	1.00	1.12	112	1	85-115	20	
Manganese	<0.0100	1.00	1.00	100	1.00	0.970	97	3	85-115	20	
Molybdenum	<0.0100	1.00	1.07	107	1.00	1.08	108	1	85-115	20	
Nickel	<0.0100	1.00	1.12	112	1.00	1.13	113	1	85-115	20	
Potassium	<0.500	10.0	9.39	94	10.0	9.48	95	1	85-115	20	
Selenium	<0.0100	1.00	1.10	110	1.00	1.11	111	1	85-115	20	
Silver	<0.00400	1.00	1.05	105	1.00	1.05	105	0	85-115	20	
Sodium	<0.500	11.0	11.1	101	11.0	11.1	101	0	85-115	20	
Zinc	<0.0100	1.00	1.09	109	1.00	1.10	110	1	85-115	20	

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

BS / BS ecoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order #: 411097 **Project ID:** 2009-084

Analyst: ZHO **Date Prepared:** 03/29/2011 **Date Analyzed:** 03/29/2011

Lab Batch ID: 849858 **Sample:** 599181-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

SVOAs by EPA 8270C Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
1,2,4-Trichlorobenzene	<0.0100	0.0500	0.0466	93	0.0500	0.0444	89	5	56-104	25	
1,2-Dichlorobenzene	<0.0100	0.0500	0.0484	97	0.0500	0.0457	91	6	53-106	25	
1,3-Dichlorobenzene	<0.0100	0.0500	0.0464	93	0.0500	0.0440	88	5	52-105	25	
1,4-Dichlorobenzene	<0.0100	0.0500	0.0468	94	0.0500	0.0444	89	5	54-105	25	
2,4,5-Trichlorophenol	<0.0100	0.0500	0.0474	95	0.0500	0.0441	88	7	55-114	25	
2,4,6-Trichlorophenol	<0.0100	0.0500	0.0496	99	0.0500	0.0467	93	6	57-113	25	
2,4-Dichlorophenol	<0.0100	0.0500	0.0480	96	0.0500	0.0460	92	4	60-110	25	
2,4-Dimethylphenol	<0.0100	0.0500	0.0502	100	0.0500	0.0481	96	4	50-108	25	
2,4-Dinitrophenol	<0.0200	0.0500	0.0451	90	0.0500	0.0437	87	3	52-111	25	
2,4-Dinitrotoluene	<0.0100	0.0500	0.0516	103	0.0500	0.0488	98	6	60-116	25	
2,6-Dinitrotoluene	<0.0100	0.0500	0.0491	98	0.0500	0.0468	94	5	60-115	25	
2-Chloronaphthalene	<0.0100	0.0500	0.0430	86	0.0500	0.0409	82	5	58-105	25	
2-Chlorophenol	<0.0100	0.0500	0.0491	98	0.0500	0.0463	93	6	58-106	25	
2-Methylnaphthalene	<0.0100	0.0500	0.0490	98	0.0500	0.0471	94	4	57-106	25	
2-methylphenol	<0.0100	0.0500	0.0479	96	0.0500	0.0451	90	6	52-106	25	
2-Nitroaniline	<0.0200	0.0500	0.0558	112	0.0500	0.0519	104	7	55-120	25	
2-Nitrophenol	<0.0100	0.0500	0.0475	95	0.0500	0.0465	93	2	57-105	25	
3&4-Methylphenol	<0.0100	0.0500	0.0478	96	0.0500	0.0454	91	5	23-140	25	
3,3-Dichlorobenzidine	<0.0100	0.0500	0.0578	116	0.0500	0.0545	109	6	36-123	25	
3-Nitroaniline	<0.0200	0.0500	0.0529	106	0.0500	0.0498	100	6	49-120	25	

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

XENCO Laboratories

BS / BSD Recoveries

ACCREDITED IN ACCORDANCE WITH nelac

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order #: 411097 **Project ID:** 2009-084

Analyst: ZHO **Date Prepared:** 03/29/2011 **Date Analyzed:** 03/29/2011

Lab Batch ID: 849858 **Sample:** 599181-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

SVOAs by EPA 8270C Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
4,6-dinitro-2-methyl phenol	<0.0100	0.0500	0.0482	96	0.0500	0.0464	93	4	57-119	25	
4-Bromophenyl-phenylether	<0.0100	0.0500	0.0481	96	0.0500	0.0454	91	6	58-112	25	
4-chloro-3-methylphenol	<0.0100	0.0500	0.0502	100	0.0500	0.0486	97	3	58-116	25	
4-Chloroaniline	<0.0200	0.0500	0.0508	102	0.0500	0.0483	97	5	2-123	25	
4-Chlorophenyl Phenyl Ether	<0.0100	0.0500	0.0482	96	0.0500	0.0454	91	6	59-109	25	
4-Nitroaniline	<0.0200	0.0500	0.0538	108	0.0500	0.0500	100	7	52-118	25	
4-Nitrophenol	<0.0100	0.0500	0.0432	86	0.0500	0.0431	86	0	18-104	25	
Acenaphthene	<0.0100	0.0500	0.0500	100	0.0500	0.0467	93	7	54-114	25	
Acenaphthylene	<0.0100	0.0500	0.0503	101	0.0500	0.0476	95	6	53-113	25	
Aniline (Phenylamine, Aminobenzene)	<0.0200	0.0500	0.0441	88	0.0500	0.0390	78	12	35-104	25	
Anthracene	<0.0100	0.0500	0.0519	104	0.0500	0.0494	99	5	56-116	25	
Benzo(a)anthracene	<0.0100	0.0500	0.0503	101	0.0500	0.0482	96	4	59-116	25	
Benzo(a)pyrene	<0.0100	0.0500	0.0546	109	0.0500	0.0514	103	6	58-118	25	
Benzo(b)fluoranthene	<0.0100	0.0500	0.0559	112	0.0500	0.0510	102	9	54-123	25	
Benzo(g,h,i)perylene	<0.0100	0.0500	0.0503	101	0.0500	0.0477	95	5	47-129	25	
Benzo(k)fluoranthene	<0.0100	0.0500	0.0510	102	0.0500	0.0493	99	3	52-122	25	
Benzoic Acid	<0.0500	0.150	0.146	97	0.150	0.152	101	4	4-113	25	
Benzyl Butyl Phthalate	<0.0100	0.0500	0.0550	110	0.0500	0.0519	104	6	57-122	25	
bis(2-chloroethoxy) methane	<0.0100	0.0500	0.0497	99	0.0500	0.0474	95	5	53-112	25	
bis(2-chloroethyl) ether	<0.0100	0.0500	0.0502	100	0.0500	0.0476	95	5	57-108	25	

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

BS / BS. .ecoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order #: 411097 **Project ID:** 2009-084

Analyst: ZHO **Date Prepared:** 03/29/2011 **Date Analyzed:** 03/29/2011

Lab Batch ID: 849858 **Sample:** 599181-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

SVOAs by EPA 8270C Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
bis(2-chloroisopropyl) ether	<0.0100	0.0500	0.0485	97	0.0500	0.0462	92	5	54-111	25	
bis(2-ethylhexyl) phthalate	<0.0100	0.0500	0.0557	111	0.0500	0.0535	107	4	59-119	25	
Chrysene	<0.0100	0.0500	0.0519	104	0.0500	0.0497	99	4	58-116	25	
Dibenz(a,h)Anthracene	<0.0100	0.0500	0.0558	112	0.0500	0.0527	105	6	46-131	25	
Dibenzofuran	<0.0100	0.0500	0.0475	95	0.0500	0.0448	90	6	56-111	25	
Diethyl Phthalate	<0.0100	0.0500	0.0522	104	0.0500	0.0489	98	7	62-114	25	
Dimethyl Phthalate	<0.0100	0.0500	0.0522	104	0.0500	0.0491	98	6	59-113	25	
di-n-Butyl Phthalate	<0.0100	0.0500	0.0555	111	0.0500	0.0528	106	5	60-118	25	
di-n-Octyl Phthalate	<0.0100	0.0500	0.0567	113	0.0500	0.0533	107	6	49-129	25	
Fluoranthene	<0.0100	0.0500	0.0539	108	0.0500	0.0506	101	6	55-120	25	
Fluorene	<0.0100	0.0500	0.0493	99	0.0500	0.0472	94	4	56-114	25	
Hexachlorobenzene	<0.0100	0.0500	0.0474	95	0.0500	0.0451	90	5	60-109	25	
Hexachlorobutadiene	<0.0100	0.0500	0.0442	88	0.0500	0.0410	82	8	52-107	25	
Hexachlorocyclopentadiene	<0.0100	0.0500	0.0443	89	0.0500	0.0419	84	6	32-115	25	
Hexachloroethane	<0.0100	0.0500	0.0475	95	0.0500	0.0452	90	5	46-115	25	
Indeno(1,2,3-c,d)Pyrene	<0.0100	0.0500	0.0560	112	0.0500	0.0519	104	8	44-132	25	
Isophorone	<0.0100	0.0500	0.0502	100	0.0500	0.0481	96	4	57-107	25	
Naphthalene	<0.0100	0.0500	0.0468	94	0.0500	0.0447	89	5	53-110	25	
Nitrobenzene	<0.0100	0.0500	0.0496	99	0.0500	0.0472	94	5	56-107	25	
N-Nitrosodi-n-Propylamine	<0.0100	0.0500	0.0539	108	0.0500	0.0514	103	5	21-137	25	

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

BS / BSD Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order #: 411097 **Project ID:** 2009-084

Analyst: ZHO **Date Prepared:** 03/29/2011 **Date Analyzed:** 03/29/2011

Lab Batch ID: 849858 **Sample:** 599181-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

SVOAs by EPA 8270C Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
N-Nitrosodiphenylamine	<0.0100	0.0500	0.0522	104	0.0500	0.0498	100	5	50-121	25	
Pentachlorophenol	<0.0100	0.0500	0.0489	98	0.0500	0.0463	93	5	36-132	25	
Phenanthrene	<0.0100	0.0500	0.0504	101	0.0500	0.0487	97	3	56-116	25	
Phenol	<0.0100	0.0500	0.0342	68	0.0500	0.0337	67	1	19-89	25	
Pyrene	<0.0100	0.0500	0.0499	100	0.0500	0.0476	95	5	57-119	25	
Pyridine	<0.0200	0.0500	0.0227	45	0.0500	<0.0200	0	NC	5-94	25	L

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

XENCO Laboratories

Form 3 - MS Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order #: 411097
Lab Batch #: 849659
Project ID: 2009-084
Date Analyzed: 03/28/2011
Date Prepared: 03/28/2011
Analyst: LATCOR
QC- Sample ID: 411097-004 S
Batch #: 1
Matrix: Water
Reporting Units: mg/L

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Fluoride	30.5	50.0	51.3	42	80-120	X
Chloride	392	250	627	94	80-120	
Sulfate	288	250	530	97	80-120	

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

B elow Reporting Limit

Final 1.000

Form 3 - MS Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order #: 411097
Lab Batch #: 849858
Project ID: 2009-084
Date Analyzed: 03/30/2011
Date Prepared: 03/29/2011
Analyst: ZHO
QC- Sample ID: 410972-001 S
Batch #: 1
Matrix: Soil
Reporting Units: mg/L

