1R - 2166

Annual GW Mon. REPORTS

DATE:

2009

Basin Environmental Consulting, LLC

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Effective Solutions

RECEIVED

APR - 1 2010

Environmental Bureau
Oil Conservation Division

2009
ANNUAL MONITORING REPORT

DCP PLANT TO LEA STATION 6-INCH SECTION 31
NE ¼ SW ¼ 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 REF: 1RP-2166

PREPARED FOR:

PLAINS

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

PREPARED BY:

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

March 2010

Camille J. Bryant
Project Manager

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PLAINS
ALL AMERICAN

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APR - 1 2010

Environmental Bureau
Oil Conservation Division

March 30, 2010

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

Re: Plains All American – 2009 Annual Monitoring Reports
4 Sites in Lea County, New Mexico
1 Site in Eddy County, New Mexico

Dear Mr. Hansen:

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

Lovington Gathering WTI	1RP-838	Section 06, T17S, R37E, Lea County
Red Byrd #1	1R-0085	Section 01, T20S, R36E, Lea County
DCP Plant to Lea Sta. 6" #2	1R-2136	Section 31, T20S, R37E, Lea County
DCP Plant to Lea Sta. 6" Sec.31	1R-2166	Section 31, T20S, R37E, Lea County
Ballard Grayburg 5-Inch	2R-0053	Section 10, T18S, R29E, Eddy County

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

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

Sincerely,

Jason Henry

Jason Henry
Remediation Coordinator
Plains All American

CC: Larry Johnson, NMOCD, Hobbs, NM
Enclosures

INTRODUCTION

On behalf of Plains Marketing, L.P. (Plains), Basin Environmental Consulting, LLC (Basin) is pleased to submit this Annual Monitoring Report in compliance with the New Mexico Oil Conservation Division (NMOCD) letter of May 1998, requiring submittal of an Annual Monitoring Report by April 1 of each year. This report is intended to be viewed as a complete document with text, figures, tables, and appendices. This report presents the results of the quarterly groundwater monitoring events conducted in calendar year 2009 only. For reference, a Site Location Map is provided as Figure 1.

Groundwater monitoring was conducted during the 3rd and 4th quarters of 2009 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 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 NE ¼, SW ¼ of Section 31, Township 20 South, Range 37 East, in Lea County. The site latitude is 32.52733° North and the site longitude is 103.2906° West. 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 pipeline clamp on the pipeline to mitigate the release. The crude oil release resulted in a surface stain measuring approximately six (6) feet in width and eight (8) feet in length. Plains initially classified the release as a "non-reportable" release, upon further investigation Plains reclassified the release to a reportable status. 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. 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 total dissolved solid (TDS) concentration of 788 mg/L. Based on the analytical results of the submitted groundwater sample, Plains notified New Mexico Oil Conservation Division (NMOCD) representatives at 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 the 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 during excavation activities, 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. Monitor well boring logs are provided as Appendix B. 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 benzene, toluene, ethyl-benzene and xylene (BTEX) and total petroleum hydrocarbons (TPH) using EPA 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 (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 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 of the release point, in an up gradient position. 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 the submitted soil samples.

Monitor well MW-3 is located approximately seventy five (75) feet to the southwest of the release point, in a cross gradient position. 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. The 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 in 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 the submitted soil samples.

Monitor well MW-4 is located approximately seventy five (75) feet to the southeast of the release point, in a down gradient position. 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 the submitted soil samples.

Currently, a total of four (4) monitor wells are located on the DCP Plant to Lea Station 6-Inch Section 31 release site. Monitor wells MW-2, MW-3 and MW-4 are gauged and sampled on a quarterly schedule and monitor well MW-1 is monitored weekly. On September 29, 2009, during initial groundwater sampling activities, phase-separated hydrocarbons were observed in monitor well MW-1. Groundwater gauging and PSH recovery is conducted weekly at monitor well MW-1. During the reporting period, approximately fifty one (51) gallons (1.2 barrels) of PSH was recovered by manual recovery from monitor well MW-1.

FIELD ACTIVITIES

Product Recovery Efforts

A measurable thickness of PSH was detected in monitor well MW-1 during initial groundwater sampling activities. The average PSH thickness reported in monitor well MW-1 during the reporting period was 2.65 feet. The maximum PSH thickness was 4.16 feet on December 8, 2009. Currently, all recovered fluids are being disposed of at an NMOCD approved disposal.

The site monitor wells were gauged and sampled September 29 and December 10, 2009. During the sampling events, the monitor wells were purged of a minimum of three (3) well volumes of water or until the wells were dry using a PVC bailer or electrical Grundfos Pump. Groundwater was allowed to recharge and samples were obtained using disposable Teflon bailers. Water samples were stored in clean, glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a trailer mounted polystyrene tank and disposed at an NMOCD approved disposal in Monument, New Mexico.

Locations of the groundwater monitor wells and the inferred groundwater elevations, which were constructed from the measurements collected during the 2009 quarterly sampling events, are depicted on Figures 2A and 2B. The 2009 Groundwater Elevation Data is provided as Table 1.

The Groundwater Gradient Map, Figure 2B, indicates a general gradient of approximately 0.007 feet/foot to the south-southeast as measured between groundwater monitor wells MW-2 and MW-4. The corrected groundwater elevation ranged between 3,455.44 and 3,457.13 feet above mean sea level, in monitor well MW-4 on December 10, 2009 and in monitor well MW-2 on September 29, 2009, respectively.

LABORATORY RESULTS

Groundwater samples collected from the monitor wells during the quarterly monitoring events were delivered to Xenco Laboratories, formerly Environmental Laboratory of Texas, Odessa, Texas for determination of benzene, toluene, ethylbenzene and xylenes (BTEX) constituent concentrations by EPA Method SW846-8021b. Pursuant to an NMOCD request, the groundwater monitor wells were sampled annually for concentrations of Poly Aromatic

Hydrocarbons (PAH) utilizing EPA Method SW 8270C. A summary of Concentrations of Benzene and BTEX in Groundwater and Concentrations of Poly Aromatic Hydrocarbons (Semi-Volatiles) in Groundwater for 2009 are presented in Table 2 and Table 3, respectively. The laboratory reports are provided as Appendix A.

Monitor well MW-1 was not sampled during the 3rd quarter of 2009, due to the reported presence of PSH in the monitor well. Monitor well MW-1 was sampled during the 4th quarter of 2009 for BTEX, TPH and PAH concentrations. The analytical results of the groundwater collected from monitor well MW-1 indicated a benzene concentration of 19.0 mg/L, a toluene concentration of 13.09 mg/L, an ethylbenzene concentration of 0.812 mg/L and a total xylene concentration of 2.623 mg/L during the 4th quarter of 2009. BTEX constituent concentrations exceeded the NMOCD regulatory standard in monitor well MW-1 for the 4th quarter of 2009. Analytical results indicated a TPH concentration of 343 mg/L. Analytical results indicated PAH constituent concentrations were less than the appropriate laboratory MDL for each constituent during the 4th quarter of the reporting period. A summary of Concentrations of Total Petroleum Hydrocarbons in Groundwater is provided in Table 4.

Monitor well MW-2 was sampled during the 3rd and 4th quarters of 2009. Analytical results indicated benzene concentrations were less than the appropriate laboratory MDL and the NMOCD regulatory standard during the 3rd and 4th quarters of the reporting period. Toluene concentrations were less than the appropriate laboratory MDL and the NMOCD regulatory standard during the 3rd and 4th quarters of the reporting period. Ethylbenzene concentrations were less than the appropriate laboratory MDL and the NMOCD regulatory standard during the 3rd and 4th quarters of the reporting period. Total xylene concentrations were less than the appropriate laboratory MDL and the NMOCD regulatory standard during the 3rd and 4th quarters of the reporting period. The analytical results indicated PAH constituent concentrations were less than the appropriate laboratory MDL for each constituent during the 3rd quarter of the reporting period.

The analytical results for volatile organic compounds using EPA Method 8260, indicted all reported constituent concentrations were less than the appropriate laboratory MDL, with the exception of methylene chloride which was less than the maximum contaminant level NMWQCC drinking water standards of 0.1 mg/L. Methylene chloride is a compound not routinely detected at crude oil contaminated groundwater sites and is likely the result of laboratory error. A summary of Concentrations of Volatile Organic Compounds in Groundwater is provided as Table 5.

The analytical results for RCRA and NMWQCC metals using EPA Method 7470A indicated all reported constituent concentrations were less than the maximum contaminant level NMWQCC drinking water standards, with the exception of iron, which exhibited a concentration of 2.1 mg/L. The maximum contaminant level NMWQCC drinking water standard for iron is 1.0 mg/L. A summary of Concentrations of RCRA Metals and NMWQCC Metals in Groundwater is provided as Table 6.

The analytical results for anions and cations using EPA SW375.4, 325.3, 310, 160.1 and SW846 6010B, indicated all NMWQCC regulatory constituent concentrations were less than the

maximum contaminant level NMWQCC drinking water standards, with the exception of fluoride, which exhibited a concentration of 6.31 mg/L. The maximum contaminant level NMWQCC drinking water standard for fluoride is 1.6 mg/L. A summary of Concentrations of Anions/Cations in Groundwater is provided as Table 7.

Monitor well MW-3 was sampled during the 3rd and 4th quarters of 2009. Analytical results indicated benzene concentrations ranged from less than the laboratory MDL during the 3rd quarter to 0.0031 mg/L during the 4th quarter of 2009. Benzene concentrations were less than the NMOCD regulatory standard during the 3rd and 4th quarters of the reporting period. Toluene concentrations were less than the appropriate laboratory MDL and the NMOCD regulatory standard during the 3rd and 4th quarters of the reporting period. Ethylbenzene concentrations were less than the appropriate laboratory MDL and the NMOCD regulatory standard during the 3rd and 4th quarters of the reporting period. Total xylene concentrations were less than the appropriate laboratory MDL and the NMOCD regulatory standard during the 3rd and 4th quarters of the reporting period. The analytical results indicated PAH constituent concentrations were less than the appropriate laboratory MDL for each constituent during the 3rd quarter of the reporting period.

The analytical results for volatile organic compounds indicated all reported constituent concentrations were less than the appropriate laboratory MDL, with the exception of methylene chloride which was less than the maximum contaminant level NMWQCC drinking water standards of 0.1 mg/L. Methylene chloride is a compound not routinely detected at crude oil contaminated groundwater sites and is likely the result of laboratory error.

The analytical results for RCRA and NMWQCC metals indicated all reported constituent concentrations were less than the maximum contaminant level NMWQCC drinking water standards, with the exception of aluminum and iron, which exhibited a concentration of 6.51 mg/L and 5.9 mg/L, respectively. The maximum contaminant level NMWQCC drinking water standard for aluminum is 5.0 mg/L and 1.0 mg/L for iron.

The analytical results for anions and cations indicated all NMWQCC regulatory constituent concentrations were less than the maximum contaminant level NMWQCC drinking water standards, with the exception of chloride and fluoride, which exhibited concentrations of 268 mg/L and 6.01 mg/L, respectively. The maximum contaminant level NMWQCC drinking water standard for chloride is 250 mg/L and 1.6 mg/L for fluoride.

Monitor well MW-4 was sampled during the 3rd and 4th quarters of 2009. Analytical results indicated benzene concentrations were less than the appropriate laboratory MDL and the NMOCD regulatory standard during the 3rd and 4th quarters of the reporting period. Toluene concentrations were less than the appropriate laboratory MDL and the NMOCD regulatory standard during the 3rd and 4th quarters of the reporting period. Ethylbenzene concentrations were less than the appropriate laboratory MDL and the NMOCD regulatory standard during the 3rd and 4th quarters of the reporting period. Total xylene concentrations were less than the appropriate laboratory MDL and the NMOCD regulatory standard during the 3rd and 4th quarters of the reporting period. The analytical results indicated PAH constituent concentrations were less

than the appropriate laboratory MDL for each constituent during the 3rd quarter of the reporting period.

The analytical results for volatile organic compounds indicted all reported constituent concentrations were less than the appropriate laboratory MDL, with the exception of methylene chloride which was less than the maximum contaminant level NMWQCC drinking water standards of 0.1 mg/L.

The analytical results for RCRA and NMWQCC metals indicated all reported constituent concentrations were less than the maximum contaminant level NMWQCC drinking water standards, with the exception of iron, which exhibited a concentration of 1.86 mg/L. The maximum contaminant level NMWQCC drinking water standard for iron is 1.0 mg/L.

The analytical results for anions and cations indicated all NMWQCC regulatory constituent concentrations were less than the maximum contaminant level NMWQCC drinking water standards, with the exception of chloride and flouride, which exhibited concentrations of 307 mg/L and 7.52 mg/L, respectively. The maximum contaminant level NMWQCC drinking water standard for chloride is 250 mg/L and 1.6 mg/L for flouride.

Groundwater Concentration and Inferred PSH Extent Maps are provided as Figures 3A and 3B.

Laboratory analytical results were compared to NMOCD regulatory limits based on the New Mexico groundwater standards found in section 20.6.6.3103 of the New Mexico Administrative Code.

SUMMARY

This report presents the results of the monitoring activities for the 2009 annual monitoring period. Currently, there are four (4) groundwater monitor wells (MW-1, MW-2, MW-3 and MW-4) on-site.

The most recent Groundwater Gradient Map Figure 2B, indicates a general gradient of approximately 0.007 feet/foot to the south-southeast.

A measurable thickness of PSH was detected in monitor well MW-1 throughout the 2009 reporting period. The average PSH thickness reported in monitor well MW-1 during the reporting period was 2.65 feet. The maximum PSH thickness was 4.16 feet on December 8, 2009. During the reporting period approximately fifty one (51) gallons (1.2 barrels) of PSH was recovered by manual recovery, from monitor well MW-1.

Review of laboratory analytical results generated from analysis of the groundwater samples obtained during the 2009 monitoring period indicates benzene concentrations were less than the NMOCD regulatory standard in three (3) of the four (4) on-site monitor wells during both monitoring events conducted in the reporting period.

ANTICIPATED ACTIONS

PSH recovery will continue on a weekly schedule from monitor well MW-1. All fluids recovered from MW-1 will be disposed of at an NMOCD permitted disposal facility. Monitor wells MW-2, MW-3 and MW-4 will continue to be monitored and sampled quarterly. Results from the 2010 sampling events will be reported in the 2010 Annual Monitoring Report.

LIMITATIONS

Basin has prepared this Annual Monitoring Report to the best of its ability. No other warranty, expressed or implied, is made or intended.

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

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

DISTRIBUTION

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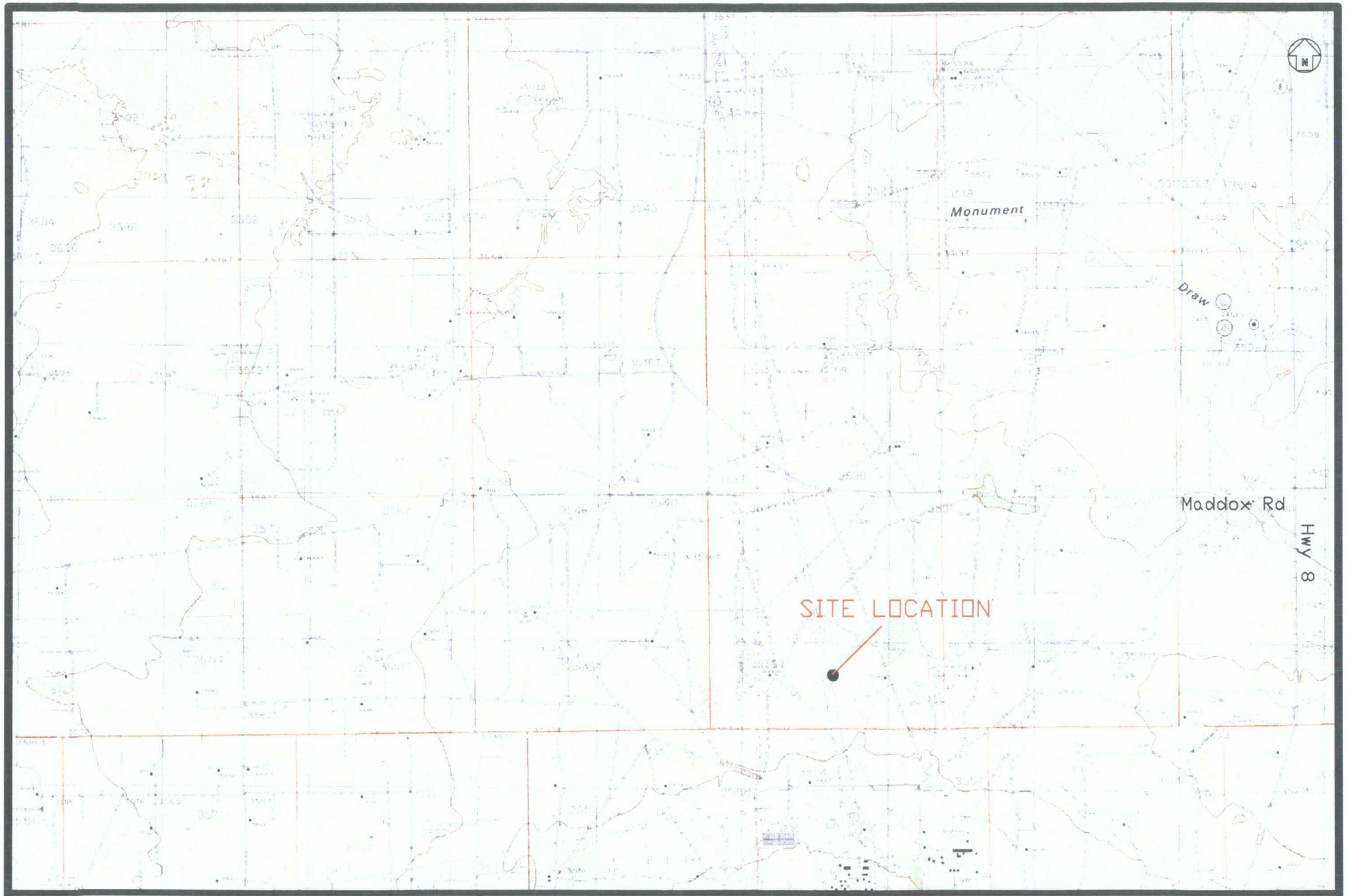
Copy Number:_____

Figures



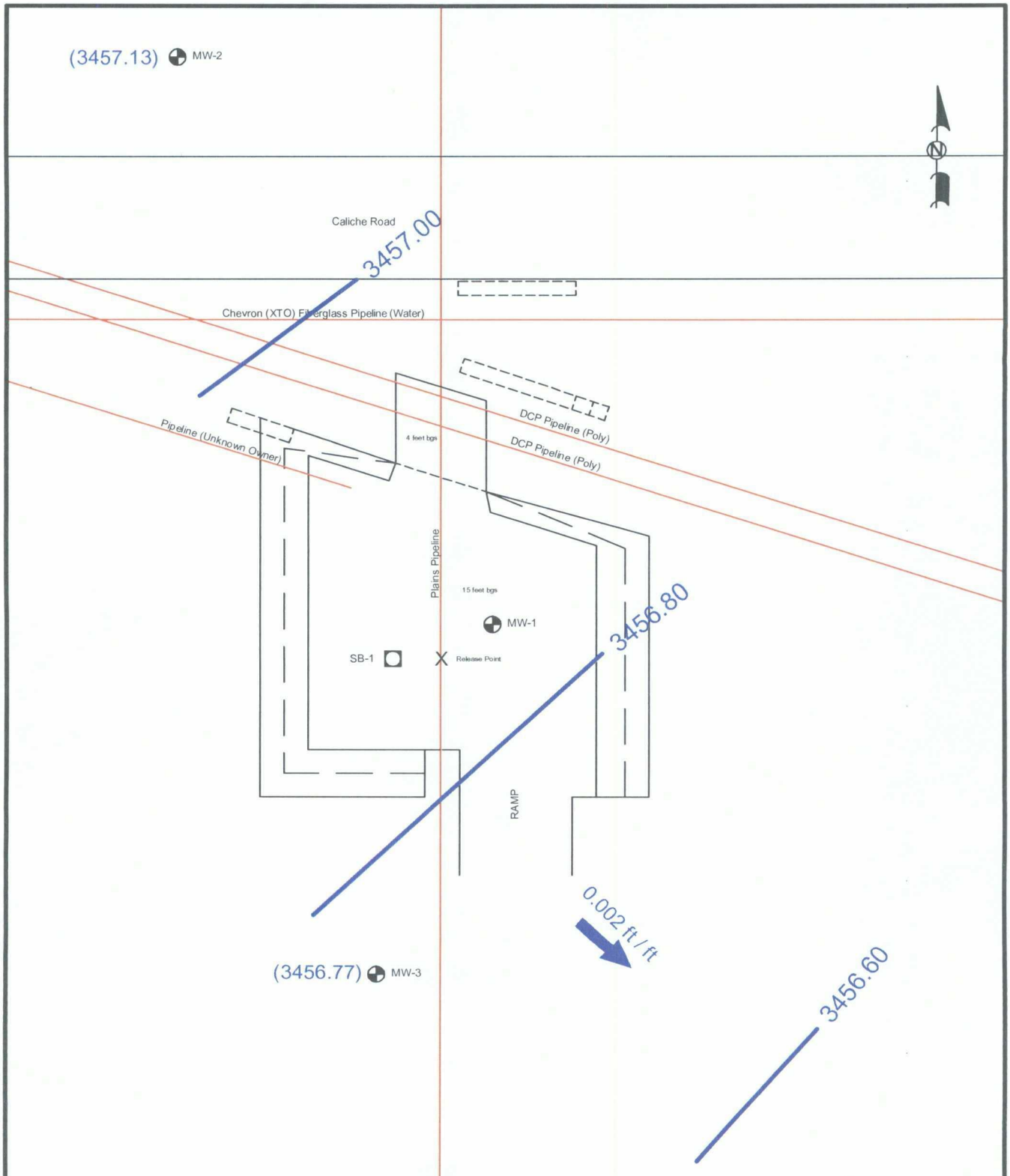
3000 1500 0 1500 3000

Distance in Feet

Figure 1
Site Location Map
Plains Marketing, L.P.
DCP Plant to Lea Station 6-Inch Sec 31
Lea County, New Mexico
SRS 2009-084
1RP-2166

Basin Environmental Consulting

Prep By: CDS	Checked By: CDS
July 20, 2009	Scale 1"=3000'



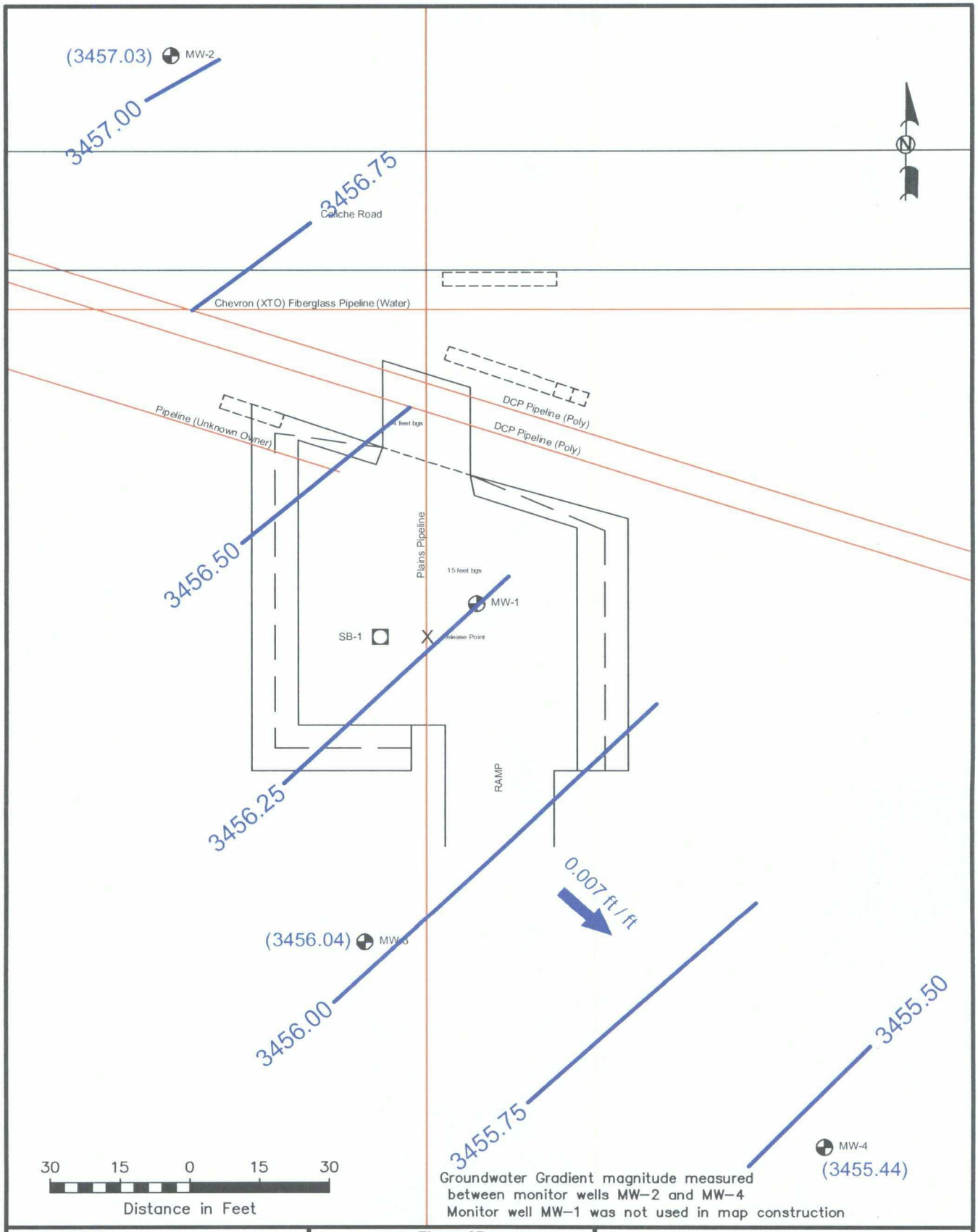
LEGEND:

- Excavation Extent
- Pipeline
- Soil Boring
- Monitor Well
- (3801.48) Groundwater Elevation (feet)
- 0.003 ft / ft Groundwater Gradient Direction and Magnitude
- Groundwater Gradient Contour Line

Figure 2A
Inferred Groundwater Gradient Map
(9/29/09)
Plains Marketing, L.P.
DCP Plant to Lea Station 6-Inch Sec 31
Lea County, NM
1RP-2166