SVOAs by SW-846 8270C	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
1,2,4-Trichlorobenzene	<0.0500	0.250	0.244	98	56-104	
1,2-Dichlorobenzene	<0.0500	0.250	0.242	97	53-106	
1,3-Dichlorobenzene	<0.0500	0.250	0.235	94	52-105	
1,4-Dichlorobenzene	<0.0500	0.250	0.235	94	54-105	
2,4,5-Trichlorophenol	<0.0500	0.250	0.247	99	55-114	
2,4,6-Trichlorophenol	<0.0500	0.250	0.266	106	57-113	
2,4-Dichlorophenol	<0.0500	0.250	0.259	104	60-110	
2,4-Dimethylphenol	<0.0500	0.250	0.268	107	50-108	
2,4-Dinitrophenol	<0.100	0.250	0.205	82	52-111	
2,4-Dinitrotoluene	<0.0500	0.250	0.263	105	60-116	
2,6-Dinitrotoluene	<0.0500	0.250	0.257	103	60-115	
2-Chloronaphthalene	<0.0500	0.250	0.224	90	58-105	
2-Chlorophenol	<0.0500	0.250	0.255	102	58-106	
2-Methylnaphthalene	<0.0500	0.250	0.262	105	57-106	
2-methylphenol	<0.0500	0.250	0.255	102	52-106	
2-Nitroaniline	<0.100	0.250	0.274	110	55-120	
2-Nitrophenol	<0.0500	0.250	0.251	100	57-105	
3&4-Methylphenol	<0.0500	0.250	0.257	103	23-140	
3,3-Dichlorobenzidine	<0.0500	0.250	0.276	110	36-123	
3-Nitroaniline	<0.100	0.250	0.263	105	49-120	
4,6-dinitro-2-methyl phenol	<0.0500	0.250	0.217	87	57-119	
4-Bromophenyl-phenylether	<0.0500	0.250	0.253	101	58-112	
4-chloro-3-methylphenol	<0.0500	0.250	0.265	106	58-116	
4-Chloroaniline	<0.100	0.250	0.240	96	2-123	
4-Chlorophenyl Phenyl Ether	<0.0500	0.250	0.257	103	59-109	
4-Nitroaniline	<0.100	0.250	0.268	107	52-118	
4-Nitrophenol	<0.0500	0.250	0.269	108	18-104	X
Acenaphthene	<0.0500	0.250	0.261	104	54-114	
Acenaphthylene	<0.0500	0.250	0.267	107	53-113	
Aniline (Phenylamine, Aminobenzene)	<0.100	0.250	0.233	93	35-104	
Anthracene	<0.0500	0.250	0.266	106	56-116	
Benzo(a)anthracene	<0.0500	0.250	0.261	104	59-116	
Benzo(a)pyrene	<0.0500	0.250	0.274	110	58-118	
Benzo(b)fluoranthene	<0.0500	0.250	0.261	104	54-123	

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

BRL - Below Reporting Limit

Form 3 - MS Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order #: 411097
Lab Batch #: 849858
Project ID: 2009-084
Date Analyzed: 03/30/2011
Date Prepared: 03/29/2011
Analyst: ZHO
QC- Sample ID: 410972-001 S
Batch #: 1
Matrix: Soil
Reporting Units: mg/L

SVOAs by SW-846 8270C Analytes	MATRIX / MATRIX SPIKE RECOVERY STUDY					
		Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Benzo(g,h,i)perylene	<0.0500	0.250	0.251	100	47-129	
Benzo(k)fluoranthene	<0.0500	0.250	0.260	104	52-122	
Benzoic Acid	<0.250	0.750	0.950	127	4-113	X
Benzyl Butyl Phthalate	<0.0500	0.250	0.279	112	57-122	
bis(2-chloroethoxy) methane	<0.0500	0.250	0.249	100	53-112	
bis(2-chloroethyl) ether	<0.0500	0.250	0.251	100	57-108	
bis(2-chloroisopropyl) ether	<0.0500	0.250	0.244	98	54-111	
bis(2-ethylhexyl) phthalate	<0.0500	0.250	0.285	114	59-119	
Chrysene	<0.0500	0.250	0.265	106	58-116	
Dibenz(a,h)Anthracene	<0.0500	0.250	0.269	108	46-131	
Dibenzofuran	<0.0500	0.250	0.255	102	56-111	
Diethyl Phthalate	<0.0500	0.250	0.266	106	62-114	
Dimethyl Phthalate	<0.0500	0.250	0.264	106	59-113	
di-n-Butyl Phthalate	<0.0500	0.250	0.279	112	60-118	
Octyl Phthalate	<0.0500	0.250	0.291	116	49-129	
nthene	<0.0500	0.250	0.274	110	55-120	
Fluorene	<0.0500	0.250	0.266	106	56-114	
Hexachlorobenzene	<0.0500	0.250	0.252	101	60-109	
Hexachlorobutadiene	<0.0500	0.250	0.238	95	52-107	
Hexachlorocyclopentadiene	<0.0500	0.250	0.208	83	32-115	
Hexachloroethane	<0.0500	0.250	0.239	96	46-115	
Indeno(1,2,3-c,d)Pyrene	<0.0500	0.250	0.277	111	44-132	
Isophorone	<0.0500	0.250	0.261	104	57-107	
Naphthalene	<0.0500	0.250	0.245	98	53-110	
Nitrobenzene	<0.0500	0.250	0.251	100	56-107	
N-Nitrosodi-n-Propylamine	<0.0500	0.250	0.264	106	21-137	
N-Nitrosodiphenylamine	<0.0500	0.250	0.268	107	50-121	
Pentachlorophenol	<0.0500	0.250	0.262	105	36-132	
Phenanthrene	<0.0500	0.250	0.258	103	56-116	
Phenol	<0.0500	0.250	0.224	90	19-89	X
Pyrene	<0.0500	0.250	0.260	104	57-119	
Pyridine	<0.100	0.250	0.190	76	5-94	

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

P elow Reporting Limit

Final 1.000

Form 3 - MS / MSD Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order # : 411097 **Project ID:** 2009-084

Lab Batch ID: 849979 **QC- Sample ID:** 410846-003 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 03/30/2011 **Date Prepared:** 03/29/2011 **Analyst:** ASA

Reporting Units: mg/L

BTEX by EPA 8021B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.108	108	0.100	0.107	107	1	70-125	25	
Toluene	<0.00200	0.100	0.109	109	0.100	0.109	109	0	70-125	25	
Ethylbenzene	<0.00100	0.100	0.108	108	0.100	0.108	108	0	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.213	107	0.200	0.209	105	2	70-131	25	
o-Xylene	<0.00100	0.100	0.108	108	0.100	0.108	108	0	71-133	25	

Lab Batch ID: 849661 **QC- Sample ID:** 411040-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 03/29/2011 **Date Prepared:** 03/29/2011 **Analyst:** LATCOR

Reporting Units: mg/L

Mercury by EPA 7470A Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Mercury	<0.000250	0.00100	0.000550	55	0.00100	0.000560	56	2	75-125	20	X

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

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

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

Form 3 - M MSD Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order # : 411097 **Project ID:** 2009-084

Lab Batch ID: 850035 **QC- Sample ID:** 411089-004 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 03/31/2011 **Date Prepared:** 03/31/2011 **Analyst:** DAT

Reporting Units: mg/L

Metals per ICP by SW846 6010B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Aluminum	0.202	1.00	1.33	113	1.00	1.35	115	1	75-125	20	
Arsenic	<0.0100	1.00	1.07	107	1.00	1.08	108	1	75-125	20	
Barium	0.0894	1.00	1.05	96	1.00	1.06	97	1	75-125	20	
Boron	0.511	1.00	1.58	107	1.00	1.64	113	4	75-125	20	
Cadmium	<0.00500	1.00	1.02	102	1.00	1.05	105	3	75-125	20	
Calcium	176	1.00	177	100	1.00	180	400	2	75-125	20	X
Chromium	<0.00500	1.00	1.00	100	1.00	1.03	103	3	75-125	20	
Cobalt	<0.0100	1.00	0.995	100	1.00	1.01	101	1	75-125	20	
Copper	<0.0100	1.00	1.00	100	1.00	1.03	103	3	75-125	20	
Iron	0.140	1.00	1.21	107	1.00	1.24	110	2	75-125	20	
Lead	<0.0120	1.00	0.986	99	1.00	1.00	100	1	75-125	20	
Magnesium	72.6	1.00	74.6	200	1.00	76.3	370	2	75-125	20	X
Manganese	0.122	1.00	1.07	95	1.00	1.09	97	2	75-125	20	
Molybdenum	0.0343	1.00	1.07	104	1.00	1.09	106	2	75-125	20	
Nickel	<0.0100	1.00	0.990	99	1.00	1.01	101	2	75-125	20	
Potassium	14.3	10.0	26.5	122	10.0	27.2	129	3	75-125	20	X
Selenium	<0.0100	1.00	1.08	108	1.00	1.11	111	3	75-125	20	
Silver	<0.00400	1.00	0.990	99	1.00	1.02	102	3	75-125	20	
Sodium	593	11.0	602	82	11.0	619	236	3	75-125	20	X
Zinc	0.0110	1.00	1.02	101	1.00	1.00	99	2	75-125	20	

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

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

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

Final 1.000

Form 3 - MS / MSD Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order # : 411097 **Project ID:** 2009-084

Lab Batch ID: 850041 **QC- Sample ID:** 411082-008 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 03/30/2011 **Date Prepared:** 03/30/2011 **Analyst:** CYE

Reporting Units: mg/L

VOAs by SW-846 8260B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
1,1,1,2-Tetrachloroethane	<0.00500	0.0500	0.0459	92	0.0500	0.0574	115	22	75-125	20	F
1,1,1-Trichloroethane	<0.00500	0.0500	0.0548	110	0.0500	0.0642	128	16	75-125	20	X
1,1,2,2-Tetrachloroethane	<0.00500	0.0500	0.0473	95	0.0500	0.0555	111	16	50-130	31	
1,1,2-Trichloroethane	<0.00500	0.0500	0.0515	103	0.0500	0.0561	112	9	75-127	20	
1,1-Dichloroethane	<0.00500	0.0500	0.0503	101	0.0500	0.0582	116	15	60-130	20	
1,1-Dichloroethene	<0.00500	0.0500	0.0446	89	0.0500	0.0525	105	16	59-172	22	
1,1-Dichloropropene	<0.00500	0.0500	0.0395	79	0.0500	0.0432	86	9	75-125	20	
1,2,3-Trichlorobenzene	<0.00500	0.0500	0.0414	83	0.0500	0.0517	103	22	75-137	20	F
1,2,3-Trichloropropane	<0.00500	0.0500	0.0378	76	0.0500	0.0440	88	15	75-125	20	
1,2,4-Trichlorobenzene	<0.00500	0.0500	0.0404	81	0.0500	0.0508	102	23	75-135	20	F
1,2,4-Trimethylbenzene	<0.00500	0.0500	<0.00500	0	0.0500	<0.00500	0	NC	75-125	20	X
1,2-Dibromo-3-Chloropropane	<0.00500	0.0500	0.0509	102	0.0500	0.0665	133	27	59-125	28	X
1,2-Dibromoethane	<0.00500	0.0500	0.0442	88	0.0500	0.0543	109	21	73-125	20	F
1,2-Dichlorobenzene	<0.00500	0.0500	0.0425	85	0.0500	0.0500	100	16	75-125	20	
1,2-Dichloroethane	<0.00500	0.0500	0.0530	106	0.0500	0.0605	121	13	68-127	20	
1,2-Dichloropropane	<0.00500	0.0500	0.0477	95	0.0500	0.0531	106	11	74-125	20	
1,3,5-Trimethylbenzene	<0.00500	0.0500	<0.00500	0	0.0500	<0.00500	0	NC	70-125	20	X
1,3-Dichlorobenzene	<0.00500	0.0500	0.0453	91	0.0500	0.0502	100	10	75-125	20	
1,3-Dichloropropane	<0.00500	0.0500	0.0480	96	0.0500	0.0552	110	14	75-125	20	
1,4-Dichlorobenzene	<0.00500	0.0500	0.0444	89	0.0500	0.0489	98	10	75-125	20	
2,2-Dichloropropane	<0.00500	0.0500	0.0534	107	0.0500	0.0625	125	16	60-140	20	
2-Chlorotoluene	<0.00500	0.0500	0.0392	78	0.0500	0.0485	97	21	73-125	20	F
4-Chlorotoluene	<0.00500	0.0500	0.0417	83	0.0500	0.0475	95	13	74-125	20	

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

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

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

Form 3 - M MSD Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order # : 411097 **Project ID:** 2009-084

Lab Batch ID: 850041 **QC- Sample ID:** 411082-008 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 03/30/2011 **Date Prepared:** 03/30/2011 **Analyst:** CYE

Reporting Units: mg/L

VOAs by SW-846 8260B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00500	0.0500	0.0484	97	0.0500	0.0563	113	15	66-142	21	
Bromobenzene	<0.00500	0.0500	0.0445	89	0.0500	0.0493	99	10	60-130	20	
Bromochloromethane	<0.00500	0.0500	0.0474	95	0.0500	0.0563	113	17	73-125	20	
Bromodichloromethane	<0.00500	0.0500	0.0559	112	0.0500	0.0648	130	15	75-125	20	X
Bromoform	0.0209	0.0500	0.0763	111	0.0500	0.0864	131	12	75-125	20	X
Bromomethane	<0.00500	0.0500	0.0522	104	0.0500	0.0530	106	2	70-130	20	
Carbon Tetrachloride	<0.00500	0.0500	0.0573	115	0.0500	0.0680	136	17	62-125	20	X
Chlorobenzene	<0.00500	0.0500	0.0427	85	0.0500	0.0510	102	18	60-133	21	
Chloroethane	<0.0100	0.0500	0.0540	108	0.0500	0.0591	118	9	70-130	20	
Chloroform	0.0143	0.0500	0.0621	96	0.0500	0.0708	113	13	74-125	20	
Chloromethane	<0.0100	0.0500	0.0552	110	0.0500	0.0604	121	9	70-130	20	
cis-1,2-Dichloroethene	<0.00500	0.0500	0.0478	96	0.0500	0.0566	113	17	60-130	20	
cis-1,3-Dichloropropene	<0.00500	0.0500	0.0371	74	0.0500	0.0402	80	8	60-140	20	
Dibromochloromethane	<0.00500	0.0500	0.0498	100	0.0500	0.0595	119	18	60-130	20	
Dibromomethane	<0.00500	0.0500	0.0502	100	0.0500	0.0587	117	16	69-127	23	
Dichlorodifluoromethane	<0.00500	0.0500	0.0556	111	0.0500	0.0600	120	8	70-130	23	
Ethylbenzene	<0.00500	0.0500	0.0363	73	0.0500	0.0420	84	15	75-125	20	X
Hexachlorobutadiene	<0.00500	0.0500	0.0448	90	0.0500	0.0526	105	16	75-125	20	
isopropylbenzene	<0.00500	0.0500	0.0328	66	0.0500	0.0381	76	15	75-125	20	X
m,p-Xylenes	<0.0100	0.100	0.0271	27	0.100	0.0231	23	16	75-125	20	X
Methylene Chloride	<0.00500	0.0500	0.0488	98	0.0500	0.0594	119	20	75-125	35	
MTBE	<0.00500	0.0500	0.0532	106	0.0500	0.0676	135	24	75-125	20	XF
Naphthalene	<0.0100	0.0500	<0.0100	0	0.0500	<0.0100	0	NC	65-135	20	X

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

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

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

Form 3 - MS / MSD Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order # : 411097 **Project ID:** 2009-084

Lab Batch ID: 850041 **QC- Sample ID:** 411082-008 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 03/30/2011 **Date Prepared:** 03/30/2011 **Analyst:** CYE

Reporting Units: mg/L

VOAs by SW-846 8260B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
n-Butylbenzene	<0.00500	0.0500	0.0357	71	0.0500	0.0384	77	7	75-125	20	X
n-Propylbenzene	<0.00500	0.0500	0.0378	76	0.0500	0.0409	82	8	75-125	20	
o-Xylene	<0.00500	0.0500	0.0192	38	0.0500	0.0188	38	2	75-125	20	X
p-Cymene (p-Isopropyltoluene)	<0.00500	0.0500	0.0231	46	0.0500	0.0205	41	12	75-125	20	X
Sec-Butylbenzene	<0.00500	0.0500	0.0396	79	0.0500	0.0436	87	10	75-125	20	
Styrene	<0.00500	0.0500	<0.00500	0	0.0500	<0.00500	0	NC	60-130	51	X
tert-Butylbenzene	<0.00500	0.0500	0.0371	74	0.0500	0.0424	85	13	75-125	20	X
Tetrachloroethylene	0.00536	0.0500	0.0476	84	0.0500	0.0565	102	17	60-130	20	
Toluene	<0.00500	0.0500	0.0411	82	0.0500	0.0429	86	4	59-139	21	
trans-1,2-dichloroethene	<0.00500	0.0500	0.0483	97	0.0500	0.0570	114	17	60-130	20	
trans-1,3-dichloropropene	<0.00500	0.0500	0.0434	87	0.0500	0.0451	90	4	66-125	20	
Trichloroethene	<0.00500	0.0500	0.0505	101	0.0500	0.0576	115	13	62-137	24	
Trichlorofluoromethane	<0.00500	0.0500	0.0632	126	0.0500	0.0665	133	5	67-125	20	X
Vinyl Chloride	<0.00200	0.0500	0.0371	74	0.0500	0.0362	72	2	75-125	20	X

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

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

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

Form 3 - MS Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order # : 411097 **Project ID:** 2009-084

Lab Batch ID: 850255 **QC- Sample ID:** 411256-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 03/31/2011 **Date Prepared:** 03/31/2011 **Analyst:** CYE

Reporting Units: mg/L

VOAs by SW-846 8260B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
1,1,1,2-Tetrachloroethane	<0.00500	0.0500	0.0549	110	0.0500	0.0555	111	1	75-125	20	
1,1,1-Trichloroethane	<0.00500	0.0500	0.0516	103	0.0500	0.0524	105	2	75-125	20	
1,1,2,2-Tetrachloroethane	<0.00500	0.0500	0.0569	114	0.0500	0.0579	116	2	50-130	31	
1,1,2-Trichloroethane	<0.00500	0.0500	0.0520	104	0.0500	0.0530	106	2	75-127	20	
1,1-Dichloroethane	<0.00500	0.0500	0.0548	110	0.0500	0.0550	110	0	60-130	20	
1,1-Dichloroethene	<0.00500	0.0500	0.0481	96	0.0500	0.0488	98	1	59-172	22	
1,1-Dichloropropene	<0.00500	0.0500	0.0481	96	0.0500	0.0482	96	0	75-125	20	
1,2,3-Trichlorobenzene	<0.00500	0.0500	0.0564	113	0.0500	0.0572	114	1	75-137	20	
1,2,3-Trichloropropane	<0.00500	0.0500	0.0556	111	0.0500	0.0567	113	2	75-125	20	
1,2,4-Trichlorobenzene	<0.00500	0.0500	0.0562	112	0.0500	0.0570	114	1	75-135	20	
1,2,4-Trimethylbenzene	<0.00500	0.0500	0.0556	111	0.0500	0.0573	115	3	75-125	20	
1,2-Dibromo-3-Chloropropane	<0.00500	0.0500	0.0488	98	0.0500	0.0524	105	7	59-125	28	
1,2-Dibromoethane	<0.00500	0.0500	0.0536	107	0.0500	0.0544	109	1	73-125	20	
1,2-Dichlorobenzene	<0.00500	0.0500	0.0531	106	0.0500	0.0544	109	2	75-125	20	
1,2-Dichloroethane	<0.00500	0.0500	0.0478	96	0.0500	0.0465	93	3	68-127	20	
1,2-Dichloropropane	<0.00500	0.0500	0.0521	104	0.0500	0.0513	103	2	74-125	20	
1,3,5-Trimethylbenzene	<0.00500	0.0500	0.0546	109	0.0500	0.0559	112	2	70-125	20	
1,3-Dichlorobenzene	<0.00500	0.0500	0.0525	105	0.0500	0.0531	106	1	75-125	20	
1,3-Dichloropropane	<0.00500	0.0500	0.0536	107	0.0500	0.0541	108	1	75-125	20	
1,4-Dichlorobenzene	<0.00500	0.0500	0.0518	104	0.0500	0.0531	106	2	75-125	20	
2,2-Dichloropropane	<0.00500	0.0500	0.0545	109	0.0500	0.0560	112	3	60-140	20	
2-Chlorotoluene	<0.00500	0.0500	0.0533	107	0.0500	0.0545	109	2	73-125	20	
4-Chlorotoluene	<0.00500	0.0500	0.0515	103	0.0500	0.0529	106	3	74-125	20	

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

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

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

Final 1.000

Form 3 - MS / MSD Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order # : 411097 **Project ID:** 2009-084

Lab Batch ID: 850255 **QC- Sample ID:** 411256-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 03/31/2011 **Date Prepared:** 03/31/2011 **Analyst:** CYE

Reporting Units: mg/L

VOAs by SW-846 8260B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00500	0.0500	0.0509	102	0.0500	0.0500	100	2	66-142	21	
Bromobenzene	<0.00500	0.0500	0.0526	105	0.0500	0.0534	107	2	60-130	20	
Bromochloromethane	<0.00500	0.0500	0.0525	105	0.0500	0.0543	109	3	73-125	20	
Bromodichloromethane	<0.00500	0.0500	0.0544	109	0.0500	0.0540	108	1	75-125	20	
Bromoform	<0.00500	0.0500	0.0448	90	0.0500	0.0471	94	5	75-125	20	
Bromomethane	<0.00500	0.0500	0.0425	85	0.0500	0.0436	87	3	70-130	20	
Carbon Tetrachloride	<0.00500	0.0500	0.0511	102	0.0500	0.0513	103	0	62-125	20	
Chlorobenzene	<0.00500	0.0500	0.0501	100	0.0500	0.0502	100	0	60-133	21	
Chloroethane	<0.0100	0.0500	0.0419	84	0.0500	0.0417	83	0	70-130	20	
Chloroform	<0.00500	0.0500	0.0512	102	0.0500	0.0512	102	0	74-125	20	
Chloromethane	<0.0100	0.0500	0.0431	86	0.0500	0.0440	88	2	70-130	20	
cis-1,2-Dichloroethene	<0.00500	0.0500	0.0524	105	0.0500	0.0514	103	2	60-130	20	
cis-1,3-Dichloropropene	<0.00500	0.0500	0.0447	89	0.0500	0.0456	91	2	60-140	20	
Dibromochloromethane	<0.00500	0.0500	0.0463	93	0.0500	0.0460	92	1	60-130	20	
Dibromomethane	<0.00500	0.0500	0.0516	103	0.0500	0.0511	102	1	69-127	23	
Dichlorodifluoromethane	<0.00500	0.0500	0.0460	92	0.0500	0.0470	94	2	70-130	23	
Ethylbenzene	<0.00500	0.0500	0.0510	102	0.0500	0.0505	101	1	75-125	20	
Hexachlorobutadiene	<0.00500	0.0500	0.0502	100	0.0500	0.0527	105	5	75-125	20	
isopropylbenzene	<0.00500	0.0500	0.0505	101	0.0500	0.0502	100	1	75-125	20	
m,p-Xylenes	<0.0100	0.100	0.105	105	0.100	0.104	104	1	75-125	20	
Methylene Chloride	<0.00500	0.0500	0.0512	102	0.0500	0.0521	104	2	75-125	35	
MTBE	<0.00500	0.0500	0.0675	135	0.0500	0.0681	136	1	75-125	20	X
Naphthalene	<0.0100	0.0500	0.0548	110	0.0500	0.0548	110	0	65-135	20	

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

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

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

Form 3 - MS/MSD Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order #: 411097 **Project ID:** 2009-084

Lab Batch ID: 850255 **QC- Sample ID:** 411256-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 03/31/2011 **Date Prepared:** 03/31/2011 **Analyst:** CYE

Reporting Units: mg/L

VOAs by SW-846 8260B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
n-Butylbenzene	<0.00500	0.0500	0.0513	103	0.0500	0.0524	105	2	75-125	20	
n-Propylbenzene	<0.00500	0.0500	0.0535	107	0.0500	0.0558	112	4	75-125	20	
o-Xylene	<0.00500	0.0500	0.0553	111	0.0500	0.0544	109	2	75-125	20	
p-Cymene (p-Isopropyltoluene)	<0.00500	0.0500	0.0512	102	0.0500	0.0529	106	3	75-125	20	
Sec-Butylbenzene	<0.00500	0.0500	0.0539	108	0.0500	0.0552	110	2	75-125	20	
Styrene	<0.00500	0.0500	0.0557	111	0.0500	0.0555	111	0	60-130	51	
tert-Butylbenzene	<0.00500	0.0500	0.0560	112	0.0500	0.0581	116	4	75-125	20	
Tetrachloroethylene	<0.00500	0.0500	0.0508	102	0.0500	0.0506	101	0	60-130	20	
Toluene	<0.00500	0.0500	0.0495	99	0.0500	0.0504	101	2	59-139	21	
trans-1,2-dichloroethene	<0.00500	0.0500	0.0489	98	0.0500	0.0493	99	1	60-130	20	
trans-1,3-dichloropropene	<0.00500	0.0500	0.0445	89	0.0500	0.0444	89	0	66-125	20	
Trichloroethene	<0.00500	0.0500	0.0491	98	0.0500	0.0480	96	2	62-137	24	
Trichlorofluoromethane	<0.00500	0.0500	0.0497	99	0.0500	0.0508	102	2	67-125	20	
Vinyl Chloride	<0.00200	0.0500	0.0365	73	0.0500	0.0378	76	3	75-125	20	X