Basin Environmental Consulting

Scale: 1" = 30'	Drawn By: CDS	Prepared By: CDS
March 23, 2010		



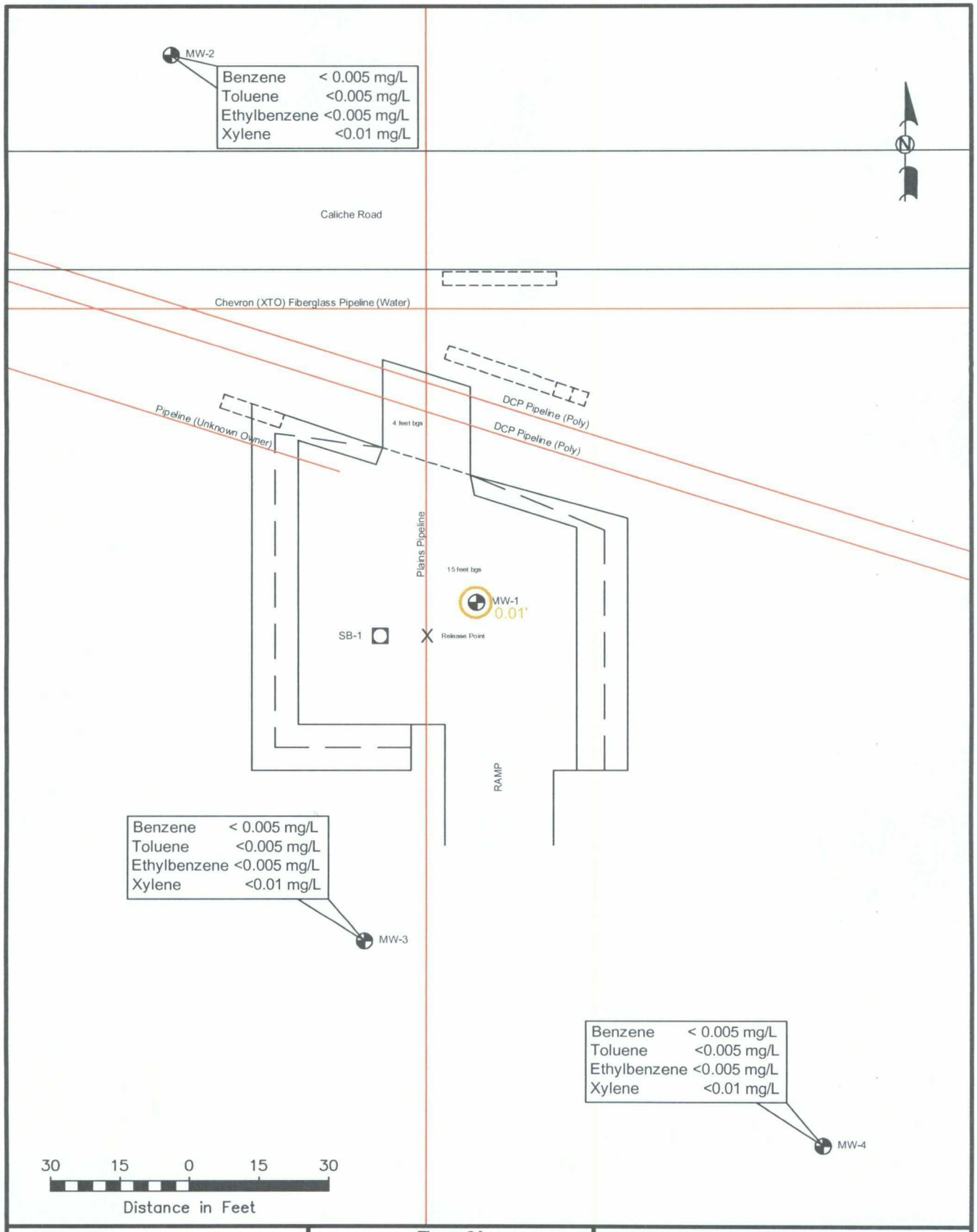
LEGEND:

- Excavation Extent
- Pipeline
- Soil Boring
- Monitor Well
- Groundwater Gradient Contour Line
- (3801.48) Groundwater Elevation (feet)
- 0.003 ft / ft Groundwater Gradient Direction and Magnitude

Figure 2B
Inferred Groundwater Gradient Map
(12/10/09)
Plains Marketing, L.P.
DCP Plant to Lea Station 6-Inch Sec 31
Lea County, NM
1RP-2166

Basin Environmental Consulting

Scale: 1" = 30'	Drawn By: CDS	Prepared By: CDS
June 11, 2009		



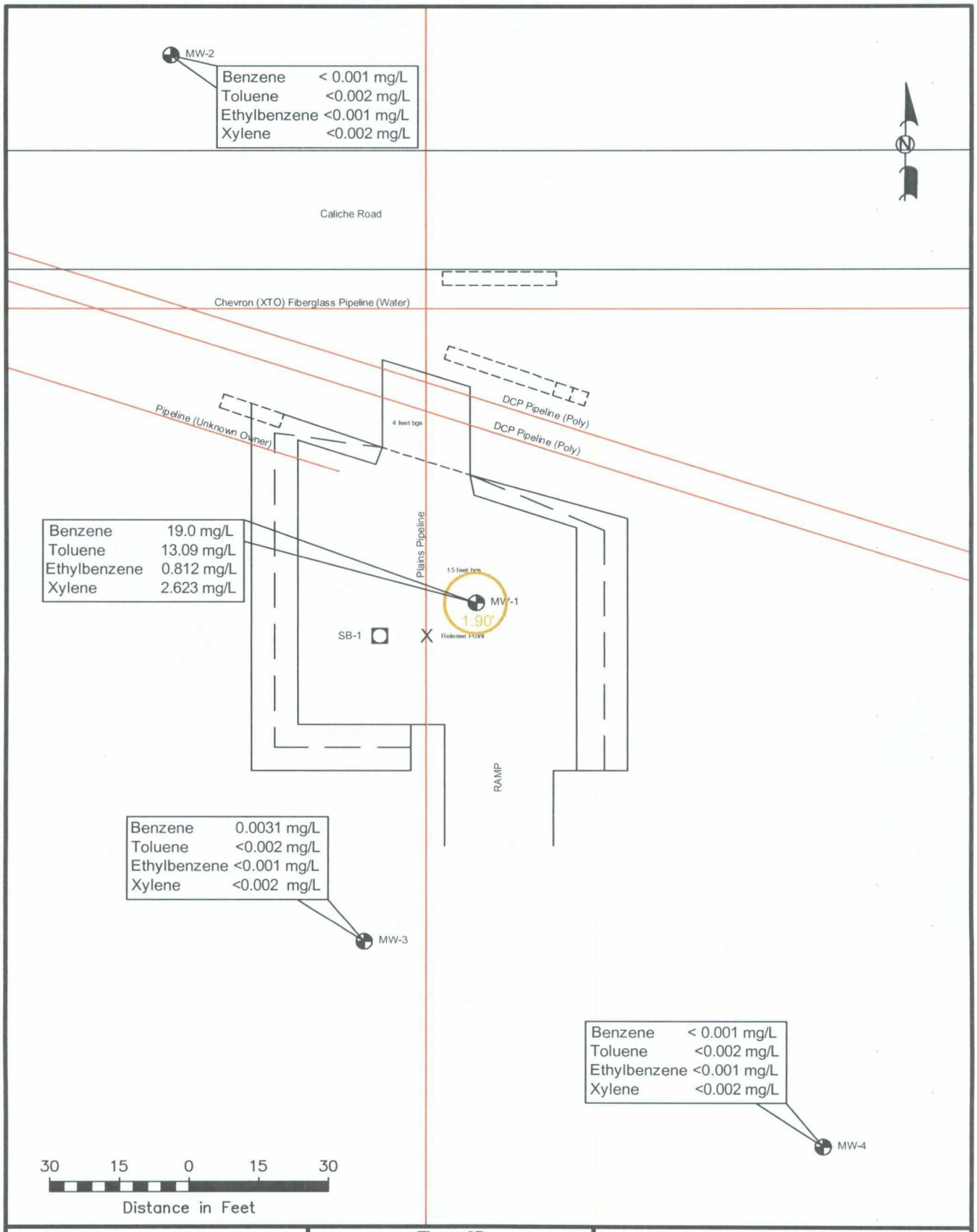
LEGEND:

- Excavation Extent
- Pipeline
- <0.001 Constituent Concentration (mg/L)
- Inferred PSH Extent
- 1.04' Thickness of PSH (in feet)
- Soil Boring
- Monitor Well

Figure 3A
Groundwater Concentration and Inferred PSH Extent Map (9/29/09)
Plains Marketing, L.P.
DCP Plant to Lea Station 6-Inch Sec 31
Lea County, NM
1RP-2166

Basin Environmental Consulting

Scale: 1" = 30'	Drawn By: CDS	Prepared By: CDS
March 23, 2010		



LEGEND:

- Excavation Extent
- Pipeline
- Soil Boring
- Monitor Well
- <0.001 Constituent Concentration (mg/L)
- Inferred PSH Extent
- 1.04' Thickness of PSH (in feet)

Figure 3B
Groundwater Concentration and Inferred PSH Extent Map (12/10/09)
Plains Marketing, L.P.
DCP Plant to Lea Station 6-Inch Sec 31
Lea County, NM
1RP-2166

Basin Environmental Consulting

Scale: 1" = 30'	Drawn By: CDS	Prepared By: CDS
March 23, 2010		

Tables

Appendices

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	*09/29/09*	-	69.82	69.83	0.01	-
MW-1	10/06/09	-	69.87	70.13	0.26	-
MW-1	10/16/09	-	69.74	71.30	1.56	-
MW-1	10/21/09	-	69.31	71.41	2.10	-
MW-1	10/30/09	-	68.98	72.34	3.36	-
MW-1	11/05/09	-	69.07	72.16	3.09	-
MW-1	11/19/09	-	68.81	72.96	4.15	-
MW-1	11/24/09	-	69.25	72.11	2.86	-
MW-1	12/08/09	-	68.78	72.94	4.16	-
MW-1	*12/10/09*	-	69.51	71.41	1.90	-
MW-1	12/17/09	-	69.05	72.85	3.80	-
MW-1	12/21/09	-	69.14	72.31	3.17	-
MW-1	12/28/09	-	68.91	72.96	4.05	-
MW-2	*09/29/09*	3,539.39	-	82.26	0.00	3,457.13
MW-2	*12/10/09*	3,539.39	-	82.36	0.00	3,457.03
MW-3	*09/29/09*	3,539.31	-	82.54	0.00	3,456.77
MW-3	*12/10/09*	3,539.31	-	82.67	0.00	3,456.64
MW-4	*09/29/09*	3,540.12	-	83.58	0.00	3,456.54
MW-4	*12/10/09*	3,540.12	-	84.68	0.00	3,455.44

TABLE 2

CONCENTRATIONS OF BENZENE AND 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: 1R-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 BTEX (mg/L)
MW-1	12/10/09	19.0	13.09	0.812	1.894	0.729	35.525
MW-2	09/29/09	<0.005	<0.005	<0.005	<0.01	<0.005	<0.01
MW-2	12/10/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020
MW-3	09/29/09	<0.005	<0.005	<0.005	<0.01	<0.005	<0.01
MW-3	12/10/09	0.0031	<0.0020	<0.0010	<0.0020	<0.0010	0.0031
MW-4	09/29/09	<0.005	<0.005	<0.005	<0.01	<0.005	<0.01
MW-4	12/10/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020
NMOCD CRITERIA		0.01	0.75	0.75	TOTAL XYLENES 0.62		

TABLE 3

CONCENTRATIONS OF POLY AROMATIC HYDROCARBONS (SEMI-VOLATILES) IN GROUNDWATER

PLAINS MARKETING, 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	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
MW-2	09/29/09	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	-	<0.005	<0.005	<0.005
MW-3	09/29/09	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	-	<0.005	<0.005	<0.005
MW-4	09/29/09	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	-	<0.005	<0.005	<0.005
MW-1	12/10/09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Clean Criteria						0.0007										0.03			

TABLE 4

CONCENTRATIONS OF TPH 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 REF NO: 1RP-2166

SAMPLE LOCATION	SAMPLE DATE	METHOD: EPA SW 846-8015 Modified			
		GRO C_6-C_{12} (mg/L)	DRO C_{12}-C_{28} (mg/L)	ORO C_{28}-C_{35} (mg/L)	TOTAL TPH C_6-C_{35} (mg/L)
MW-1	12/10/09	332	11	<1.50	343

Table 5

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER
PLAINS MARKETING, 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	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	MTBE	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane
09/29/09	MW-2	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.01
09/29/09	MW-3	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.01
09/29/09	MW-4	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.01
Maximum Contaminant Levels from NMWQCC Drinking water standards Sections 1-101.UU and 3-103.A.		0.01 mg/L	-	-	-	-	-	-	-	-	-	-	0.01 mg/L	-	-

Table 5

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER
PLAINS MARKETING, 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	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
09/29/09	MW-2	<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
09/29/09	MW-3	<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
09/29/09	MW-4	<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 5

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER
PLAINS MARKETING, 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	Isopropylbenzene	Methylene chloride	Naphthalene	n-Propylbenzene	Styrene	1,1,1,2-Tetrachloroethane
09/29/09	MW-2	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.01	<0.005	<0.005	<0.005
09/29/09	MW-3	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.01	<0.005	<0.005	<0.005
09/29/09	MW-4	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<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 5

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER
PLAINS MARKETING, 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
09/29/09	MW-2	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.002
09/29/09	MW-3	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.002
09/29/09	MW-4	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.002
Maximum Contaminant Levels from NMWQCC Drinking water standards Sections 1-101.UU and 3-103.A.		**0.02 mg/L**	**-**	**0.75 mg/L**	**-**	**-**	**0.06 mg/L**	**-**	**0.01 mg/ L**	**-**	**-**	**-**	**-**	**Total Xylene 0.62 mg/L**		**0.001 mg/L**

TABLE 6

CONCENTRATIONS OF RCRA AND NMWQCC METALS IN GROUNDWATER

PLAINS MARKETING, 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-2	09/29/09	2.36	0.019	0.126	0.317	<0.001	0.007	<0.005	0.008	**2.1**	<0.002	0.045	0.02	0.006	0.028	<0.002	0.014	0.0001
MW-3	09/29/09	**6.51**	0.024	0.704	0.224	<0.001	0.01	0.006	0.014	**5.9**	0.005	0.147	0.024	0.013	0.008	<0.002	0.024	<0.0001
MW-4	09/29/09	2.22	0.04	0.176	0.184	<0.001	0.006	<0.005	0.01	**1.860**	<0.002	0.065	0.019	0.007	0.006	<0.002	0.008	<0.0001
Maximum Contaminant Levels from NM WQCC Drinking water standards Sections 1-101.UU and 3-103.A.		**5.0 mg/L**	**0.1 mg/L**	**1.0 mg/L**	**0.75 mg/L**	**0.01 mg/L**	**0.05 mg/L**	**0.05 mg/L**	**1.0 mg/L**	**1.0 mg/L**	**0.05 mg/L**	**0.2 mg/L**	**1.0 mg/L**	**0.2 mg/L**	**0.05 mg/L**	**0.05 mg/L**	**10 mg/L**	**0.002 mg/L**

TABLE 7
CONCENTRATIONS OF ANIONS/CATIONS IN GROUNDWATER
PLAINS MARKETING, 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
9/29/2009	MW-2	58	39.8	<12.5	125	164	204	192	200	6.98	<1.25	**6.31**
9/29/2009	MW-3	67	20.2	<12.5	199	**268**	119	260	196	3.66	<1.25	**6.01**
9/29/2009	MW-4	69	22.2	<12.5	203	**307**	93.5	180	204	2.25	<1.25	**7.52**
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**

Appendix A
Laboratory Reports

Analytical Report 346678

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

DCP Plant to Lea Station Sec. 31

2009-084

03-NOV-09

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-08-TX), Arizona (AZ0738), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00308), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87428), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-08-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-08-TX)
Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370-08-TX)
Xenco-Boca Raton (EPA Lab Code: FL00449): Florida(E86240),
South Carolina(96031001), Louisiana(04154), Georgia(917)

03-NOV-09

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

Reference: XENCO Report No: **346678**
DCP Plant to Lea Station Sec. 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 346678. 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. 346678 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 346678

PLAINS ALL AMERICAN EH&S, Midland, TX

DCP Plant to Lea Station Sec. 31

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-2	W	Sep-29-09 11:30		346678-001
MW-3	W	Sep-29-09 13:00		346678-002
MW-4	W	Sep-29-09 14:00		346678-003

CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S
Project Name: DCP Plant to Lea Station Sec. 31

Project ID: 2009-084 *Report Date:* 03-NOV-09
Work Order Number: 346678 *Date Received:* 10/01/2009

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-775240 Inorganic Anions by EPA 300
E300MI

Batch 775240, Chloride, Fluoride, Sulfate recovered below QC limits in the Matrix Spike.
Samples affected are: 346678-003, -001, -002.
The Laboratory Control Sample for Chloride , Fluoride, Sulfate is within laboratory Control Limits

E300MI
Batch 775240, Nitrate as N RPD is outside the QC limit. This is most likely due to sample non-homogeneity.
Samples affected are: 346678-003, -001, -002.