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

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

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

Sample Duplicate Recovery

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order #: 411097

Lab Batch #: 849832 **Project ID:** 2009-084

Date Analyzed: 03/29/2011 13:25 **Date Prepared:** 03/29/2011 **Analyst:** ALA

QC- Sample ID: 410758-001 D **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

Alkalinity by SM2320B Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Alkalinity, Total (as CaCO3)	786	786	0	20	
Alkalinity, Bicarbonate (as CaCO3)	959	959	0	20	
Alkalinity, Carbonate (as CaCO3)	<4.00	<4.00	0	20	

Lab Batch #: 849832

Date Analyzed: 03/29/2011 13:20 **Date Prepared:** 03/29/2011 **Analyst:** ALA

QC- Sample ID: 410832-001 D **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

Alkalinity by SM2320B Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Alkalinity, Total (as CaCO3)	232	230	1	20	
Alkalinity, Bicarbonate (as CaCO3)	232	230	1	20	
Alkalinity, Carbonate (as CaCO3)	<4.00	<4.00	0	20	

Lab Batch #: 849659

Date Analyzed: 03/28/2011 15:15 **Date Prepared:** 03/28/2011 **Analyst:** LATCOR

QC- Sample ID: 411097-004 D **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

Anions by E300 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Fluoride	30.5	30.6	0	20	
Chloride	392	374	5	20	
Sulfate	288	280	3	20	

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

Xe o Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Ben J. Arguijo

Company Name: Basin Environmental Service Technologies, LLC

Company Address: P. O. Box 301

City/State/Zip: Lovington, NM 88260

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

Sampler Signature:

e-mail: bjarguijo@basinenv.com

Project Name: DCP Plant to Lea Station 6" Section 31

Project #: 2009-084

Project Loc: Lea County, NM

PO #: PAA - J. Henry

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

(lab use only)

ORDER #: 411097

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TOTAL: TPH: 418.1 8015M	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260 X	RCI	NMWQCC Metals (see Attached)	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
01	MW-2			03/25/11	0845		3	X		X						GW									X				X
02	MW-3			03/25/11	0855		3	X		X						GW									X				X
03	MW-4			03/25/11	0900		3	X		X						GW									X				X
04	MW-5			03/25/11	0910		6	X	X	X						GW			X	X		X	X	X			X		X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
	3/25/11	16:50			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Lisa Murdock	3-25-11	16:50

Laboratory Comments:

Sample Containers Intact? (Y) N

VOCs Free of Headspace? Y N (NA)

Labels on container(s) Y N

Custody seals on container(s) Y N (N/A)

Custody seals on cooler(s) Y N

Sample Hand Delivered Y N

by Sampler/Client Rep. ? Y N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 2.6 °C

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

Prelogin / Nonconformance Report - Sample Log-In

Client: Plains

Date/Time: 3-25-11 16:50

Lab ID #: 411097

Initials: LM

Sample Receipt Checklist

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

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

Nonconformance Documentation

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

Regarding: MW-3 has 1 ~~sample~~ VOA LM with headspace

Corrective Action Taken:_____

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

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

Field Parameters

specific conductance
pH
temperature
depth to water

General Chemistry

331000

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

RCRA Metals

- Arsenic
- Barium
- Cadmium
- Chromium
- Lead
- Mercury
- Selenium
- Silver

Additional WQCC Metals

- Copper
- Iron
- Manganese
- Zinc
- Aluminum
- Boron
- Cobalt
- Molybdenum
- Nickel

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

Analytical Report 411661

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

DCP Plant to Lea Station 6" Section 31

2009-084

04-APR-11

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

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

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

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

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

04-APR-11

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

Reference: XENCO Report No: **411661**
DCP Plant to Lea Station 6" Section 31
Project Address: Lea County, NM

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 411661. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 411661 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

Sample Cross Reference 411661

PLAINS ALL AMERICAN EH&S, Midland, TX

DCP Plant to Lea Station 6" Section 31

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-5	W	Mar-30-11 15:00		411661-001

CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S
Project Name: DCP Plant to Lea Station 6" Section 31

Project ID:	*2009-084*	*Report Date:*	*04-APR-11*
Work Order Number:	*411661*	*Date Received:*	*03/31/2011*

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-850439 Inorganic Anions In Water by E300
E300MI

Batch 850439, Ortho-Phosphate recovered below QC limits in the Matrix Spike.
Samples affected are: 411661-001.
The Laboratory Control Sample for Ortho-Phosphate is within laboratory Control Limits

Certificate of Analys ımmary 411661

PLAINS ALL AMERICA. _H&S, Midland, TX

Project Name: DCP Plant to Lea Station 6" Section 31

Project Id: 2009-084
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Thu Mar-31-11 04:25 pm
Report Date: 04-APR-11
Project Manager: Brent Barron, II

Analysis Requested								
	Lab Id:	411661-001						
	Field Id:	MW-5						
	Depth:							
	Matrix:	WATER						
	Sampled:	Mar-30-11 15:00						
Inorganic Anions In Water by E300	***Extracted:***							
	Analyzed:	Apr-01-11 09:34						
	Units/RL:	mg/L	RL					
Nitrate as N		4.17	0.500					
Ortho-Phosphate		3.09	2.50					

Brent Barron, II
Odessa Laboratory Manager

Final 1.000

XENCO Laboratories

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit

PQL Practical Quantitation Limit

* Outside XENCO's scope of NELAC Accreditation.

BS / BSD Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order #: 411661 **Project ID:** 2009-084

Analyst: LATCOR **Date Prepared:** 04/01/2011 **Date Analyzed:** 04/01/2011

Lab Batch ID: 850439 **Sample:** 850439-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions In Water by E300 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
Nitrate as N	<0.0500	2.26	2.20	97	2.26	2.12	94	4	80-120	20	
Ortho-Phosphate	<0.250	2.00	1.94	97	2.00	1.94	97	0	80-120	20	

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

Final 1.000

Form 3 - MS Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order #: 411661
Lab Batch #: 850439
Project ID: 2009-084
Date Analyzed: 04/01/2011
Date Prepared: 04/01/2011
Analyst: LATCOR
QC- Sample ID: 411663-005 S
Batch #: 1
Matrix: Water
Reporting Units: mg/L

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Nitrate as N	6.55	56.5	54.4	85	80-120	
Ortho-Phosphate	7.73	50.0	36.6	58	80-120	X

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

BRL - Below Reporting Limit

Sample Duplicate Recovery

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order #: 411661

Lab Batch #: 850439 **Project ID:** 2009-084

Date Analyzed: 04/01/2011 09:34 **Date Prepared:** 04/01/2011 **Analyst:** LATCOR

QC- Sample ID: 411663-005 D **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

Inorganic Anions In Water by E300	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Nitrate as N	6.55	6.58	0	20	
Ortho-Phosphate	7.73	7.70	0	20	

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

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Ben J. Arguijo

Company Name: Basin Environmental Service Technologies, LLC

Company Address: P. O. Box 301

City/State/Zip: Lovington, NM 88260

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

Sampler Signature: e-mail: bjarguijo@basinenv.com

Project Name: DCP Plant to Lea Station 6" Section 31

Project #: 2009-084

Project Loc: Lea County, NM

PO #: PAA - J. Henry

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

(lab use only)
ORDER #: 411661

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1	8015M TPH: TX 1005	8015B TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: BTEX 8021B/5030 or BTEX 8260	RCI	NMWQCC Metals (see Attached)				RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
01	MW-5			03/30/11	1520		1	X								GW										X							X

Special Instructions:

Laboratory Comments:
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N NA
Labels on container(s) Y N
Custody seals on container(s) Y N
Custody seals on cooler(s) Y N NA
Sample Hand Delivered Y N
by Sampler/Client Rep. ? Y N
by Courier? UPS DHL FedEx Lone Star
250 ml poly
Temperature Upon Receipt: 5 1/2 °C

Relinquished by:	Date	Time	Received by:	Date	Time
	3/31/11	1625			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Andrea Ellison	3.31.11	16:25

XENCO Laboratories

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

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

Prelogin / Nonconformance Report - Sample Log-In

Client: Basin Env. / Plains
Date/Time: 3.31.11 16:25
Lab ID #: 411661
Initials: AE

Sample Receipt Checklist

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

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

Nonconformance Documentation

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

Regarding: _____

Corrective Action Taken: _____

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

Analytical Report 418094

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

DCP Plant to Lea Station 6" Section 31

2009-084

06-JUN-11

Collected By: Client

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

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

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

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

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

06-JUN-11

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

Reference: XENCO Report No: **418094**
DCP Plant to Lea Station 6" Section 31
Project Address: Lea County, NM

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 418094. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 418094 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

XENCO Laboratories

Sample Cross Reference 418094

PLAINS ALL AMERICAN EH&S, Midland, TX

DCP Plant to Lea Station 6" Section 31

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-2	W	May-26-11 09:05		418094-001
MW-3	W	May-26-11 09:15		418094-002
MW-4	W	May-26-11 09:20		418094-003
MW-5	W	May-26-11 09:25		418094-004

CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S
Project Name: DCP Plant to Lea Station 6" Section 31

Project ID:	*2009-084*	*Report Date:*	*06-JUN-11*
Work Order Number:	*418094*	*Date Received:*	*05/27/2011*

Sample receipt non conformances and comments:
None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-858471 BTEX by EPA 8021
SW8021BM

Batch 858471, 1,4-Difluorobenzene recovered above QC limits . Matrix interferences is suspected; data confirmed by re-analysis
Samples affected are: 418094-004.

Certificate of Analysis Summary 418094

PLAINS ALL AMERICA, H&S, Midland, TX

Project Name: DCP Plant to Lea Station 6" Section 31

Project Id: 2009-084
Contact: Jason Henry
Project Location: Lea County, NM

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

Analysis Requested	*Lab Id:*	418094-001		418094-002		418094-003		418094-004			
	Field Id:	MW-2		MW-3		MW-4		MW-5			
	Depth:										
	Matrix:	WATER		WATER		WATER		WATER			
	Sampled:	May-26-11 09:05		May-26-11 09:15		May-26-11 09:20		May-26-11 09:25			
BTEX by EPA 8021	*Extracted:*	Jun-01-11 11:34		Jun-01-11 11:34		Jun-01-11 11:34		Jun-01-11 11:34			
	Analyzed:	Jun-01-11 15:35		Jun-01-11 15:58		Jun-01-11 16:20		Jun-01-11 16:43			
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL		
Benzene		ND	0.0010	0.00425	0.0010	ND	0.0010	1.12 D	0.0250		
Toluene		ND	0.0020	ND	0.0020	ND	0.0020	0.0265	0.0020		
Ethylbenzene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010		
m_p-Xylenes		ND	0.0020	ND	0.0020	ND	0.0020	0.0137	0.0020		
o-Xylene		ND	0.0010	ND	0.0010	ND	0.0010	0.0138	0.0010		
Xylenes, Total		ND	0.0010	ND	0.0010	ND	0.0010	0.0275	0.0010		
Total BTEX		ND	0.0010	0.00425	0.0010	ND	0.0010	1.17 D	0.0010		

Brent Barron, II
Odessa Laboratory Manager

Final 1.000

XENCO Laboratories

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit

PQL Practical Quantitation Limit

LOD Limit of Detection

LOQ Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

rk Orders : 418094, **Project ID:** 2009-084

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

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

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

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

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

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

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

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

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

Lab Batch #: 858471 **Sample:** 418094-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/01/11 15:35

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0298	0.0300	99	80-120	
4-Bromofluorobenzene	0.0310	0.0300	103	80-120	

Lab Batch #: 858471 **Sample:** 418094-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/01/11 15:58

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0287	0.0300	96	80-120	
4-Bromofluorobenzene	0.0311	0.0300	104	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Orders : 418094,

Project ID: 2009-084

Lab Batch #: 858471 **Sample:** 418094-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/01/11 16:20

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0281	0.0300	94	80-120	
4-Bromofluorobenzene	0.0288	0.0300	96	80-120	

Lab Batch #: 858471 **Sample:** 418094-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 06/01/11 16:43

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0528	0.0300	176	80-120	**
4-Bromofluorobenzene	0.0289	0.0300	96	80-120	

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

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

BTEX by EPA 8021	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	0.0314	0.0300	105	80-120	

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

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

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

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

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

BTEX by EPA 8021	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	0.0318	0.0300	106	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

rk Orders : 418094,

Project ID: 2009-084

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

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

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

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Final 1.000

BS / BSD Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order #: 418094 **Project ID:** 2009-084

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

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

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

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

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

Lab Batch ID: 858712 **Sample:** 604361-1-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	0.0917	92	0.100	0.0994	99	8	70-125	25	
Toluene	<0.00200	0.100	0.0925	93	0.100	0.102	102	10	70-125	25	
Ethylbenzene	<0.00100	0.100	0.0911	91	0.100	0.0996	100	9	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.196	98	0.200	0.212	106	8	70-131	25	
o-Xylene	<0.00100	0.100	0.109	109	0.100	0.115	115	5	71-133	25	

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: DCP Plant to Lea Station 6" Section 31

W' -k Order #: 418094
ab Batch #: 858471
Project ID: 2009-084
Date Analyzed: 06/01/2011
Date Prepared: 06/01/2011
Analyst: ASA
QC- Sample ID: 418009-008 S
Batch #: 1
Matrix: Water
Reporting Units: mg/L

BTEX by EPA 8021B	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Benzene	0.00219	0.100	0.0889	87	70-125	
Toluene	<0.00200	0.100	0.0899	90	70-125	
Ethylbenzene	<0.00100	0.100	0.0867	87	71-129	
m_p-Xylenes	<0.00200	0.200	0.182	91	70-131	
o-Xylene	0.00271	0.100	0.0997	97	71-133	

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

P elow Reporting Limit

Final 1.000

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Ben J. Arguijo

Company Name: Basin Environmental Service Technologies, LLC

Company Address: P. O. Box 301

City/State/Zip: Lovington, NM 88260

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

Sampler Signature:

e-mail: bjarguijo@basinenv.com

Project Name: DCP Plant to Lea Station 6" Section 31

Project #: 2009-084

Project Loc: Lea County, NM

PO #: PAA - J. Henry

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

(lab use only)

ORDER #: 418094

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: BTEX 80218/5030 or BTEX 8260 X	RCI	NMWQCC Metals (see Attached)	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
001	MW-2			05/26/11	0905		3	X		X						GW								X				X
002	MW-3			05/26/11	0915		3	X		X						GW								X				X
003	MW-4			05/26/11	0920		3	X		X						GW								X				X
004	MW-5			05/26/11	0925		3	X		X						GW								X				X

Special Instructions:

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

Laboratory Comments:

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

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

Temperature Upon Receipt: 5.6 °C

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

Prelogin / Nonconformance Report - Sample Log-In

Client: Plains

Date/Time: 5-27-11 16:42

Lab ID # : 418094

Initials: LM

Sample Receipt Checklist

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

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

Nonconformance Documentation

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

Regarding: _____

Corrective Action Taken: _____

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

Analytical Report 426114

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

DCP Plant to Lea Station 6" Section 31

2009-084

26-AUG-11

Collected By: Client

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

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

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

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

26-AUG-11

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

Reference: XENCO Report No: **426114**
DCP Plant to Lea Station 6" Section 31
Project Address: Lea County, NM

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 426114. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 426114 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron II
Odessa Laboratory Manager

XENCO Laboratories

Sample Cross Reference 426114

PLAINS ALL AMERICAN EH&S, Midland, TX

DCP Plant to Lea Station 6" Section 31

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-2	W	08-17-11 16:25		426114-001
MW-3	W	08-17-11 14:30		426114-002
MW-4	W	08-17-11 15:10		426114-003
MW-5	W	08-17-11 16:00		426114-004

CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S
Project Name: DCP Plant to Lea Station 6" Section 31

Project ID:	*2009-084*	*Report Date:*	*26-AUG-11*
Work Order Number:	*426114*	*Date Received:*	*08/19/2011*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 426114

PLAINS ALL AMERICA, EH&S, Midland, TX

Project Name: DCP Plant to Lea Station 6" Section 31

Project Id: 2009-084
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Fri Aug-19-11 11:58 am
Report Date: 26-AUG-11
Project Manager: Brent Barron II

Analysis Requested													
	Lab Id:	426114-001		426114-002		426114-003		426114-004					
	Field Id:	MW-2		MW-3		MW-4		MW-5					
	Depth:												
	Matrix:	WATER		WATER		WATER		WATER					
	Sampled:	Aug-17-11 16:25		Aug-17-11 14:30		Aug-17-11 15:10		Aug-17-11 16:00					
BTEX by EPA 8021	***Extracted:***	Aug-22-11 16:00		Aug-22-11 16:00		Aug-22-11 16:00		Aug-24-11 16:45					
	Analyzed:	Aug-23-11 01:25		Aug-23-11 01:48		Aug-23-11 02:11		Aug-25-11 03:33					
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL				
Benzene		ND	0.00100	0.0138	0.00100	ND	0.00100	1.73	0.0200				
Toluene		ND	0.00200	ND	0.00200	ND	0.00200	0.0560	0.0400				
Ethylbenzene		ND	0.00100	ND	0.00100	ND	0.00100	ND	0.0200				
m_p-Xylenes		ND	0.00200	ND	0.00200	ND	0.00200	ND	0.0400				
o-Xylene		ND	0.00100	ND	0.00100	ND	0.00100	0.0210	0.0200				
Xylenes, Total		ND	0.00100	ND	0.00100	ND	0.00100	0.0210	0.0200				
Total BTEX		ND	0.00100	0.0138	0.00100	ND	0.00100	1.81	0.0200				

Brent Barron II
Odessa Laboratory Manager

Final 1.000

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

ork Orders : 426114,

Project ID:2009-084

Lab Batch #:868039 **Sample:** 426114-001 / SMP **Batch:** 1 **Matrix:**Water

Units: mg/L **Date Analyzed:** 08/23/11 01:25

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0282	0.0300	94	80-120	
4-Bromofluorobenzene	0.0288	0.0300	96	80-120	

Lab Batch #:868039 **Sample:** 426114-002 / SMP **Batch:** 1 **Matrix:**Water

Units: mg/L **Date Analyzed:** 08/23/11 01:48

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0287	0.0300	96	80-120	
4-Bromofluorobenzene	0.0281	0.0300	94	80-120	

Lab Batch #:868039 **Sample:** 426114-003 / SMP **Batch:** 1 **Matrix:**Water

Units: mg/L **Date Analyzed:** 08/23/11 02:11

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

Lab Batch #:868312 **Sample:** 426114-004 / SMP **Batch:** 1 **Matrix:**Water

Units: mg/L **Date Analyzed:** 08/25/11 03:33

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0285	0.0300	95	80-120	

Lab Batch #:868039 **Sample:** 610293-1-BLK / BLK **Batch:** 1 **Matrix:**Water

Units: mg/L **Date Analyzed:** 08/23/11 01:02

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0281	0.0300	94	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Orders 426114, **Project ID:**2009-084

Lab Batch #:868312 **Sample:** 610433-1-BLK / BLK **Batch:** 1 **Matrix:**Water

Units: mg/L **Date Analyzed:** 08/25/11 01:39

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0275	0.0300	92	80-120	
4-Bromofluorobenzene	0.0281	0.0300	94	80-120	

Lab Batch #:868039 **Sample:** 610293-1-BKS / BKS **Batch:** 1 **Matrix:**Water

Units: mg/L **Date Analyzed:** 08/22/11 23:32

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

Lab Batch #:868312 **Sample:** 610433-1-BKS / BKS **Batch:** 1 **Matrix:**Water

Units: mg/L **Date Analyzed:** 08/25/11 00:08

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0275	0.0300	92	80-120	
4-Bromofluorobenzene	0.0280	0.0300	93	80-120	

Lab Batch #:868039 **Sample:** 610293-1-BSD / BSD **Batch:** 1 **Matrix:**Water

Units: mg/L **Date Analyzed:** 08/22/11 23:55

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0296	0.0300	99	80-120	
4-Bromofluorobenzene	0.0291	0.0300	97	80-120	

Lab Batch #:868312 **Sample:** 610433-1-BSD / BSD **Batch:** 1 **Matrix:**Water

Units: mg/L **Date Analyzed:** 08/25/11 00:31

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0292	0.0300	97	80-120	
4-Bromofluorobenzene	0.0309	0.0300	103	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Orders : 426114, **Project ID:** 2009-084

Lab Batch #: 868039 **Sample:** 426114-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/23/11 04:27

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

Lab Batch #: 868312 **Sample:** 426116-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/25/11 04:19

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	0.0293	0.0300	98	80-120	

Lab Batch #: 868039 **Sample:** 426114-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/23/11 04:50

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0295	0.0300	98	80-120	
4-Bromofluorobenzene	0.0276	0.0300	92	80-120	

Lab Batch #: 868312 **Sample:** 426116-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08/25/11 04:41

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0283	0.0300	94	80-120	
4-Bromofluorobenzene	0.0303	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.

BS / BSD Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order #: 426114 **Project ID:** 2009-084

Analyst: ASA **Date Prepared:** 08/22/2011 **Date Analyzed:** 08/22/2011

Lab Batch ID: 868039 **Sample:** 610293-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.114	114	0.100	0.112	112	2	70-125	25	
Toluene	<0.00200	0.100	0.100	100	0.100	0.0991	99	1	70-125	25	
Ethylbenzene	<0.00100	0.100	0.109	109	0.100	0.108	108	1	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.218	109	0.200	0.214	107	2	70-131	25	
o-Xylene	<0.00100	0.100	0.103	103	0.100	0.101	101	2	71-133	25	

Analyst: ASA **Date Prepared:** 08/24/2011 **Date Analyzed:** 08/25/2011

Lab Batch ID: 868312 **Sample:** 610433-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.110	110	0.100	0.115	115	4	70-125	25	
Toluene	<0.00200	0.100	0.0970	97	0.100	0.102	102	5	70-125	25	
Ethylbenzene	<0.00100	0.100	0.106	106	0.100	0.111	111	5	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.211	106	0.200	0.221	111	5	70-131	25	
o-Xylene	<0.00100	0.100	0.0979	98	0.100	0.106	106	8	71-133	25	

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

Form 3 - MSD Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order # : 426114 **Project ID:** 2009-084

Lab Batch ID: 868039 **QC- Sample ID:** 426114-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 08/23/2011 **Date Prepared:** 08/22/2011 **Analyst:** ASA

Reporting Units: mg/L

BTEX by EPA 8021 Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.113	113	0.100	0.110	110	3	70-125	25	
Toluene	<0.00200	0.100	0.0994	99	0.100	0.0953	95	4	70-125	25	
Ethylbenzene	<0.00100	0.100	0.106	106	0.100	0.104	104	2	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.209	105	0.200	0.200	100	4	70-131	25	
o-Xylene	<0.00100	0.100	0.100	100	0.100	0.0974	97	3	71-133	25	

Lab Batch ID: 868312 **QC- Sample ID:** 426116-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 08/25/2011 **Date Prepared:** 08/24/2011 **Analyst:** ASA

Reporting Units: mg/L

BTEX by EPA 8021 Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	0.00258	0.100	0.115	112	0.100	0.113	110	2	70-125	25	
Toluene	<0.00200	0.100	0.0998	100	0.100	0.0979	98	2	70-125	25	
Ethylbenzene	<0.00100	0.100	0.108	108	0.100	0.106	106	2	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.214	107	0.200	0.211	106	1	70-131	25	
o-Xylene	<0.00100	0.100	0.101	101	0.100	0.0995	100	1	71-133	25	