Batch: LBA-775584 Alkalinity by SM2320B
None

Batch: LBA-775620 VOAs by SW-846 8260B
None

Batch: LBA-775661 SVOAs by SW-846 8270C
SW8270C

Batch 775661, Hexachlorobutadiene, Hexachloroethane RPD was outside laboratory control limits.
Samples affected are: 346678-003, -001, -002

CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S
Project Name: DCP Plant to Lea Station Sec. 31

Project ID: 2009-084 | *Report Date:* 03-NOV-09
Work Order Number: 346678 | *Date Received:* 10/01/2009

Batch: LBA-775780 Total Lead by SW6020A
SW6020

Batch 775780, Iron, Zinc recovered below QC limits in the Matrix Spike. Boron recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Barium, Iron, Manganese recovered above QC limits in the Matrix Spike Duplicate.
Samples affected are: 346678-003, -001, -002.
The Laboratory Control Sample for Iron, Manganese, Zinc, Barium, Boron is within laboratory Control Limits

Batch: LBA-775998 Mercury, Total by EPA 245.1
None

Batch: LBA-776000 Metals per ICP by SW846 6010B
None

Certificate of Analysis Summary 346678

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: DCP Plant to Lea Station Sec. 31

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

Date Received in Lab: Thu Oct-01-09 07:35 am
Report Date: 03-NOV-09
Project Manager: Brent Barron, II

Analysis Requested											
	Lab Id:	346678-001		346678-002		346678-003					
	Field Id:	MW-2		MW-3		MW-4					
	Depth:										
	Matrix:	WATER		WATER		WATER					
	Sampled:	Sep-29-09 11:30		Sep-29-09 13:00		Sep-29-09 14:00					
Alkalinity by SM2320B	*Extracted:*										
	Analyzed:	Oct-02-09 14:00		Oct-02-09 14:00		Oct-02-09 14:00					
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL				
Alkalinity, Total (as CaCO3)		200	4.00	196	4.00	204	4.00				
Alkalinity, Carbonate (as CaCO3)		ND	4.00	ND	4.00	ND	4.00				
Alkalinity, Bicarbonate (as CaCO3)		200	4.00	196	4.00	204	4.00				
Anions by E300	*Extracted:*										
	Analyzed:	Oct-01-09 08:40		Oct-01-09 08:40		Oct-01-09 08:40					
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL				
Fluoride		6.31	1.00	6.01	1.00	7.52	1.00				
Chloride		164	2.50	268	2.50	307	2.50				
Sulfate		204	2.50	119	2.50	93.5	2.50				
Nitrate as N		6.98	0.250	3.66	0.250	2.25	0.250				
Ortho-Phosphate		ND	1.25	ND	1.25	ND	1.25				

Brent Barron, II
Odessa Laboratory Manager

Certificate of Analysis Summary 346678

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: DCP Plant to Lea Station Sec. 31

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

Date Received in Lab: Thu Oct-01-09 07:35 am
Report Date: 03-NOV-09
Project Manager: Brent Barron, II

Analysis Requested												
	Lab Id:	346678-001		346678-002		346678-003						
	Field Id:	MW-2		MW-3		MW-4						
	Depth:											
	Matrix:	WATER		WATER		WATER						
	Sampled:	Sep-29-09 11:30		Sep-29-09 13:00		Sep-29-09 14:00						
ICP-MS Metals by SW 6020A	*Extracted:*	Oct-05-09 13:00		Oct-05-09 13:00		Oct-05-09 13:00						
	Analyzed:	Oct-06-09 12:03		Oct-06-09 12:08		Oct-06-09 12:12						
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL					
Aluminum		2.36	0.010	6.51	0.010	2.22	0.010					
Arsenic		0.019	0.002	0.024	0.002	0.040	0.002					
Barium		0.126	0.005	0.704	0.005	0.176	0.005					
Boron		0.317	0.010	0.224	0.010	0.184	0.010					
Cadmium		ND	0.001	ND	0.001	ND	0.001					
Chromium		0.007	0.003	0.010	0.003	0.006	0.003					
Cobalt		ND	0.005	0.006	0.005	ND	0.005					
Copper		0.008	0.003	0.014	0.003	0.010	0.003					
Iron		2.10	0.150	5.90	0.150	1.86	0.150					
Lead		ND	0.002	0.005	0.002	ND	0.002					
Manganese		0.045	0.003	0.147	0.003	0.065	0.003					
Molybdenum		0.020	0.004	0.024	0.004	0.019	0.004					
Nickel		0.006	0.005	0.013	0.005	0.007	0.005					
Selenium		0.028	0.003	0.008	0.003	0.006	0.003					
Silver		ND	0.002	ND	0.002	ND	0.002					
Zinc		0.014	0.003	0.024	0.003	0.008	0.003					
Mercury by EPA 7470A	*Extracted:*	Oct-05-09 11:00		Oct-05-09 11:00		Oct-05-09 11:00						
	Analyzed:	Oct-07-09 12:55		Oct-07-09 12:55		Oct-07-09 12:55						
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL					
Mercury		0.0001	0.0001	ND	0.0001	ND	0.0001					

Brent Barron, II
Odessa Laboratory Manager

Certificate of Analysis Summary 346678

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: DCP Plant to Lea Station Sec. 31

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

Date Received in Lab: Thu Oct-01-09 07:35 am
Report Date: 03-NOV-09
Project Manager: Brent Barron, II

Analysis Requested											
	Lab Id:	346678-001		346678-002		346678-003					
	Field Id:	MW-2		MW-3		MW-4					
	Depth:										
	Matrix:	WATER		WATER		WATER					
	Sampled:	Sep-29-09 11:30		Sep-29-09 13:00		Sep-29-09 14:00					
Metals per ICP by SW846 6010B	*Extracted:*										
	Analyzed:	Oct-07-09 10:27		Oct-07-09 10:27		Oct-07-09 10:27					
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL				
Calcium		58.0	2.50	67.0	2.50	69.0	2.50				
Magnesium		39.8	0.250	20.2	0.250	22.2	0.250				
Potassium		ND	12.5	ND	12.5	ND	12.5				
Sodium		125	12.5	199	12.5	203	12.5				

Brent Barron, II
Odessa Laboratory Manager

Certificate of Analysis Summary 346678

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: DCP Plant to Lea Station Sec. 31

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

Date Received in Lab: Thu Oct-01-09 07:35 am
Report Date: 03-NOV-09
Project Manager: Brent Barron, II

Analysis Requested											
	Lab Id:	346678-001		346678-002		346678-003					
	Field Id:	MW-2		MW-3		MW-4					
	Depth:										
	Matrix:	WATER		WATER		WATER					
	Sampled:	Sep-29-09 11:30		Sep-29-09 13:00		Sep-29-09 14:00					
SVOAs by EPA 8270C	*Extracted:*	Oct-02-09 10:30		Oct-02-09 10:33		Oct-02-09 10:36					
	Analyzed:	Oct-03-09 16:46		Oct-03-09 17:23		Oct-03-09 18:02					
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL				
Acenaphthene		ND	0.005	ND	0.005	ND	0.005				
Acenaphthylene		ND	0.005	ND	0.005	ND	0.005				
Aniline (Phenylamine, Aminobenzene)		ND	0.020	ND	0.020	ND	0.020				
Anthracene		ND	0.005	ND	0.005	ND	0.005				
Benzo(a)anthracene		ND	0.005	ND	0.005	ND	0.005				
Benzo(a)pyrene		ND	0.005	ND	0.005	ND	0.005				
Benzo(b)fluoranthene		ND	0.005	ND	0.005	ND	0.005				
Benzo(k)fluoranthene		ND	0.005	ND	0.005	ND	0.005				
Benzo(g,h,i)perylene		ND	0.005	ND	0.005	ND	0.005				
Benzoic Acid		ND	0.030	ND	0.030	ND	0.030				
Benzyl Butyl Phthalate		ND	0.005	ND	0.005	ND	0.005				
bis(2-chloroethoxy) methane		ND	0.010	ND	0.010	ND	0.010				
bis(2-chloroethyl) ether		ND	0.010	ND	0.010	ND	0.010				
bis(2-chloroisopropyl) ether		ND	0.010	ND	0.010	ND	0.010				
bis(2-ethylhexyl) phthalate		ND	0.005	ND	0.005	ND	0.005				
4-Bromophenyl-phenylether		ND	0.010	ND	0.010	ND	0.010				
4-chloro-3-methylphenol		ND	0.010	ND	0.010	ND	0.010				
4-Chloroaniline		ND	0.020	ND	0.020	ND	0.020				
2-Chloronaphthalene		ND	0.010	ND	0.010	ND	0.010				
2-Chlorophenol		ND	0.010	ND	0.010	ND	0.010				
4-Chlorophenyl Phenyl Ether		ND	0.010	ND	0.010	ND	0.010				
Chrysene		ND	0.005	ND	0.005	ND	0.005				
Dibenz(a,h)Anthracene		ND	0.005	ND	0.005	ND	0.005				
Dibenzofuran		ND	0.010	ND	0.010	ND	0.010				
di-n-Butyl Phthalate		ND	0.005	ND	0.005	ND	0.005				

Brent Barron, II
Odessa Laboratory Manager

Certificate of Analysis Summary 346678

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: DCP Plant to Lea Station Sec. 31

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

Date Received in Lab: Thu Oct-01-09 07:35 am
Report Date: 03-NOV-09
Project Manager: Brent Barron, II

Analysis Requested											
	Lab Id:	346678-001		346678-002		346678-003					
	Field Id:	MW-2		MW-3		MW-4					
	Depth:										
	Matrix:	WATER		WATER		WATER					
	Sampled:	Sep-29-09 11:30		Sep-29-09 13:00		Sep-29-09 14:00					
SVOAs by EPA 8270C	*Extracted:*	Oct-02-09 10:30		Oct-02-09 10:33		Oct-02-09 10:36					
	Analyzed:	Oct-03-09 16:46		Oct-03-09 17:23		Oct-03-09 18:02					
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL				
1,2-Dichlorobenzene		ND	0.010	ND	0.010	ND	0.010				
1,3-Dichlorobenzene		ND	0.010	ND	0.010	ND	0.010				
1,4-Dichlorobenzene		ND	0.010	ND	0.010	ND	0.010				
3,3-Dichlorobenzidine		ND	0.010	ND	0.010	ND	0.010				
2,4-Dichlorophenol		ND	0.010	ND	0.010	ND	0.010				
Diethyl Phthalate		ND	0.005	ND	0.005	ND	0.005				
Dimethyl Phthalate		ND	0.005	ND	0.005	ND	0.005				
2,4-Dimethylphenol		ND	0.010	ND	0.010	ND	0.010				
4,6-dinitro-2-methyl phenol		ND	0.010	ND	0.010	ND	0.010				
2,4-Dinitrophenol		ND	0.010	ND	0.010	ND	0.010				
2,4-Dinitrotoluene		ND	0.010	ND	0.010	ND	0.010				
2,6-Dinitrotoluene		ND	0.010	ND	0.010	ND	0.010				
di-n-Octyl Phthalate		ND	0.005	ND	0.005	ND	0.005				
Fluoranthene		ND	0.005	ND	0.005	ND	0.005				
Fluorene		ND	0.005	ND	0.005	ND	0.005				
Hexachlorobenzene		ND	0.010	ND	0.010	ND	0.010				
Hexachlorobutadiene		ND	0.010	ND	0.010	ND	0.010				
Hexachlorocyclopentadiene		ND	0.010	ND	0.010	ND	0.010				
Hexachloroethane		ND	0.010	ND	0.010	ND	0.010				
Indeno(1,2,3-c,d)Pyrene		ND	0.005	ND	0.005	ND	0.005				
Isophorone		ND	0.010	ND	0.010	ND	0.010				
2-Methylnaphthalene		ND	0.005	ND	0.005	ND	0.005				
2-methylphenol		ND	0.010	ND	0.010	ND	0.010				
3&4-Methylphenol		ND	0.010	ND	0.010	ND	0.010				
Naphthalene		ND	0.005	ND	0.005	ND	0.005				

Brent Barron, II
Odessa Laboratory Manager

Certificate of Analysis Summary 346678

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: DCP Plant to Lea Station Sec. 31