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

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

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

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Ben J. Arguijo

Company Name: Basin Environmental Service Technologies, LLC

Company Address: P. O. Box 301

City/State/Zip: Lovington, NM 88260

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

Sampler Signature: Dakotah Ward e-mail: bjarguijo@basinenv.com

Project Name: DCP Plant to Lea Station 6" Section 31

Project #: 2009-084

Project Loc: Lea County, NM

PO #: PAA - J. Henry

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

(lab use only)

ORDER #: 426114

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 / 5B	TOTAL: TPH: TX 1005 / TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
001	MW-2			08/17/11	1625		3	X		X						GW									X					X
002	MW-3			08/17/11	1430		3	X		X						GW									X					X
003	MW-4			08/17/11	1510		3	X		X						GW									X					X
004	MW-5			08/17/11	1600		3	X		X						GW									X					X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Dakotah Ward	8/17/11	1745		8/17/11	1745
Relinquished by:	Date	Time	Received by:	Date	Time
	8/19/11	0800	Kristyna Bernal	8/17/11	800
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
Kristyna Bernal	8/19/11	11:58	A. Hinojos	8/19/11	11:58

Laboratory Comments:

Sample Containers Intact?	Y N
VOCs Free of Headspace?	Y N
Labels on container(s)	Y N
Custody seals on container(s)	Y N
Custody seals on cooler(s)	Y N
Sample Hand Delivered	Y N
by Sampler/Client Rep. ?	
by Courier? UPS DHL FedEx Lone Star	
40 mL VOAs	
Temperature Upon Receipt:	5.5 °C

Final 1.000

Prelogin / Nonconformance Report - Sample Log-In

Client: Plains
Date/Time: 8/19/11 11:58
Lab ID # : 426114
Initials: AH

Sample Receipt Checklist

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

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	5.5 °C	lbs	°C	lbs	°C	lbs	°C	lbs	°C

Nonconformance Documentation

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

Regarding: _____

Corrective Action Taken: _____

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

Analytical Report 432429

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

DCP Plant to Lea Station 6" Section 31

2009-084

08-DEC-11

Collected By: Client

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

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

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

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

08-DEC-11

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

Reference: XENCO Report No: **432429**
DCP Plant to Lea Station 6" Section 31
Project Address: Lea County, NM

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 432429. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 432429 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron II
Odessa Laboratory Manager

XENCO Laboratories

Sample Cross Reference 432429

PLAINS ALL AMERICAN EH&S, Midland, TX

DCP Plant to Lea Station 6" Section 31

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-2	W	11-29-11 12:30		432429-001
MW-3	W	11-29-11 13:00		432429-002
MW-4	W	11-29-11 13:55		432429-003
MW-5	W	11-29-11 14:00		432429-004

CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S
Project Name: DCP Plant to Lea Station 6" Section 31

Project ID:	*2009-084*	*Report Date:*	*08-DEC-11*
Work Order Number:	*432429*	*Date Received:*	*11/30/2011*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Certificate of Analys ummary 432429

PLAINS ALL AMERICA. .H&S, Midland, TX

Project Name: DCP Plant to Lea Station 6" Section 31

Project Id: 2009-084
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Wed Nov-30-11 02:37 pm
Report Date: 08-DEC-11
Project Manager: Brent Barron II

Analysis Requested	*Lab Id:*	432429-001		432429-002		432429-003		432429-004			
	Field Id:	MW-2		MW-3		MW-4		MW-5			
	Depth:										
	Matrix:	WATER		WATER		WATER		WATER			
	Sampled:	Nov-29-11 12:30		Nov-29-11 13:00		Nov-29-11 13:55		Nov-29-11 14:00			
BTEX by EPA 8021	*Extracted:*	Dec-02-11 16:39		Dec-02-11 16:39		Dec-02-11 16:39		Dec-02-11 16:39			
	Analyzed:	Dec-02-11 23:58		Dec-03-11 01:51		Dec-03-11 02:14		Dec-03-11 02:37			
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL		
Benzene		ND	0.00100	0.00500	0.00100	ND	0.00100	0.233	0.00100		
Toluene		ND	0.00200	ND	0.00200	ND	0.00200	0.00730	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	0.00200	0.00200		
o-Xylene		ND	0.00100	ND	0.00100	ND	0.00100	0.00188	0.00100		
Xylenes, Total		ND	0.00100	ND	0.00100	ND	0.00100	0.00388	0.00100		
Total BTEX		ND	0.00100	0.00500	0.00100	ND	0.00100	0.244	0.00100		

Brent Barron II
Odessa Laboratory Manager

Certificate of Analysis Summary 432429

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: DCP Plant to Lea Station 6" Section 31

Project Id: 2009-084
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Wed Nov-30-11 02:37 pm
Report Date: 08-DEC-11
Project Manager: Brent Barron II

Analysis Requested	*Lab Id:*	432429-001	432429-002	432429-003	432429-004		
	Field Id:	MW-2	MW-3	MW-4	MW-5		
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER		
	Sampled:	Nov-29-11 12:30	Nov-29-11 13:00	Nov-29-11 13:55	Nov-29-11 14:00		
SVOA PAHs List SUB: TX104704215	*Extracted:*				Dec-05-11 10:12		
	Analyzed:				Dec-06-11 16:13		
	Units/RL:				mg/L	RL	
Acenaphthene					ND	0.0112	
Acenaphthylene					ND	0.0112	
Anthracene					ND	0.0112	
Benzo(a)anthracene					ND	0.0112	
Benzo(a)pyrene					ND	0.0112	
Benzo(b)fluoranthene					ND	0.0112	
Benzo(k)fluoranthene					ND	0.0112	
Benzo(g,h,i)perylene					ND	0.0112	
Chrysene					ND	0.0112	
Dibenz(a,h)anthracene					ND	0.0112	
Fluoranthene					ND	0.0112	
Fluorene					ND	0.0112	
Indeno(1,2,3-c,d)Pyrene					ND	0.0112	
1-Methylnaphthalene					ND	0.00559	
2-Methylnaphthalene					ND	0.0112	
Naphthalene					ND	0.0112	
Phenanthrene					ND	0.0112	
Pyrene					ND	0.0112	

Brent Barron II
Odessa Laboratory Manager

XENCO Laboratories

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

***** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation. ^ NELAC or State program does not offer Accreditation at this time.

Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Orders : 432429,

Project ID: 2009-084

Lab Batch #: 876337 **Sample:** 432429-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/02/11 23:58

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0280	0.0300	93	80-120	
4-Bromofluorobenzene	0.0291	0.0300	97	80-120	

Lab Batch #: 876337 **Sample:** 432429-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/03/11 01:51

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0251	0.0300	84	80-120	
4-Bromofluorobenzene	0.0261	0.0300	87	80-120	

Lab Batch #: 876337 **Sample:** 432429-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/03/11 02:14

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0263	0.0300	88	80-120	
4-Bromofluorobenzene	0.0268	0.0300	89	80-120	

Lab Batch #: 876337 **Sample:** 432429-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/03/11 02:37

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0279	0.0300	93	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

ork Orders : 432429,

Project ID: 2009-084

Lab Batch #: 876470 **Sample:** 432429-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/06/11 16:13

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.0452	0.0559	81	44-117	
2-Fluorophenol	0.0253	0.0559	45	30-100	
Nitrobenzene-d5	0.0442	0.0559	79	46-111	
Phenol-d6	0.0152	0.0559	27	15-94	
Terphenyl-D14	0.0589	0.0559	105	46-126	
2,4,6-Tribromophenol	0.0463	0.0559	83	48-117	

Lab Batch #: 876337 **Sample:** 614999-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/02/11 19:48

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

Lab Batch #: 876470 **Sample:** 614891-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/06/11 11:56

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.0453	0.0500	91	44-117	
2-Fluorophenol	0.0327	0.0500	65	30-100	
Nitrobenzene-d5	0.0438	0.0500	88	46-111	
Phenol-d6	0.0227	0.0500	45	15-94	
Terphenyl-D14	0.0547	0.0500	109	46-126	
2,4,6-Tribromophenol	0.0351	0.0500	70	48-117	

Lab Batch #: 876337 **Sample:** 614999-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/02/11 18:17

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0294	0.0300	98	80-120	
4-Bromofluorobenzene	0.0289	0.0300	96	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Orders : 432429, **Project ID:** 2009-084

Lab Batch #: 876470 **Sample:** 614891-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/06/11 12:19

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.0481	0.0500	96	44-117	
2-Fluorophenol	0.0346	0.0500	69	30-100	
Nitrobenzene-d5	0.0462	0.0500	92	46-111	
Phenol-d6	0.0246	0.0500	49	15-94	
Terphenyl-D14	0.0502	0.0500	100	46-126	
2,4,6-Tribromophenol	0.0448	0.0500	90	48-117	

Lab Batch #: 876337 **Sample:** 614999-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/02/11 18:40

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0280	0.0300	93	80-120	
4-Bromofluorobenzene	0.0278	0.0300	93	80-120	

Lab Batch #: 876470 **Sample:** 614891-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/06/11 12:43

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.0484	0.0500	97	44-117	
2-Fluorophenol	0.0349	0.0500	70	30-100	
Nitrobenzene-d5	0.0465	0.0500	93	46-111	
Phenol-d6	0.0256	0.0500	51	15-94	
Terphenyl-D14	0.0505	0.0500	101	46-126	
2,4,6-Tribromophenol	0.0460	0.0500	92	48-117	

Lab Batch #: 876337 **Sample:** 432132-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/03/11 00:21

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0300	0.0300	100	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

ork Orders : 432429,

Project ID: 2009-084

Lab Batch #: 876337 **Sample:** 432132-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/03/11 00:43

BTEX by EPA 8021	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0274	0.0300	91	80-120	
4-Bromofluorobenzene	0.0288	0.0300	96	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BSD Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order #: 432429 **Project ID:** 2009-084

Analyst: ASA **Date Prepared:** 12/02/2011 **Date Analyzed:** 12/02/2011

Lab Batch ID: 876337 **Sample:** 614999-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
BTEX by EPA 8021 **Analytes**	**Blank Sample Result [A]**	**Spike Added [B]**	**Blank Spike Result [C]**	**Blank Spike %R [D]**	**Spike Added [E]**	**Blank Spike Duplicate Result [F]**	**Blk. Spk Dup. %R [G]**	**RPD %**	**Control Limits %R**	**Control Limits %RPD**	**Flag**
Benzene	<0.00100	0.100	0.102	102	0.100	0.101	101	1	70-125	25	
Toluene	<0.00200	0.100	0.104	104	0.100	0.103	103	1	70-125	25	
Ethylbenzene	<0.00100	0.100	0.110	110	0.100	0.108	108	2	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.221	111	0.200	0.215	108	3	70-131	25	
o-Xylene	<0.00100	0.100	0.111	111	0.100	0.108	108	3	71-133	25	

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

Xenco Laboratories

BS / BSD Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order #: 432429 **Project ID:** 2009-084

Analyst: WEW **Date Prepared:** 12/05/2011 **Date Analyzed:** 12/06/2011

Lab Batch ID: 876470 **Sample:** 614891-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

SVOA PAHs List Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Acenaphthene	<0.0100	0.0500	0.0465	93	0.0500	0.0478	96	3	27-132	31	
Acenaphthylene	<0.0100	0.0500	0.0446	89	0.0500	0.0455	91	2	46-108	25	
Anthracene	<0.0100	0.0500	0.0459	92	0.0500	0.0469	94	2	47-145	25	
Benzo(a)anthracene	<0.0100	0.0500	0.0477	95	0.0500	0.0482	96	1	33-143	25	
Benzo(a)pyrene	<0.0100	0.0500	0.0427	85	0.0500	0.0436	87	2	65-135	25	
Benzo(b)fluoranthene	<0.0100	0.0500	0.0432	86	0.0500	0.0458	92	6	24-159	25	
Benzo(k)fluoranthene	<0.0100	0.0500	0.0483	97	0.0500	0.0486	97	1	25-125	25	
Benzo(g,h,i)perylene	<0.0100	0.0500	0.0456	91	0.0500	0.0459	92	1	65-135	25	
Chrysene	<0.0100	0.0500	0.0466	93	0.0500	0.0466	93	0	65-135	25	
Dibenz(a,h)anthracene	<0.0100	0.0500	0.0454	91	0.0500	0.0461	92	2	50-125	25	
Fluoranthene	<0.0100	0.0500	0.0427	85	0.0500	0.0431	86	1	47-125	25	
Fluorene	<0.0100	0.0500	0.0476	95	0.0500	0.0488	98	2	48-139	25	
Indeno(1,2,3-c,d)Pyrene	<0.0100	0.0500	0.0411	82	0.0500	0.0423	85	3	27-160	25	
Naphthalene	<0.0100	0.0500	0.0469	94	0.0500	0.0477	95	2	26-175	25	
Phenanthrene	<0.0100	0.0500	0.0458	92	0.0500	0.0460	92	0	65-135	25	
Pyrene	<0.0100	0.0500	0.0471	94	0.0500	0.0480	96	2	23-152	31	