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

Date Received in Lab: Thu Oct-01-09 07:35 am
Report Date: 03-NOV-09
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	346678-001		346678-002		346678-003				
	Field Id:	MW-2		MW-3		MW-4				
	Depth:									
	Matrix:	WATER		WATER		WATER				
	Sampled:	Sep-29-09 11:30		Sep-29-09 13:00		Sep-29-09 14:00				
SVOAs by EPA 8270C	*Extracted:*	Oct-02-09 10:30		Oct-02-09 10:33		Oct-02-09 10:36				
	Analyzed:	Oct-03-09 16:46		Oct-03-09 17:23		Oct-03-09 18:02				
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL			
2-Nitroaniline		ND	0.010	ND	0.010	ND	0.010			
3-Nitroaniline		ND	0.010	ND	0.010	ND	0.010			
4-Nitroaniline		ND	0.020	ND	0.020	ND	0.020			
Nitrobenzene		ND	0.010	ND	0.010	ND	0.010			
2-Nitrophenol		ND	0.010	ND	0.010	ND	0.010			
4-Nitrophenol		ND	0.010	ND	0.010	ND	0.010			
N-Nitrosodi-n-Propylamine		ND	0.010	ND	0.010	ND	0.010			
N-Nitrosodiphenylamine		ND	0.010	ND	0.010	ND	0.010			
Pentachlorophenol		ND	0.010	ND	0.010	ND	0.010			
Phenanthrene		ND	0.005	ND	0.005	ND	0.005			
Phenol		ND	0.010	ND	0.010	ND	0.010			
Pyrene		ND	0.005	ND	0.005	ND	0.005			
Pyridine		ND	0.010	ND	0.010	ND	0.010			
1,2,4-Trichlorobenzene		ND	0.010	ND	0.010	ND	0.010			
2,4,5-Trichlorophenol		ND	0.010	ND	0.010	ND	0.010			
2,4,6-Trichlorophenol		ND	0.010	ND	0.010	ND	0.010			

Brent Barron, II
Odessa Laboratory Manager

Certificate of Analysis Summary 346678

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: DCP Plant to Lea Station Sec. 31

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

Date Received in Lab: Thu Oct-01-09 07:35 am
Report Date: 03-NOV-09
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	346678-001		346678-002		346678-003				
	Field Id:	MW-2		MW-3		MW-4				
	Depth:									
	Matrix:	WATER		WATER		WATER				
	Sampled:	Sep-29-09 11:30		Sep-29-09 13:00		Sep-29-09 14:00				
VOAs by SW-846 8260B	*Extracted:*	Oct-05-09 11:37		Oct-05-09 11:39		Oct-05-09 11:41				
	Analyzed:	Oct-05-09 12:34		Oct-05-09 12:56		Oct-05-09 13:18				
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL			
Benzene		ND	0.005	ND	0.005	ND	0.005			
Bromobenzene		ND	0.005	ND	0.005	ND	0.005			
Bromochloromethane		ND	0.005	ND	0.005	ND	0.005			
Bromodichloromethane		ND	0.005	ND	0.005	ND	0.005			
Bromoform		ND	0.005	ND	0.005	ND	0.005			
Bromomethane		ND	0.005	ND	0.005	ND	0.005			
MTBE		ND	0.005	ND	0.005	ND	0.005			
n-Butylbenzene		ND	0.005	ND	0.005	ND	0.005			
Sec-Butylbenzene		ND	0.005	ND	0.005	ND	0.005			
tert-Butylbenzene		ND	0.005	ND	0.005	ND	0.005			
Carbon Disulfide		ND	0.050	ND	0.050	ND	0.050			
Carbon Tetrachloride		ND	0.005	ND	0.005	ND	0.005			
Chlorobenzene		ND	0.005	ND	0.005	ND	0.005			
Chloroethane		ND	0.010	ND	0.010	ND	0.010			
Chloroform		ND	0.005	ND	0.005	ND	0.005			
Chloromethane		ND	0.010	ND	0.010	ND	0.010			
2-Chlorotoluene		ND	0.005	ND	0.005	ND	0.005			
4-Chlorotoluene		ND	0.005	ND	0.005	ND	0.005			
p-Cymene (p-Isopropyltoluene)		ND	0.005	ND	0.005	ND	0.005			
Dibromochloromethane		ND	0.005	ND	0.005	ND	0.005			
1,2-Dibromo-3-Chloropropane		ND	0.005	ND	0.005	ND	0.005			
1,2-Dibromoethane		ND	0.005	ND	0.005	ND	0.005			
Dibromomethane		ND	0.005	ND	0.005	ND	0.005			
1,2-Dichlorobenzene		ND	0.005	ND	0.005	ND	0.005			
1,3-Dichlorobenzene		ND	0.005	ND	0.005	ND	0.005			

Brent Barron, II
Odessa Laboratory Manager

Certificate of Analysis Summary 346678

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: DCP Plant to Lea Station Sec. 31

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

Date Received in Lab: Thu Oct-01-09 07:35 am
Report Date: 03-NOV-09
Project Manager: Brent Barron, II

Analysis Requested											
	Lab Id:	346678-001		346678-002		346678-003					
	Field Id:	MW-2		MW-3		MW-4					
	Depth:										
	Matrix:	WATER		WATER		WATER					
	Sampled:	Sep-29-09 11:30		Sep-29-09 13:00		Sep-29-09 14:00					
VOAs by SW-846 8260B	***Extracted:***	Oct-05-09 11:37		Oct-05-09 11:39		Oct-05-09 11:41					
	Analyzed:	Oct-05-09 12:34		Oct-05-09 12:56		Oct-05-09 13:18					
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL				
1,4-Dichlorobenzene		ND	0.005	ND	0.005	ND	0.005				
Dichlorodifluoromethane		ND	0.005	ND	0.005	ND	0.005				
1,1-Dichloroethane		ND	0.005	ND	0.005	ND	0.005				
1,2-Dichloroethane		ND	0.005	ND	0.005	ND	0.005				
1,1-Dichloroethene		ND	0.005	ND	0.005	ND	0.005				
cis-1,2-Dichloroethene		ND	0.005	ND	0.005	ND	0.005				
trans-1,2-dichloroethene		ND	0.005	ND	0.005	ND	0.005				
1,2-Dichloropropane		ND	0.005	ND	0.005	ND	0.005				
1,3-Dichloropropane		ND	0.005	ND	0.005	ND	0.005				
2,2-Dichloropropane		ND	0.005	ND	0.005	ND	0.005				
1,1-Dichloropropene		ND	0.005	ND	0.005	ND	0.005				
cis-1,3-Dichloropropene		ND	0.005	ND	0.005	ND	0.005				
trans-1,3-dichloropropene		ND	0.005	ND	0.005	ND	0.005				
Ethylbenzene		ND	0.005	ND	0.005	ND	0.005				
Hexachlorobutadiene		ND	0.005	ND	0.005	ND	0.005				
isopropylbenzene		ND	0.005	ND	0.005	ND	0.005				
Methylene Chloride		0.006	0.005	0.006	0.005	0.006	0.005				
Naphthalene		ND	0.010	ND	0.010	ND	0.010				
n-Propylbenzene		ND	0.005	ND	0.005	ND	0.005				
Styrene		ND	0.005	ND	0.005	ND	0.005				
1,1,1,2-Tetrachloroethane		ND	0.005	ND	0.005	ND	0.005				
1,1,2,2-Tetrachloroethane		ND	0.005	ND	0.005	ND	0.005				
Tetrachloroethylene		ND	0.005	ND	0.005	ND	0.005				
Toluene		ND	0.005	ND	0.005	ND	0.005				
1,2,3-Trichlorobenzene		ND	0.005	ND	0.005	ND	0.005				

Brent Barron, II
Odessa Laboratory Manager

Certificate of Analysis Summary 346678

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: DCP Plant to Lea Station Sec. 31

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

Date Received in Lab: Thu Oct-01-09 07:35 am
Report Date: 03-NOV-09
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	346678-001		346678-002		346678-003				
	Field Id:	MW-2		MW-3		MW-4				
	Depth:									
	Matrix:	WATER		WATER		WATER				
	Sampled:	Sep-29-09 11:30		Sep-29-09 13:00		Sep-29-09 14:00				
VOAs by SW-846 8260B	*Extracted:*	Oct-05-09 11:37		Oct-05-09 11:39		Oct-05-09 11:41				
	Analyzed:	Oct-05-09 12:34		Oct-05-09 12:56		Oct-05-09 13:18				
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL			
1,2,4-Trichlorobenzene		ND	0.005	ND	0.005	ND	0.005			
1,1,1-Trichloroethane		ND	0.005	ND	0.005	ND	0.005			
1,1,2-Trichloroethane		ND	0.005	ND	0.005	ND	0.005			
Trichloroethene		ND	0.005	ND	0.005	ND	0.005			
Trichlorofluoromethane		ND	0.005	ND	0.005	ND	0.005			
1,2,3-Trichloropropane		ND	0.005	ND	0.005	ND	0.005			
1,2,4-Trimethylbenzene		ND	0.005	ND	0.005	ND	0.005			
1,3,5-Trimethylbenzene		ND	0.005	ND	0.005	ND	0.005			
o-Xylene		ND	0.005	ND	0.005	ND	0.005			
m,p-Xylenes		ND	0.010	ND	0.010	ND	0.010			
Vinyl Chloride		ND	0.002	ND	0.002	ND	0.002			

Brent Barron, II
Odessa Laboratory Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

BRL Below Reporting Limit.

RL Reporting Limit

* Outside XENCO's scope of NELAC Accreditation.

Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station Sec. 31

Work Orders : 346678,

Project ID: 2009-084

Lab Batch #: 775661 **Sample:** 539448-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/03/09 14:52

SVOAs by EPA 8270C	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.045	0.050	90	43-116	
2-Fluorophenol	0.035	0.050	70	21-100	
Nitrobenzene-d5	0.045	0.050	90	35-114	
Phenol-d6	0.024	0.050	48	10-94	
Terphenyl-D14	0.046	0.050	92	33-141	
2,4,6-Tribromophenol	0.050	0.050	100	10-123	

Lab Batch #: 775661 **Sample:** 539448-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/03/09 15:30

SVOAs by EPA 8270C	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.043	0.050	86	43-116	
2-Fluorophenol	0.036	0.050	72	21-100	
Nitrobenzene-d5	0.047	0.050	94	35-114	
Phenol-d6	0.024	0.050	48	10-94	
Terphenyl-D14	0.047	0.050	94	33-141	
2,4,6-Tribromophenol	0.052	0.050	104	10-123	

Lab Batch #: 775661 **Sample:** 346678-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/03/09 16:46

SVOAs by EPA 8270C	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.043	0.050	86	43-116	
2-Fluorophenol	0.024	0.050	48	21-100	
Nitrobenzene-d5	0.042	0.050	84	35-114	
Phenol-d6	0.013	0.050	26	10-94	
Terphenyl-D14	0.052	0.050	104	33-141	
2,4,6-Tribromophenol	0.045	0.050	90	10-123	

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

Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station Sec. 31

Work Orders : 346678,

Project ID: 2009-084

Lab Batch #: 775661 **Sample:** 346678-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/03/09 17:23

SVOAs by EPA 8270C	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.043	0.050	86	43-116	
2-Fluorophenol	0.021	0.050	42	21-100	
Nitrobenzene-d5	0.041	0.050	82	35-114	
Phenol-d6	0.011	0.050	22	10-94	
Terphenyl-D14	0.051	0.050	102	33-141	
2,4,6-Tribromophenol	0.044	0.050	88	10-123	

Lab Batch #: 775661 **Sample:** 346678-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/03/09 18:02

SVOAs by EPA 8270C	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.041	0.050	82	43-116	
2-Fluorophenol	0.023	0.050	46	21-100	
Nitrobenzene-d5	0.039	0.050	78	35-114	
Phenol-d6	0.013	0.050	26	10-94	
Terphenyl-D14	0.052	0.050	104	33-141	
2,4,6-Tribromophenol	0.044	0.050	88	10-123	

Lab Batch #: 775661 **Sample:** 539448-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/06/09 14:37

SVOAs by EPA 8270C	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.047	0.050	94	43-116	
2-Fluorophenol	0.035	0.050	70	21-100	
Nitrobenzene-d5	0.045	0.050	90	35-114	
Phenol-d6	0.023	0.050	46	10-94	
Terphenyl-D14	0.057	0.050	114	33-141	
2,4,6-Tribromophenol	0.039	0.050	78	10-123	

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

Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station Sec. 31

Work Orders : 346678,

Project ID: 2009-084

Lab Batch #: 775620 **Sample:** 539623-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/05/09 11:04

VOAs by SW-846 8260B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0474	0.0500	95	74-124	
Dibromofluoromethane	0.0476	0.0500	95	75-131	
1,2-Dichloroethane-D4	0.0492	0.0500	98	63-144	
Toluene-D8	0.0502	0.0500	100	80-117	

Lab Batch #: 775620 **Sample:** 539623-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/05/09 11:47

VOAs by SW-846 8260B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0475	0.0500	95	74-124	
Dibromofluoromethane	0.0468	0.0500	94	75-131	
1,2-Dichloroethane-D4	0.0505	0.0500	101	63-144	
Toluene-D8	0.0491	0.0500	98	80-117	

Lab Batch #: 775620 **Sample:** 346678-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/05/09 12:34

VOAs by SW-846 8260B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0468	0.0500	94	74-124	
Dibromofluoromethane	0.0453	0.0500	91	75-131	
1,2-Dichloroethane-D4	0.0479	0.0500	96	63-144	
Toluene-D8	0.0491	0.0500	98	80-117	

Lab Batch #: 775620 **Sample:** 346678-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/05/09 12:56

VOAs by SW-846 8260B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0483	0.0500	97	74-124	
Dibromofluoromethane	0.0450	0.0500	90	75-131	
1,2-Dichloroethane-D4	0.0495	0.0500	99	63-144	
Toluene-D8	0.0493	0.0500	99	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.

Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station Sec. 31

Work Orders : 346678, **Project ID:** 2009-084

Lab Batch #: 775620 **Sample:** 346678-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/05/09 13:18

VOAs by SW-846 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0480	0.0500	96	74-124	
Dibromofluoromethane	0.0472	0.0500	94	75-131	
1,2-Dichloroethane-D4	0.0513	0.0500	103	63-144	
Toluene-D8	0.0482	0.0500	96	80-117	

Lab Batch #: 775620 **Sample:** 346678-003 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/05/09 13:39

VOAs by SW-846 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0475	0.0500	95	74-124	
Dibromofluoromethane	0.0477	0.0500	95	75-131	
1,2-Dichloroethane-D4	0.0497	0.0500	99	63-144	
Toluene-D8	0.0491	0.0500	98	80-117	

Lab Batch #: 775620 **Sample:** 346678-003 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 10/05/09 14:01

VOAs by SW-846 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0485	0.0500	97	74-124	
Dibromofluoromethane	0.0466	0.0500	93	75-131	
1,2-Dichloroethane-D4	0.0481	0.0500	96	63-144	
Toluene-D8	0.0492	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
All results are based on MDL and validated for QC purposes.

Blank Spike Recovery

Project Name: DCP Plant to Lea Station Sec. 31

Work Order #: 346678 **Project ID:** 2009-084

Lab Batch #: 775584 **Sample:** 775584-1-BKS **Matrix:** Water
Date Analyzed: 10/02/2009 **Date Prepared:** 10/02/2009 **Analyst:** WRU
Reporting Units: mg/L **Batch #:** 1

Alkalinity by SM2320B Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
		BLANK /BLANK SPIKE RECOVERY STUDY				
Alkalinity, Total (as CaCO3)	ND	200	172	86	80-120	

Lab Batch #: 775780 **Sample:** 539604-1-BKS **Matrix:** Water
Date Analyzed: 10/06/2009 **Date Prepared:** 10/05/2009 **Analyst:** HAT
Reporting Units: mg/L **Batch #:** 1

ICP-MS Metals by SW 6020A Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
		BLANK /BLANK SPIKE RECOVERY STUDY				
Aluminum	ND	0.200	0.198	99	75-125	
Arsenic	ND	0.050	0.048	96	75-125	
Barium	ND	0.050	0.050	100	75-125	
Boron	ND	0.020	0.018	90	75-125	
Cadmium	ND	0.020	0.021	105	75-125	
Chromium	ND	0.050	0.050	100	75-125	
Cobalt	ND	0.050	0.049	98	75-125	
Copper	ND	0.050	0.049	98	75-125	
Iron	ND	0.200	0.200	100	75-125	
Lead	ND	0.050	0.047	94	75-125	
Manganese	ND	0.050	0.050	100	75-125	
Molybdenum	ND	0.050	0.049	98	75-125	
Nickel	ND	0.050	0.049	98	75-125	
Selenium	ND	0.050	0.050	100	75-125	
Silver	ND	0.020	0.021	105	75-125	
Zinc	ND	0.050	0.052	104	75-125	

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

Blank Spike Recovery

Project Name: DCP Plant to Lea Station Sec. 31

Work Order #: 346678 **Project ID:** 2009-084

Lab Batch #: 775240 **Sample:** 775240-1-BKS **Matrix:** Water

Date Analyzed: 10/01/2009 **Date Prepared:** 10/01/2009 **Analyst:** LATCOR

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

Anions by E300 Analytes	Blank Result [A]	BLANK /BLANK SPIKE RECOVERY STUDY Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Fluoride	ND	2.70	2.76	102	90-110	
Chloride	ND	10.0	10.2	102	90-110	
Sulfate	ND	11.0	11.9	108	90-110	
Nitrate as N	ND	2.00	1.96	98	90-110	
Ortho-Phosphate	ND	1.70	1.75	103	90-110	

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

Blank Spike Recovery

Project Name: DCP Plant to Lea Station Sec. 31

Work Order #: 346678 **Project ID:** 2009-084

Lab Batch #: 775620 **Sample:** 539623-1-BKS **Matrix:** Water

Date Analyzed: 10/05/2009 **Date Prepared:** 10/05/2009 **Analyst:** KHM

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

VOAs by SW-846 8260B Analytes	Blank Result [A]	BLANK /BLANK SPIKE RECOVERY STUDY Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Benzene	ND	0.050	0.046	92	66-142	
Bromobenzene	ND	0.050	0.049	98	60-130	
Bromochloromethane	ND	0.050	0.046	92	73-125	
Bromodichloromethane	ND	0.050	0.049	98	75-125	
Bromoform	ND	0.050	0.056	112	75-125	
Bromomethane	ND	0.050	0.047	94	70-130	
MTBE	ND	0.050	0.051	102	75-125	
n-Butylbenzene	ND	0.050	0.047	94	75-125	
Sec-Butylbenzene	ND	0.050	0.049	98	75-125	
tert-Butylbenzene	ND	0.050	0.050	100	75-125	
Carbon Disulfide	ND	0.500	0.467	93	60-140	
Carbon Tetrachloride	ND	0.050	0.048	96	62-125	
Chlorobenzene	ND	0.050	0.052	104	60-133	
Chloroethane	ND	0.050	0.041	82	70-130	
Chloroform	ND	0.050	0.045	90	74-125	
Chloromethane	ND	0.050	0.044	88	70-130	
2-Chlorotoluene	ND	0.050	0.049	98	73-125	
4-Chlorotoluene	ND	0.050	0.048	96	74-125	
p-Cymene (p-Isopropyltoluene)	ND	0.050	0.051	102	75-125	
Dibromochloromethane	ND	0.050	0.054	108	60-130	
1,2-Dibromo-3-Chloropropane	ND	0.050	0.043	86	59-125	
1,2-Dibromoethane	ND	0.050	0.047	94	73-125	
Dibromomethane	ND	0.050	0.043	86	69-127	
1,2-Dichlorobenzene	ND	0.050	0.049	98	75-125	
1,3-Dichlorobenzene	ND	0.050	0.049	98	75-125	
1,4-Dichlorobenzene	ND	0.050	0.049	98	75-125	
Dichlorodifluoromethane	ND	0.050	0.048	96	70-130	
1,1-Dichloroethane	ND	0.050	0.046	92	60-130	
1,2-Dichloroethane	ND	0.050	0.041	82	68-127	
1,1-Dichloroethene	ND	0.050	0.041	82	59-172	
cis-1,2-Dichloroethene	ND	0.050	0.043	86	60-130	
trans-1,2-dichloroethene	ND	0.050	0.043	86	60-130	
1,2-Dichloropropane	ND	0.050	0.048	96	74-125	

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

Blank Spike Recovery

Project Name: DCP Plant to Lea Station Sec. 31

Work Order #: 346678 **Project ID:** 2009-084

Lab Batch #: 775620 **Sample:** 539623-1-BKS **Matrix:** Water

Date Analyzed: 10/05/2009 **Date Prepared:** 10/05/2009 **Analyst:** KHM

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

BLANK /BLANK SPIKE RECOVERY STUDY

VOAs by SW-846 8260B Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
1,3-Dichloropropane	ND	0.050	0.046	92	75-125	
2,2-Dichloropropane	ND	0.050	0.046	92	60-140	
1,1-Dichloropropene	ND	0.050	0.039	78	75-125	
cis-1,3-Dichloropropene	ND	0.050	0.051	102	60-140	
trans-1,3-dichloropropene	ND	0.050	0.050	100	66-125	
Ethylbenzene	ND	0.050	0.048	96	75-125	
Hexachlorobutadiene	ND	0.050	0.052	104	75-125	
isopropylbenzene	ND	0.050	0.049	98	75-125	
Methylene Chloride	ND	0.050	0.041	82	75-125	
Naphthalene	ND	0.050	0.050	100	65-135	
n-Propylbenzene	ND	0.050	0.051	102	75-125	
Styrene	ND	0.050	0.049	98	60-130	
1,1,1,2-Tetrachloroethane	ND	0.050	0.052	104	75-125	
1,1,2,2-Tetrachloroethane	ND	0.050	0.048	96	50-130	
Tetrachloroethylene	ND	0.050	0.050	100	60-130	
Toluene	ND	0.050	0.049	98	59-139	
1,2,3-Trichlorobenzene	ND	0.050	0.052	104	75-137	
1,2,4-Trichlorobenzene	ND	0.050	0.052	104	75-135	
1,1,1-Trichloroethane	ND	0.050	0.043	86	75-125	
1,1,2-Trichloroethane	ND	0.050	0.048	96	75-127	
Trichloroethene	ND	0.050	0.048	96	62-137	
Trichlorofluoromethane	ND	0.050	0.052	104	67-125	
1,2,3-Trichloropropane	ND	0.050	0.051	102	75-125	
1,2,4-Trimethylbenzene	ND	0.050	0.048	96	75-125	
1,3,5-Trimethylbenzene	ND	0.050	0.049	98	70-125	
o-Xylene	ND	0.050	0.052	104	75-125	
m,p-Xylenes	ND	0.100	0.101	101	75-125	
Vinyl Chloride	ND	0.050	0.043	86	75-125	

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

BS / BSD Recoveries

Project Name: DCP Plant to Lea Station Sec. 31

Work Order #: 346678 **Project ID:** 2009-084

Analyst: LATCOR **Date Prepared:** 10/05/2009 **Date Analyzed:** 10/07/2009

Lab Batch ID: 775998 **Sample:** 539849-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
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**
Mercury	ND	0.0010	0.0009	90	*0.001*	0.0010	100	11	75-125	20	

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

BS / BSD Recoveries

Project Name: DCP Plant to Lea Station Sec. 31

Work Order #: 346678 **Project ID:** 2009-084

Analyst: CLR **Date Prepared:** 10/02/2009 **Date Analyzed:** 10/03/2009

Lab Batch ID: 775661 **Sample:** 539448-1-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
Acenaphthene	ND	0.050	0.044	88	0.05	0.044	88	0	54-114	25	
Acenaphthylene	ND	0.050	0.042	84	0.05	0.043	86	2	53-113	25	
Aniline (Phenylamine, Aminobenzene)	ND	0.050	0.038	76	0.05	0.038	76	0	35-104	25	
Anthracene	ND	0.050	0.045	90	0.05	0.048	96	6	56-116	25	
Benzo(a)anthracene	ND	0.050	0.041	82	0.05	0.043	86	5	59-116	25	
Benzo(a)pyrene	ND	0.050	0.046	92	0.05	0.049	98	6	58-118	25	
Benzo(b)fluoranthene	ND	0.050	0.047	94	0.05	0.051	102	8	54-123	25	
Benzo(k)fluoranthene	ND	0.050	0.048	96	0.05	0.050	100	4	52-122	25	
Benzo(g,h,i)perylene	ND	0.050	0.056	112	0.05	0.060	120	7	47-129	25	
Benzoic Acid	ND	0.150	0.033	22	0.15	0.030	20	10	4-113	25	
Benzyl Butyl Phthalate	ND	0.050	0.041	82	0.05	0.043	86	5	57-122	25	
bis(2-chloroethoxy) methane	ND	0.050	0.042	84	0.05	0.044	88	5	53-112	25	
bis(2-chloroethyl) ether	ND	0.050	0.040	80	0.05	0.041	82	2	57-108	25	
bis(2-chloroisopropyl) ether	ND	0.050	0.040	80	0.05	0.040	80	0	54-111	25	
bis(2-ethylhexyl) phthalate	ND	0.050	0.043	86	0.05	0.044	88	2	59-119	25	
4-Bromophenyl-phenylether	ND	0.050	0.044	88	0.05	0.047	94	7	58-112	25	
4-chloro-3-methylphenol	ND	0.050	0.044	88	0.05	0.046	92	4	58-116	25	
4-Chloroaniline	ND	0.050	0.047	94	0.05	0.049	98	4	2-123	25	
2-Chloronaphthalene	ND	0.050	0.044	88	0.05	0.042	84	5	58-105	25	
2-Chlorophenol	ND	0.050	0.041	82	0.05	0.044	88	7	58-106	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 Sec. 31

Work Order #: 346678 **Project ID:** 2009-084

Analyst: CLR **Date Prepared:** 10/02/2009 **Date Analyzed:** 10/03/2009

Lab Batch ID: 775661 **Sample:** 539448-1-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-Chlorophenyl Phenyl Ether	ND	0.050	0.043	86	0.05	0.045	90	5	59-109	25	
Chrysene	ND	0.050	0.046	92	0.05	0.048	96	4	58-116	25	
Dibenz(a,h)Anthracene	ND	0.050	0.056	112	0.05	0.060	120	7	46-131	25	
Dibenzofuran	ND	0.050	0.044	88	0.05	0.046	92	4	56-111	25	
di-n-Butyl Phthalate	ND	0.050	0.047	94	0.05	0.049	98	4	60-118	25	
1,2-Dichlorobenzene	ND	0.050	0.042	84	0.05	0.034	68	21	53-106	25	
1,3-Dichlorobenzene	ND	0.050	0.042	84	0.05	0.034	68	21	52-105	25	
1,4-Dichlorobenzene	ND	0.050	0.042	84	0.05	0.034	68	21	54-105	25	
3,3-Dichlorobenzidine	ND	0.050	0.038	76	0.05	0.041	82	8	36-123	25	
2,4-Dichlorophenol	ND	0.050	0.045	90	0.05	0.046	92	2	60-110	25	
Diethyl Phthalate	ND	0.050	0.044	88	0.05	0.047	94	7	62-114	25	
Dimethyl Phthalate	ND	0.050	0.043	86	0.05	0.046	92	7	59-113	25	
2,4-Dimethylphenol	ND	0.050	0.037	74	0.05	0.041	82	10	50-108	25	
4,6-dinitro-2-methyl phenol	ND	0.050	0.044	88	0.05	0.047	94	7	57-119	25	
2,4-Dinitrophenol	ND	0.050	0.042	84	0.05	0.044	88	5	52-111	25	
2,4-Dinitrotoluene	ND	0.050	0.043	86	0.05	0.047	94	9	60-116	25	
2,6-Dinitrotoluene	ND	0.050	0.043	86	0.05	0.046	92	7	60-115	25	
di-n-Octyl Phthalate	ND	0.050	0.042	84	0.05	0.043	86	2	49-129	25	
Fluoranthene	ND	0.050	0.047	94	0.05	0.050	100	6	55-120	25	
Fluorene	ND	0.050	0.044	88	0.05	0.046	92	4	56-114	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 Sec. 31