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

Form 3 - MS / MSD Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order # : 432429 **Project ID:** 2009-084

Lab Batch ID: 876337 **QC- Sample ID:** 432132-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 12/03/2011 **Date Prepared:** 12/02/2011 **Analyst:** ASA

Reporting Units: mg/L

BTEX by EPA 8021 Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0993	99	0.100	0.0972	97	2	70-125	25	
Toluene	<0.00200	0.100	0.102	102	0.100	0.0987	99	3	70-125	25	
Ethylbenzene	<0.00100	0.100	0.105	105	0.100	0.103	103	2	71-129	25	
m_p-Xylenes	<0.00200	0.200	0.207	104	0.200	0.203	102	2	70-131	25	
o-Xylene	<0.00100	0.100	0.103	103	0.100	0.102	102	1	71-133	25	

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

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

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

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

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

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

Project Name: DCP Plant to Lea Station 6" Section 31
Project #: 2009-084
Project Loc: Lea County, NM
PO #: PAA - J. Henry
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 432429

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	TOTAL: BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	PAH	Chlorides		RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
01	MW-2			11/29/11	12:30		3	X		X						GW									X							X
02	MW-3			11/29/11	13:00		3	X		X						GW									X							X
03	MW-4			11/29/11	13:55		3	X		X						GW									X							X
04	MW-5			11/29/11	14:00		3	X		X						GW									X			X				X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Miguel Sanchez	11/30/11	1437			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			[illegible]	11/30/11	1437

Laboratory Comments:

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

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 2.0 °C

Final 1.000

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

Prelogin / Nonconformance Report - Sample Log-In

Client: Basin Env. / Plains

Date/Time: 11.30.11 14:37

Lab ID #: 432429

Initials: TB

Sample Receipt Checklist

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

18. Cooler 1 No.	Cooler 2 No.	Cooler 3 No.	Cooler 4 No.	Cooler 5 No.
lbs 2.0 °C	lbs °C	lbs °C	lbs °C	lbs °C

Nonconformance Documentation

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

Regarding: _____

_____

Corrective Action Taken: _____

_____

_____

_____

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

☐ Initial and Backup Temperature confirm out of temperature conditions

☐ Client understands and would like to proceed with analysis

Analytical Report 433648

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

DCP Plant to Lea Station 6" Section 31

2009-084

27-DEC-11

Collected By: Client

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

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

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

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

27-DEC-11

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

Reference: XENCO Report No: **433648**
DCP Plant to Lea Station 6" Section 31
Project Address: Lea County, NM

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 433648. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 433648 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron II
Odessa Laboratory Manager

XENCO Laboratories

Sample Cross Reference 433648

PLAINS ALL AMERICAN EH&S, Midland, TX

DCP Plant to Lea Station 6" Section 31

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-3	W	12-16-11 12:40		433648-001

CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S
Project Name: DCP Plant to Lea Station 6" Section 31

Project ID:	*2009-084*	*Report Date:*	*27-DEC-11*
Work Order Number:	*433648*	*Date Received:*	*12/19/2011*

Sample receipt non conformances and comments:
Sample -002 (MW-4) was broken during shipment to Houston office, client will resample.

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-877812 SVOA PAHs List by SW-846 8270C
SW8270C

Batch 877812, Nitrobenzene-d5 recovered above QC limits Data confirmed by re-analysis. Samples affected are: 615639-1-BKS.
Terphenyl-D14 recovered above QC limits Data confirmed by re-analysis. Samples affected are: 615639-1-BLK,433648-001.

SW8270C

Batch 877812, Acenaphthylene recovered above QC limits in the laboratory control sample. Samples affected are: 433648-001.

Surrogates recovered high, however all analytes were non-detect. Compounds in QC recovered high, however all samples were non-detect. Samples reported as is

Certificate of Analysis Summary 433648

PLAINS ALL AMERICA H&S, Midland, TX

Project Name: DCP Plant to Lea Station 6" Section 31

Project Id: 2009-084
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Mon Dec-19-11 10:50 am
Report Date: 27-DEC-11
Project Manager: Brent Barron II

Analysis Requested							
	Lab Id:	433648-001					
	Field Id:	MW-3					
	Depth:						
	Matrix:	WATER					
	Sampled:	Dec-16-11 12:40					
SVOA PAHs List	*Extracted:*	Dec-20-11 15:09					
SUB: TX104704215	*Analyzed:*	Dec-23-11 11:08					
	Units/RL:	mg/L	RL				
Acenaphthene		ND	0.0111				
Acenaphthylene		ND	0.0111				
Anthracene		ND	0.0111				
Benzo(a)anthracene		ND	0.0111				
Benzo(a)pyrene		ND	0.0111				
Benzo(b)fluoranthene		ND	0.0111				
Benzo(k)fluoranthene		ND	0.0111				
Benzo(g,h,i)perylene		ND	0.0111				
Chrysene		ND	0.0111				
Dibenz(a,h)anthracene		ND	0.0111				
Fluoranthene		ND	0.0111				
Fluorene		ND	0.0111				
Indeno(1,2,3-c,d)Pyrene		ND	0.0111				
1-Methylnaphthalene		ND	0.00556				
2-Methylnaphthalene		ND	0.0111				
Naphthalene		ND	0.0111				
Phenanthrene		ND	0.0111				
Pyrene		ND	0.0111				

Brent Barron II
Odessa Laboratory Manager

XENCO Laboratories

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation. ^ NELAC or State program does not offer Accreditation at this time.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

ork Orders : 433648,

Project ID: 2009-084

Lab Batch #: 877812 **Sample:** 433648-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/23/11 11:08

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.0585	0.0556	105	44-117	
2-Fluorophenol	0.0284	0.0556	51	30-100	
Nitrobenzene-d5	0.0594	0.0556	107	46-111	
Phenol-d6	0.0158	0.0556	28	15-94	
Terphenyl-D14	0.0726	0.0556	131	46-126	**
2,4,6-Tribromophenol	0.0511	0.0556	92	48-117	

Lab Batch #: 877812 **Sample:** 615639-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/23/11 08:25

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.0538	0.0500	108	44-117	
2-Fluorophenol	0.0460	0.0500	92	30-100	
Nitrobenzene-d5	0.0539	0.0500	108	46-111	
Phenol-d6	0.0424	0.0500	85	15-94	
erphenyl-D14	0.0654	0.0500	131	46-126	**
2,4,6-Tribromophenol	0.0445	0.0500	89	48-117	

Lab Batch #: 877812 **Sample:** 615639-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/23/11 08:48

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.0572	0.0500	114	44-117	
2-Fluorophenol	0.0476	0.0500	95	30-100	
Nitrobenzene-d5	0.0558	0.0500	112	46-111	**
Phenol-d6	0.0472	0.0500	94	15-94	
Terphenyl-D14	0.0580	0.0500	116	46-126	
2,4,6-Tribromophenol	0.0518	0.0500	104	48-117	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Orders : 433648,

Project ID: 2009-084

Lab Batch #: 877812 **Sample:** 615639-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/23/11 09:12

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.0540	0.0500	108	44-117	
2-Fluorophenol	0.0451	0.0500	90	30-100	
Nitrobenzene-d5	0.0530	0.0500	106	46-111	
Phenol-d6	0.0450	0.0500	90	15-94	
Terphenyl-D14	0.0557	0.0500	111	46-126	
2,4,6-Tribromophenol	0.0495	0.0500	99	48-117	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BS. .ecoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order #: 433648 **Project ID:** 2009-084

Analyst: MCH **Date Prepared:** 12/20/2011 **Date Analyzed:** 12/23/2011

Lab Batch ID: 877812 **Sample:** 615639-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

SVOA PAHs List Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Acenaphthene	<0.0100	0.0500	0.0548	110	0.0500	0.0537	107	2	27-132	31	
Acenaphthylene	<0.0100	0.0500	0.0549	110	0.0500	0.0533	107	3	46-108	25	H
Anthracene	<0.0100	0.0500	0.0504	101	0.0500	0.0494	99	2	47-145	25	
Benzo(a)anthracene	<0.0100	0.0500	0.0515	103	0.0500	0.0506	101	2	33-143	25	
Benzo(a)pyrene	<0.0100	0.0500	0.0510	102	0.0500	0.0510	102	0	65-135	25	
Benzo(b)fluoranthene	<0.0100	0.0500	0.0506	101	0.0500	0.0479	96	5	24-159	25	
Benzo(k)fluoranthene	<0.0100	0.0500	0.0478	96	0.0500	0.0494	99	3	25-125	25	
Benzo(g,h,i)perylene	<0.0100	0.0500	0.0472	94	0.0500	0.0464	93	2	65-135	25	
Chrysene	<0.0100	0.0500	0.0542	108	0.0500	0.0530	106	2	65-135	25	
Dibenz(a,h)anthracene	<0.0100	0.0500	0.0538	108	0.0500	0.0533	107	1	50-125	25	
Fluoranthene	<0.0100	0.0500	0.0523	105	0.0500	0.0513	103	2	47-125	25	
Fluorene	<0.0100	0.0500	0.0540	108	0.0500	0.0525	105	3	48-139	25	
Indeno(1,2,3-c,d)Pyrene	<0.0100	0.0500	0.0541	108	0.0500	0.0535	107	1	27-160	25	
Naphthalene	<0.0100	0.0500	0.0504	101	0.0500	0.0490	98	3	26-175	25	
Phenanthrene	<0.0100	0.0500	0.0476	95	0.0500	0.0464	93	3	65-135	25	
Pyrene	<0.0100	0.0500	0.0524	105	0.0500	0.0513	103	2	23-152	31	

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

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Ben J. Arguijo

Company Name: Basin Environmental Service Technologies, LLC

Company Address: P. O. Box 301

City/State/Zip: Lovington, NM 88260

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

Sampler Signature:

e-mail: bjarguijo@basinenv.com

Project Name: DCP Plant to Lea Station 6" Section 31

Project #: 2009-084

Project Loc: Lea County, NM

PO #: PAA - J. Henry

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

(lab use only)

ORDER #: 433648

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TOTAL: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	PAH	Chlorides		RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
01	MW-3			12/16/11	1240		1	X								GW												X				X
02	MW-4			12/16/11	1215		1	X								GW												X				X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
	12/16/11	10:50			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Cindra	12-19-11	10:50

Laboratory Comments:

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

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 3 °C

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

Prelogin / Nonconformance Report - Sample Log-In

Client: Basin / Plains

Date/Time: 12-19-11 10:50

Lab ID #: 433648

Initials: AE

Sample Receipt Checklist

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

Nonconformance Documentation

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

Regarding: _____

_____

Corrective Action Taken: _____

_____

_____

_____

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

Analytical Report 433833

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

DCP Plant to Lea Station 6" Section 31

2009-084

29-DEC-11

Collected By: Client

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

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

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

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

29-DEC-11

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

Reference: XENCO Report No: **433833**
DCP Plant to Lea Station 6" Section 31
Project Address: Lea County, NM

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 433833. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 433833 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron II
Odessa Laboratory Manager

XENCO Laboratories

Sample Cross Reference 433833

PLAINS ALL AMERICAN EH&S, Midland, TX

DCP Plant to Lea Station 6" Section 31

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-4	W	12-21-11 09:30		433833-001

CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S
Project Name: DCP Plant to Lea Station 6" Section 31

Project ID:	*2009-084*	*Report Date:*	*29-DEC-11*
Work Order Number:	*433833*	*Date Received:*	*12/21/2011*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 433833