Work Order #: 346678 **Project ID:** 2009-084

Analyst: CLR **Date Prepared:** 10/02/2009 **Date Analyzed:** 10/03/2009

Lab Batch ID: 775661 **Sample:** 539448-1-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
Hexachlorobenzene	ND	0.050	0.047	94	0.05	0.050	100	6	60-109	25	
Hexachlorobutadiene	ND	0.050	0.046	92	0.05	0.035	70	27	52-107	25	F
Hexachlorocyclopentadiene	ND	0.050	0.045	90	0.05	0.048	96	6	32-115	25	
Hexachloroethane	ND	0.050	0.042	84	0.05	0.032	64	27	46-115	25	F
Indeno(1,2,3-c,d)Pyrene	ND	0.050	0.054	108	0.05	0.058	116	7	44-132	25	
Isophorone	ND	0.050	0.043	86	0.05	0.045	90	5	57-107	25	
2-Methylnaphthalene	ND	0.050	0.046	92	0.05	0.041	82	11	57-106	25	
2-methylphenol	ND	0.050	0.037	74	0.05	0.038	76	3	52-106	25	
3&4-Methylphenol	ND	0.100	0.067	67	0.1	0.069	69	3	23-140	25	
Naphthalene	ND	0.050	0.043	86	0.05	0.038	76	12	53-110	25	
2-Nitroaniline	ND	0.050	0.044	88	0.05	0.048	96	9	55-120	25	
3-Nitroaniline	ND	0.050	0.049	98	0.05	0.051	102	4	49-120	25	
4-Nitroaniline	ND	0.050	0.054	108	0.05	0.057	114	5	52-118	25	
Nitrobenzene	ND	0.050	0.043	86	0.05	0.045	90	5	56-107	25	
2-Nitrophenol	ND	0.050	0.044	88	0.05	0.046	92	4	57-105	25	
4-Nitrophenol	ND	0.050	0.032	64	0.05	0.033	66	3	18-104	25	
N-Nitrosodi-n-Propylamine	ND	0.050	0.041	82	0.05	0.041	82	0	21-137	25	
N-Nitrosodiphenylamine	ND	0.050	0.042	84	0.05	0.045	90	7	50-121	25	
Pentachlorophenol	ND	0.050	0.035	70	0.05	0.038	76	8	36-132	25	
Phenanthrene	ND	0.050	0.047	94	0.05	0.049	98	4	56-116	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 Sec. 31

Work Order #: 346678
Analyst: CLR
Lab Batch ID: 775661 **Sample:** 539448-1-BKS **Batch #:** 1
Units: mg/L

Date Prepared: 10/02/2009

Project ID: 2009-084
Date Analyzed: 10/03/2009
Matrix: Water

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
Phenol	ND	0.050	0.027	54	0.05	0.027	54	0	19-89	25	
Pyrene	ND	0.050	0.044	88	0.05	0.047	94	7	57-119	25	
Pyridine	ND	0.050	0.021	42	0.05	0.020	40	5	5-94	25	
1,2,4-Trichlorobenzene	ND	0.050	0.044	88	0.05	0.037	74	17	56-104	25	
2,4,5-Trichlorophenol	ND	0.050	0.044	88	0.05	0.047	94	7	55-114	25	
2,4,6-Trichlorophenol	ND	0.050	0.043	86	0.05	0.046	92	7	57-113	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 Sec. 31

Work Order #: 346678
Lab Batch #: 775240
Project ID: 2009-084
Date Analyzed: 10/01/2009
Date Prepared: 10/01/2009
Analyst: LATCOR
QC- Sample ID: 346505-001 S
Batch #: 1
Matrix: Water
Reporting Units: mg/L

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Fluoride	9.20	27.0	30.7	80	90-110	X
Chloride	154	100	240	86	90-110	X
Sulfate	71.1	100	159	88	90-110	X
Nitrate as N	3.75	20.0	23.9	101	90-110	
Ortho-Phosphate	ND	17.0	16.6	98	90-110	

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

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: DCP Plant to Lea Station Sec. 31

Work Order # : 346678 **Project ID:** 2009-084

Lab Batch ID: 775780 **QC- Sample ID:** 345663-002 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 10/06/2009 **Date Prepared:** 10/05/2009 **Analyst:** HAT

Reporting Units: mg/L

ICP-MS Metals by SW 6020A 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	0.067	0.200	0.279	106	0.200	0.290	112	4	75-125	25	
Arsenic	0.006	0.050	0.047	82	0.050	0.051	90	8	75-125	25	
Barium	0.458	0.050	0.509	102	0.050	0.523	130	3	75-125	25	X
Boron	0.312	0.020	0.340	140	0.020	0.358	230	5	75-125	25	X
Cadmium	ND	0.020	0.016	80	0.020	0.017	85	6	75-125	25	
Chromium	ND	0.050	0.057	114	0.050	0.062	124	8	75-125	25	
Cobalt	ND	0.050	0.054	108	0.050	0.059	118	9	75-125	25	
Copper	0.006	0.050	0.053	94	0.050	0.057	102	7	75-125	25	
Iron	36.1	0.200	36.2	50	0.200	36.5	200	1	75-125	25	X
Lead	0.026	0.050	0.075	98	0.050	0.081	110	8	75-125	25	
Manganese	2.98	0.050	3.03	100	0.050	3.07	180	1	75-125	25	X
Molybdenum	ND	0.050	0.056	112	0.050	0.062	124	10	75-125	25	
Nickel	0.009	0.050	0.058	98	0.050	0.062	106	7	75-125	25	
Selenium	ND	0.050	0.038	76	0.050	0.042	84	10	75-125	25	
Silver	ND	0.020	0.016	80	0.020	0.018	90	12	75-125	25	
Zinc	0.027	0.050	0.064	74	0.050	0.068	82	6	75-125	25	X

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

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

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

Form 3 - MS / MSD Recoveries

Project Name: DCP Plant to Lea Station Sec. 31

Work Order # : 346678 **Project ID:** 2009-084

Lab Batch ID: 775998 **QC- Sample ID:** 346432-016 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 10/07/2009 **Date Prepared:** 10/05/2009 **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	0.0001	0.0010	0.0011	100	0.0010	0.0011	100	0	75-125	20	

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

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

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

Form 3 - MS / MSD Recoveries

Project Name: DCP Plant to Lea Station Sec. 31

Work Order # : 346678 **Project ID:** 2009-084

Lab Batch ID: 775620 **QC- Sample ID:** 346678-003 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 10/05/2009 **Date Prepared:** 10/05/2009 **Analyst:** KHM

Reporting Units: mg/L

VOAs by SW-846 8260B	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.050	0.045	90	0.050	0.046	92	2	66-142	21	
Bromobenzene	ND	0.050	0.047	94	0.050	0.049	98	4	60-130	20	
Bromochloromethane	ND	0.050	0.046	92	0.050	0.044	88	4	73-125	20	
Bromodichloromethane	ND	0.050	0.046	92	0.050	0.047	94	2	75-125	20	
Bromoform	ND	0.050	0.048	96	0.050	0.052	104	8	75-125	20	
Bromomethane	ND	0.050	0.044	88	0.050	0.043	86	2	70-130	20	
MTBE	ND	0.050	0.051	102	0.050	0.052	104	2	75-125	20	
n-Butylbenzene	ND	0.050	0.045	90	0.050	0.046	92	2	75-125	20	
Sec-Butylbenzene	ND	0.050	0.047	94	0.050	0.048	96	2	75-125	20	
tert-Butylbenzene	ND	0.050	0.049	98	0.050	0.049	98	0	75-125	20	
Carbon Disulfide	ND	0.500	0.454	91	0.500	0.448	90	1	60-140	20	
Carbon Tetrachloride	ND	0.050	0.045	90	0.050	0.047	94	4	62-125	20	
Chlorobenzene	ND	0.050	0.048	96	0.050	0.051	102	6	60-133	21	
Chloroethane	ND	0.050	0.040	80	0.050	0.039	78	3	70-130	20	
Chloroform	ND	0.050	0.044	88	0.050	0.044	88	0	74-125	20	
Chloromethane	ND	0.050	0.042	84	0.050	0.040	80	5	70-130	20	
2-Chlorotoluene	ND	0.050	0.047	94	0.050	0.047	94	0	73-125	20	
4-Chlorotoluene	ND	0.050	0.046	92	0.050	0.047	94	2	74-125	20	
p-Cymene (p-Isopropyltoluene)	ND	0.050	0.049	98	0.050	0.050	100	2	75-125	20	
Dibromochloromethane	ND	0.050	0.048	96	0.050	0.051	102	6	60-130	20	
1,2-Dibromo-3-Chloropropane	ND	0.050	0.043	86	0.050	0.045	90	5	59-125	28	
1,2-Dibromoethane	ND	0.050	0.045	90	0.050	0.049	98	9	73-125	20	
Dibromomethane	ND	0.050	0.042	84	0.050	0.044	88	5	69-127	23	

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 Sec. 31

Work Order # : 346678 **Project ID:** 2009-084

Lab Batch ID: 775620 **QC- Sample ID:** 346678-003 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 10/05/2009 **Date Prepared:** 10/05/2009 **Analyst:** KHM

Reporting Units: mg/L

VOAs by SW-846 8260B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
1,2-Dichlorobenzene	ND	0.050	0.047	94	0.050	0.048	96	2	75-125	20	
1,3-Dichlorobenzene	ND	0.050	0.049	98	0.050	0.050	100	2	75-125	20	
1,4-Dichlorobenzene	ND	0.050	0.047	94	0.050	0.048	96	2	75-125	20	
Dichlorodifluoromethane	ND	0.050	0.048	96	0.050	0.044	88	9	70-130	23	
1,1-Dichloroethane	ND	0.050	0.045	90	0.050	0.045	90	0	60-130	20	
1,2-Dichloroethane	ND	0.050	0.041	82	0.050	0.042	84	2	68-127	20	
1,1-Dichloroethene	ND	0.050	0.041	82	0.050	0.040	80	2	59-172	22	
cis-1,2-Dichloroethene	ND	0.050	0.042	84	0.050	0.043	86	2	60-130	20	
trans-1,2-dichloroethene	ND	0.050	0.043	86	0.050	0.043	86	0	60-130	20	
1,2-Dichloropropane	ND	0.050	0.046	92	0.050	0.048	96	4	74-125	20	
1,3-Dichloropropane	ND	0.050	0.043	86	0.050	0.047	94	9	75-125	20	
2,2-Dichloropropane	ND	0.050	0.044	88	0.050	0.045	90	2	60-140	20	
1,1-Dichloropropene	ND	0.050	0.039	78	0.050	0.040	80	3	75-125	20	
cis-1,3-Dichloropropene	ND	0.050	0.048	96	0.050	0.050	100	4	60-140	20	
trans-1,3-dichloropropene	ND	0.050	0.046	92	0.050	0.049	98	6	66-125	20	
Ethylbenzene	ND	0.050	0.045	90	0.050	0.047	94	4	75-125	20	
Hexachlorobutadiene	ND	0.050	0.049	98	0.050	0.052	104	6	75-125	20	
isopropylbenzene	ND	0.050	0.046	92	0.050	0.048	96	4	75-125	20	
Methylene Chloride	0.006	0.050	0.045	78	0.050	0.045	78	0	75-125	35	
Naphthalene	ND	0.050	0.047	94	0.050	0.049	98	4	65-135	20	
n-Propylbenzene	ND	0.050	0.048	96	0.050	0.050	100	4	75-125	20	
Styrene	ND	0.050	0.046	92	0.050	0.048	96	4	60-130	51	
1,1,1,2-Tetrachloroethane	ND	0.050	0.048	96	0.050	0.050	100	4	75-125	20	

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

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

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

Form 3 - MS / MSD Recoveries

Project Name: DCP Plant to Lea Station Sec. 31

Work Order # : 346678 **Project ID:** 2009-084

Lab Batch ID: 775620 **QC- Sample ID:** 346678-003 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 10/05/2009 **Date Prepared:** 10/05/2009 **Analyst:** KHM

Reporting Units: mg/L

VOAs by SW-846 8260B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
1,1,2,2-Tetrachloroethane	ND	0.050	0.045	90	0.050	0.048	96	6	50-130	31	
Tetrachloroethylene	ND	0.050	0.048	96	0.050	0.050	100	4	60-130	20	
Toluene	ND	0.050	0.046	92	0.050	0.047	94	2	59-139	21	
1,2,3-Trichlorobenzene	ND	0.050	0.049	98	0.050	0.052	104	6	75-137	20	
1,2,4-Trichlorobenzene	ND	0.050	0.049	98	0.050	0.050	100	2	75-135	20	
1,1,1-Trichloroethane	ND	0.050	0.042	84	0.050	0.041	82	2	75-125	20	
1,1,2-Trichloroethane	ND	0.050	0.046	92	0.050	0.049	98	6	75-127	20	
Trichloroethene	ND	0.050	0.045	90	0.050	0.046	92	2	62-137	24	
Trichlorofluoromethane	ND	0.050	0.049	98	0.050	0.045	90	9	67-125	20	
1,2,3-Trichloropropane	ND	0.050	0.047	94	0.050	0.052	104	10	75-125	20	
1,2,4-Trimethylbenzene	ND	0.050	0.047	94	0.050	0.047	94	0	75-125	20	
1,3,5-Trimethylbenzene	ND	0.050	0.047	94	0.050	0.047	94	0	70-125	20	
o-Xylene	ND	0.050	0.048	96	0.050	0.049	98	2	75-125	20	
m,p-Xylenes	ND	0.100	0.097	97	0.100	0.100	100	3	75-125	20	
Vinyl Chloride	ND	0.050	0.041	82	0.050	0.038	76	8	75-125	20	

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

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

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

Sample Duplicate Recovery

Project Name: DCP Plant to Lea Station Sec. 31

Work Order #: 346678

Lab Batch #: 775240 **Project ID:** 2009-084
Date Analyzed: 10/01/2009 **Date Prepared:** 10/01/2009 **Analyst:** LATCOR
QC- Sample ID: 346505-001 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	9.20	9.26	1	20	
Chloride	154	145	6	20	
Sulfate	71.1	58.6	19	20	
Nitrate as N	3.75	2.42	43	20	F
Ortho-Phosphate	ND	ND	NC	20	