PLAINS ALL AMERICA... EH&S, Midland, TX

Project Name: DCP Plant to Lea Station 6" Section 31

Project Id: 2009-084
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Wed Dec-21-11 01:20 pm
Report Date: 29-DEC-11
Project Manager: Brent Barron II

Analysis Requested							
	Lab Id:	433833-001					
	Field Id:	MW-4					
	Depth:						
	Matrix:	WATER					
	Sampled:	Dec-21-11 09:30					
SVOA PAHs List by EPA 8270C SUB: E871002	*Extracted:*	Dec-28-11 16:00					
	Analyzed:	Dec-29-11 15:45					
	Units/RL:	mg/L	RL				
Acenaphthene		ND	0.0102				
Acenaphthylene		ND	0.0102				
Anthracene		ND	0.0102				
Benzo(a)anthracene		ND	0.0102				
Benzo(a)pyrene		ND	0.0102				
Benzo(b)fluoranthene		ND	0.0102				
Benzo(k)fluoranthene		ND	0.0102				
Benzo(g,h,i)perylene		ND	0.0102				
Chrysene		ND	0.0102				
Dibenz(a,h)Anthracene		ND	0.0102				
Fluoranthene		ND	0.0102				
Fluorene		ND	0.0102				
Indeno(1,2,3-c,d)Pyrene		ND	0.0102				
1-Methylnaphthalene		ND	0.00510				
2-Methylnaphthalene		ND	0.0102				
Naphthalene		ND	0.0102				
Phenanthrene		ND	0.0102				
Pyrene		ND	0.0102				

Brent Barron II
Odessa Laboratory Manager

Final 1.000

XENCO Laboratories

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation. ^ NELAC or State program does not offer Accreditation at this time.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

ork Orders : 433833,

Project ID: 2009-084

Lab Batch #: 878168 **Sample:** 433833-001 / SMP **Batch:** 1 **Matrix:** Water

Units: ug/L **Date Analyzed:** 12/29/11 15:45

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	40.4	51.0	79	44-117	
2-Fluorophenol	25.8	51.0	51	30-100	
Nitrobenzene-d5	43.6	51.0	85	46-111	
Phenol-d6	14.5	51.0	28	15-94	
Terphenyl-D14	60.1	51.0	118	46-126	
2,4,6-Tribromophenol	45.0	51.0	88	48-117	

Lab Batch #: 878168 **Sample:** 615966-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: ug/L **Date Analyzed:** 12/29/11 11:50

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	46.0	50.0	92	44-117	
2-Fluorophenol	39.6	50.0	79	30-100	
Nitrobenzene-d5	46.8	50.0	94	46-111	
Phenol-d6	30.6	50.0	61	15-94	
erphenyl-D14	58.8	50.0	118	46-126	
2,4,6-Tribromophenol	42.5	50.0	85	48-117	

Lab Batch #: 878168 **Sample:** 615966-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: ug/L **Date Analyzed:** 12/29/11 12:37

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	48.0	50.0	96	44-117	
2-Fluorophenol	39.0	50.0	78	30-100	
Nitrobenzene-d5	47.4	50.0	95	46-111	
Phenol-d6	33.1	50.0	66	15-94	
Terphenyl-D14	50.1	50.0	100	46-126	
2,4,6-Tribromophenol	51.4	50.0	103	48-117	

* Surrogate outside of Laboratory QC limits

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

*** *Poor recoveries due to dilution*

Surrogate Recovery [D] = 100 * A / B

results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Orders : 433833,

Project ID: 2009-084

Lab Batch #: 878168 **Sample:** 615966-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: ug/L **Date Analyzed:** 12/29/11 13:01

SVOA PAHs List by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	46.8	50.0	94	44-117	
2-Fluorophenol	39.1	50.0	78	30-100	
Nitrobenzene-d5	48.0	50.0	96	46-111	
Phenol-d6	33.1	50.0	66	15-94	
Terphenyl-D14	48.4	50.0	97	46-126	
2,4,6-Tribromophenol	50.6	50.0	101	48-117	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Xenco Laboratories

BS / BSD Recoveries

Project Name: DCP Plant to Lea Station 6" Section 31

Work Order #: 433833 **Project ID:** 2009-084

Analyst: MCH **Date Prepared:** 12/28/2011 **Date Analyzed:** 12/29/2011

Lab Batch ID: 878168 **Sample:** 615966-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

SVOA PAHs List by EPA 8270C Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Acenaphthene	<0.0100	0.0500	0.0489	98	0.0500	0.0480	96	2	54-114	25	
Acenaphthylene	<0.0100	0.0500	0.0490	98	0.0500	0.0477	95	3	53-113	25	
Anthracene	<0.0100	0.0500	0.0483	97	0.0500	0.0489	98	1	56-116	25	
Benzo(a)anthracene	<0.0100	0.0500	0.0487	97	0.0500	0.0481	96	1	59-116	25	
Benzo(a)pyrene	<0.0100	0.0500	0.0499	100	0.0500	0.0503	101	1	58-118	25	
Benzo(b)fluoranthene	<0.0100	0.0500	0.0454	91	0.0500	0.0472	94	4	54-123	25	
Benzo(k)fluoranthene	<0.0100	0.0500	0.0517	103	0.0500	0.0502	100	3	52-122	25	
Benzo(g,h,i)perylene	<0.0100	0.0500	0.0516	103	0.0500	0.0497	99	4	47-129	25	
Chrysene	<0.0100	0.0500	0.0482	96	0.0500	0.0469	94	3	58-116	25	
Dibenz(a,h)Anthracene	<0.0100	0.0500	0.0483	97	0.0500	0.0474	95	2	46-131	25	
Fluoranthene	<0.0100	0.0500	0.0481	96	0.0500	0.0491	98	2	55-120	25	
Fluorene	<0.0100	0.0500	0.0482	96	0.0500	0.0479	96	1	56-114	25	
Indeno(1,2,3-c,d)Pyrene	<0.0100	0.0500	0.0513	103	0.0500	0.0508	102	1	44-132	25	
1-Methylnaphthalene	<0.00500	0.0500	0.0465	93	0.0500	0.0468	94	1	47-113	25	
2-Methylnaphthalene	<0.0100	0.0500	0.0468	94	0.0500	0.0475	95	1	57-106	25	
Naphthalene	<0.0100	0.0500	0.0463	93	0.0500	0.0463	93	0	53-110	25	
Phenanthrene	<0.0100	0.0500	0.0484	97	0.0500	0.0489	98	1	56-116	25	
Pyrene	<0.0100	0.0500	0.0500	100	0.0500	0.0472	94	6	57-119	25	

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

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

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

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

Project Name: DCP Plant to Lea Station 6" Section 31
Project #: 2009-084
Project Loc: Lea County, NM
PO #: PAA - J. Henry
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 433833

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix (DW=Drinking Water SL=Sludge; GW = Groundwater S=Soil/Solid; NP=Non-Potable Specify Other)	Analyze For: TCLP: TPH: 418.1 8015M	TCLP: TPH: TX 1005 TX 1006	TCLP: Cations (Ca, Mg, Na, K)	TCLP: Anions (Cl, SO4, Alkalinity)	TCLP: SAR / ESP / CEC	TCLP: Metals: As Ag Ba Cd Cr Pb Hg Se	TCLP: Volatiles	TCLP: Semivolatiles	TOTAL: BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	PAH	Chlorides	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
	MW-4			12/21/11	0930		1	X								GW									X				X		X

Special instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	12-21-11	03:20			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: [signature]	12/21/11	9:13:20

Laboratory Comments:

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

Temperature Upon Receipt: 12.0 °C

Final 1.000

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

Prelogin / Nonconformance Report - Sample Log-In

Client: Basin Environmental

Date/Time: 12-21-11 13:20

Lab ID # : 433883

Initials: TB

Sample Receipt Checklist

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

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	6.2 °C	lbs	°C	lbs	°C	lbs	°C	lbs	°C

Nonconformance Documentation

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

Regarding: _____

Corrective Action Taken: _____

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

Appendix B

Release Notification &

Corrective Action (Form C-141)

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

State of New Mexico
Energy Minerals and Natural Resources

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

RECEIVED
APR 29 2009
HOBBSOCD

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Plains Pipeline, LP	Contact	Jason Henry
Address	2530 Hwy 214 – Denver City, Tx 79323	Telephone No.	(575) 441-1099
Facility Name	DCP Plant to Lea Station 6-inch Sec. 31	Facility Type	Pipeline

Surface Owner	Mineral Owner	Lease No.
NM SLO		

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
K	31	20S	37E					Lea

Latitude N 32.52733° Longitude W 103.2906°

NATURE OF RELEASE

Type of Release: Crude Oil	Volume of Release: 20 bbls	Volume Recovered: 0 bbls
Source of Release: 6" Steel Pipeline	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery: 04/02/2009 15:00
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? on 04/29/2009 Larry Johnson (initial estimate = 2-3 bbls based on small surface stain)	
By Whom? Jason Henry	Date and Hour: 04/29/2009 @ 09:00 (revised to reportable on 04/29/2009)	
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.*

External corrosion of 6" inch pipeline caused a release of crude oil. A clamp was installed on the pipeline to mitigate the release. Throughput for the subject line is 660 bbls/day and the operating pressure of the pipeline is 45 psi. The depth of the pipeline at the release point is approximately 2' bgs. The H2S concentration in the crude is less than 10 ppm and the gravity of the crude is 65.

Describe Area Affected and Cleanup Action Taken.*

The released crude resulted in a surface stain that measured approximately 6' x 8'. The impacted area will be remediated per applicable guidelines.

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: Jason Henry	OIL CONSERVATION DIVISION	
Printed Name: Jason Henry	Approved by District Supervisor: Larry Johnson ENVIRONMENTAL ENGINEER	
Title: Remediation Coordinator	Approval Date: 4-29-09	Expiration Date: 6-29-09
E-mail Address: jhenry@paalp.com	Conditions of Approval:	Attached ☐ IRP# 09.4.2166
Date: 04/29/2009 Phone: (575) 441-1099		

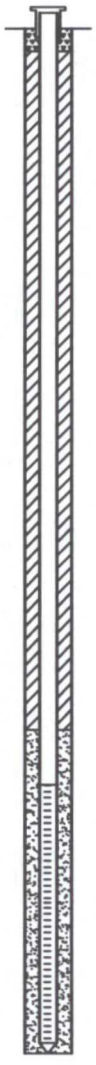
* Attach Additional Sheets If Necessary

Appendix C

Monitor Well Logs

Monitor Well MW-5

Drilling Depth	Petroleum Odor	Petroleum Stain	Soil Description
0	None	None	
5	None	None	0 - 14' bgs - Backfill
10	None	None	
15	None	None	14 - 21' bgs - Tan fine sand - Sandstone
20	None	None	21 - 23' bgs - Brownish red find sand - Sandstone
25	None	None	23 - 26' bgs - Tan find sand - Sandstone
30	None	None	26 - 37' bgs - Tan fine sand - Caliche - Sandstone
35	None	None	37 - 39' bgs - Tan fine sand
40	None	None	
45	None	None	
50	None	None	
55	None	None	
60	None	None	
65	None	None	39 - 95' bgs - Red fine - very fine sand
70	None	None	
75	None	None	
80	None	None	
85	None	None	
90	None	None	
95	None	None	



Monitor Well MW-5

Date Drilled: January 25, 2011
Thickness of Bentonite Seal: 63 Ft
Depth of Exploratory Boring: 95 Ft bgs
Depth to Groundwater: 83 Ft bgs
Ground Water Elevation:

- Indicates the PSH level measured on ____
- Indicates the groundwater level measured on March 24, 2011
- Indicates samples selected for Laboratory Analysis.
- PID: Head-space reading in ppm obtained with a photo-ionization detector.

- Grout Surface Seal
- Bentonite Pellet Seal
- Sand Pack
- Screen

Completion Notes

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

Monitor Well MW-5
DCP Plant to Lea Station 6-Inch Sec. 31
Lea County, New Mexico
Plains Pipeline, L.P.

Basin Environmental Service Technologies, LLC

Prep By: BJA	Checked By: BRB
March 16, 2012	