Lab Batch #: 775780
Date Analyzed: 10/06/2009 **Date Prepared:** 10/05/2009 **Analyst:** HAT
QC- Sample ID: 345663-002 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

ICP-MS Metals by SW 6020A Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Aluminum	0.067	0.069	3	25	
Arsenic	0.006	0.005	18	25	
Barium	0.458	0.466	2	25	
Boron	0.312	0.340	9	25	
Cadmium	ND	ND	NC	25	
Chromium	ND	ND	NC	25	
Cobalt	ND	ND	NC	25	
Copper	0.006	0.006	0	25	
Iron	36.1	37.1	3	25	
Manganese	2.98	3.08	3	25	
Molybdenum	ND	ND	NC	25	
Nickel	0.009	0.009	0	25	
Selenium	ND	ND	NC	25	
Silver	ND	ND	NC	25	
Zinc	0.027	0.029	7	25	

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

Sample Duplicate Recovery

Project Name: DCP Plant to Lea Station Sec. 31

Work Order #: 346678

Lab Batch #: 775780 **Project ID:** 2009-084

Date Analyzed: 10/06/2009 **Date Prepared:** 10/05/2009 **Analyst:** HAT

QC- Sample ID: 345663-002 D **Batch #:** 1 **Matrix:** Water

Reporting Units: ug/L

ICP-MS Metals by SW 6020A	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Lead	25.5	24.5	4	25	

Lab Batch #: 776000

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

QC- Sample ID: 346678-001 D **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

Metals per ICP by SW846 6010B	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Calcium	58.0	57.3	1	25	
Magnesium	39.8	40.5	2	25	
Potassium	ND	ND	NC	25	
Sodium	125	121	3	25	

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

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

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

Project Manager: Curt Stanley
Project Name: DCP Plant to Lea Station 6" #2
Company Name: Basin Environmental Service Technologies, LLC
Project #: 2009-039
Company Address: P. O. Box 301
Project Loc: Lea County, NM
City/State/Zip: Lovington, NM 88260
PO #: PAA - J. Henry
Telephone No: (575)605-7210
Fax No: (575) 396-1429
Report Format: [X] Standard [ ] TRRP [ ] NPDES
Sampler Signature:
e-mail: cdstanley@basin-consulting.com

(lab use only)
ORDER #: 346678

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: GW – Groundwater, WW – Wastewater, S – Soil/Sed, SW – Surface Water, Sl – Sludge, OW – Other	Analyze For: TCLP: TOTAL: 8015B TPH: 418.1 (Modified)	TPH: TX 1005	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	HCID	NMWQCC Metals (see Attached)					RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
01	MW-2			09/29/09	1130		6	X	X	X						GW			X	X		X	X	X			X						X
02	MW-3			09/29/09	1300		6	X	X	X						GW			X	X		X	X	X			X						X
03	MW-4			09/29/09	1400		6	X	X	X						GW			X	X		X	X	X			X						X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
	9-30	13:00		9/30/09	1300
Relinquished by:	Date	Time	Received by:	Date	Time
	10/1/09	0735			
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Jeanne Fitch	10-01-09	0735

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

Temperature Upon Receipt: 1.1 °C

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

Field Parameters

specific conductance
pH
temperature
depth to water

General Chemistry*

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

RCRA Metals

Arsenic
Barium
Cadmium
Chromium
Lead
Mercury
Selenium
Silver

Additional WQCC Metals

Copper
Iron
Manganese
Zinc
Aluminum
Boron
Cobalt
Molybdenum
Nickel

All compounds listed in US EPA SW-846 Methods 8260 (VOC) & 8270 (SVOC)

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Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Plains / BasinEnv.

Date/ Time: 10-01-09 @ 0735

Lab ID #: 346078

Initials: JMF

Sample Receipt Checklist

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

Variance Documentation

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

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

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

Jeanne Fitch

From: Jeanne Fitch [jeanne.fitch@xenco.com]
Sent: Thursday, October 01, 2009 11:50 AM
To: 'Curt D. Stanley'
Subject: RE: MW samples DCP Plant (analysis question)
Thanks Curt. . .FYI. . .NO3 has a 48 hr TAT and MW-2 was sampled at 11:30 on 09/29/09.

Thank You,

Jeanne Fitch

Environmental Lab of Texas
a Xenco Company
12600 West I-20 East
Odessa, TX 79765
(432) 563-1800

From: Curt D. Stanley [mailto:cstanley@basinenv.com]
Sent: Thursday, October 01, 2009 11:46 AM
To: Jeanne Fitch
Subject: Re: MW samples DCP Plant (analysis question)

Jeanne,

Please run NO3, PO4 and F... and yes we need RCRA 8, plus 9 WQCC metals..

Thanks,
Curt

----- Original Message -----
From: Jeanne Fitch
To: 'Curt D. Stanley'
Sent: Thursday, October 01, 2009 7:14 AM
Subject: Re: MW samples DCP Plant (analysis question)

Hi Curt,

I noticed on your additional info page for the MW samples that NO3,PO4,and F were listed under Gen Chem but not on the COC. Did you need them analyzed as well? And just to confirm....you would like the RCRA 8 Metals + the additional 9 WQCC Metals. Please let me know.

Thank You,

Jeanne Fitch

Environmental Lab of Texas
a Xenco Company
12600 West I-20 East
Odessa, TX 79765
(432) 563-1800

Please consider the environment before printing this email.

10/1/2009

Jeanne Fitch

From: Curt D. Stanley [cstanley@basinenv.com]
Sent: Tuesday, November 03, 2009 2:23 PM
To: Jeanne Fitch
Subject: Re: REVISED WO#346678 DCP Plant to Lea Station 6" #2

Jeanne,

Please revise the site name on these reports to read DCP Plant to Lea Station Sec 31. The project number should be 2009-084. Sorry for the confusion at this end. Please revise and reissue.

Thanks,
Curt

----- Original Message -----
From: Jeanne Fitch
To: 'Curt D. Stanley' ; 'Camille J. Bryant'
Cc: jhenry@paalp.com
Sent: Friday, October 09, 2009 7:24 AM
Subject: Re: REVISED WO#346678 DCP Plant to Lea Station 6" #2

Hello Curt,

I have attached a revised report WO#346678 for DCP Plant to Lea Station 6" #2. As per your request we have reported the VOC SW8260 as mg/L and broke down the Total Alkalinity into Carbonate/Bicarbonate and Total Alkalinity. Please let me know if I can help you with anything else

Thank You,

Jeanne Fitch

Environmental Lab of Texas
a Xenco Company
12600 West I-20 East
Odessa, TX 79765
(432) 563-1800

11/3/2009

Analytical Report 355577

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

DCP Plant to Lea Station 6-Inch # 2

2009-039

22-DEC-09

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-08-TX), Arizona (AZ0738), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00308), USDA (S-44102)

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

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-08-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-08-TX)
Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370-08-TX)
Xenco-Boca Raton (EPA Lab Code: FL00449): Florida(E86240),
South Carolina(96031001), Louisiana(04154), Georgia(917)

22-DEC-09

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

Reference: XENCO Report No: **355577**
DCP Plant to Lea Station 6-Inch # 2
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 355577. 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. 355577 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 355577

PLAINS ALL AMERICAN EH&S, Midland, TX

DCP Plant to Lea Station 6-Inch # 2

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-2	W	Dec-10-09 12:45		355577-001
MW-3	W	Dec-10-09 13:30		355577-002
MW-4	W	Dec-10-09 14:15		355577-003
MW-1	W	Dec-10-09 15:00		355577-004

CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S
Project Name: DCP Plant to Lea Station 6-Inch # 2

Project ID: 2009-039 *Report Date:* 22-DEC-09
Work Order Number: 355577 *Date Received:* 12/14/2009

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-786220 BTEX by EPA 8021
None

Batch: LBA-786316 TCLP SVOCs by SW-846 8270C
None

Batch: LBA-786690 TPH by SW8015 Mod
SW8015MOD_NM

Batch 786690, C12-C28 Diesel Range Hydrocarbons recovered below QC limits in the Matrix Spike.
Samples affected are: 355577-004.
The Laboratory Control Sample for C12-C28 Diesel Range Hydrocarbons is within laboratory Control Limits

Certificate of Analysis Summary 355577

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: DCP Plant to Lea Station 6-Inch # 2

Project Id: 2009-039
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Mon Dec-14-09 05:20 pm
Report Date: 22-DEC-09
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	355577-001		355577-002		355577-003		355577-004			
	Field Id:	MW-2		MW-3		MW-4		MW-1			
	Depth:										
	Matrix:	WATER		WATER		WATER		WATER			
	Sampled:	Dec-10-09 12:45		Dec-10-09 13:30		Dec-10-09 14:15		Dec-10-09 15:00			
BTEX by EPA 8021	*Extracted:*	Dec-17-09 13:00		Dec-17-09 13:00		Dec-17-09 13:00		Dec-17-09 13:00			
	Analyzed:	Dec-17-09 17:25		Dec-17-09 17:48		Dec-17-09 18:11		Dec-17-09 23:11			
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL		
Benzene		ND	0.0010	0.0069	0.0010	0.0015	0.0010	15.08	0.1000		
Toluene		ND	0.0020	0.0027	0.0020	ND	0.0020	12.29	0.2000		
Ethylbenzene		ND	0.0010	ND	0.0010	ND	0.0010	0.7900	0.1000		
m,p-Xylenes		ND	0.0020	ND	0.0020	ND	0.0020	1.776	0.2000		
o-Xylene		ND	0.0010	ND	0.0010	ND	0.0010	0.5690	0.1000		
Xylenes, Total		ND	0.0010	ND	0.0010	ND	0.0010	2.345	0.1000		
Total BTEX		ND	0.0010	0.0096	0.0010	0.0015	0.0010	30.51	0.1000		

Brent Barron, II
Odessa Laboratory Manager

Final Ver. 1.000

Certificate of Analysis Summary 355577

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: DCP Plant to Lea Station 6-Inch # 2

Project Id: 2009-039
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Mon Dec-14-09 05:20 pm
Report Date: 22-DEC-09
Project Manager: Brent Barron, II

Analysis Requested							
	Lab Id:	355577-001	355577-002	355577-003	355577-004		
	Field Id:	MW-2	MW-3	MW-4	MW-1		
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER		
	Sampled:	Dec-10-09 12:45	Dec-10-09 13:30	Dec-10-09 14:15	Dec-10-09 15:00		
SVOA PAHs List	*Extracted:*				Dec-17-09 11:58		
SUB: T104704215-08B-TX	*Analyzed:*				Dec-18-09 14:47		
	Units/RL:				mg/L RL		
Acenaphthene					ND 0.100		
Acenaphthylene					ND 0.100		
Anthracene					ND 0.100		
Benzo(a)anthracene					ND 0.100		
Benzo(a)pyrene					ND 0.100		
Benzo(b)fluoranthene					ND 0.100		
Benzo(k)fluoranthene					ND 0.100		
Benzo(g,h,i)perylene					ND 0.100		
Chrysene					ND 0.100		
Dibenz(a,h)anthracene					ND 0.100		
Fluoranthene					ND 0.100		
Fluorene					ND 0.100		
Indeno(1,2,3-c,d)Pyrene					ND 0.100		
1-Methylnaphthalene					ND 0.100		
2-Methylnaphthalene					ND 0.100		
Naphthalene					ND 0.100		
Phenanthrene					ND 0.100		
Pyrene					ND 0.100		

Brent Barron, II
Odessa Laboratory Manager

Final Ver. 1.000

Certificate of Analysis Summary 355577

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: DCP Plant to Lea Station 6-Inch # 2

Project Id: 2009-039
Contact: Jason Henry
Project Location: Lea County, NM

Date Received in Lab: Mon Dec-14-09 05:20 pm
Report Date: 22-DEC-09
Project Manager: Brent Barron, II

Analysis Requested							
	Lab Id:	355577-001	355577-002	355577-003	355577-004		
	Field Id:	MW-2	MW-3	MW-4	MW-1		
	Depth:						
	Matrix:	WATER	WATER	WATER	WATER		
	Sampled:	Dec-10-09 12:45	Dec-10-09 13:30	Dec-10-09 14:15	Dec-10-09 15:00		
TPH by SW8015 Mod	*Extracted:*				Dec-21-09 10:00		
	Analyzed:				Dec-22-09 08:26		
	Units/RL:				mg/L RL		
C6-C12 Gasoline Range Hydrocarbons					582 7.50		
C12-C28 Diesel Range Hydrocarbons					30.9 7.50		
C28-C35 Oil Range Hydrocarbons					ND 7.50		
Total TPH					613 7.50		

Brent Barron, II
Odessa Laboratory Manager

Final Ver. 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 effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

BRL Below Reporting Limit.

RL Reporting Limit

* Outside XENCO's scope of NELAC Accreditation.

Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station 6-Inch # 2

Work Orders : 355577, **Project ID:** 2009-039

Lab Batch #: 786220 **Sample:** 545803-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/17/09 11:50

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0309	0.0300	103	80-120	

Lab Batch #: 786220 **Sample:** 545803-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/17/09 12:13

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

Lab Batch #: 786220 **Sample:** 545803-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/17/09 13:23

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0265	0.0300	88	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

Lab Batch #: 786220 **Sample:** 355577-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/17/09 17:25

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0262	0.0300	87	80-120	
4-Bromofluorobenzene	0.0295	0.0300	98	80-120	

Lab Batch #: 786220 **Sample:** 355577-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/17/09 17:48

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0271	0.0300	90	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-Inch # 2

Work Orders : 355577,

Project ID: 2009-039

Lab Batch #: 786220 **Sample:** 355577-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/17/09 18:11

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0266	0.0300	89	80-120	
4-Bromofluorobenzene	0.0311	0.0300	104	80-120	

Lab Batch #: 786220 **Sample:** 355577-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/17/09 23:11

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0278	0.0300	93	80-120	
4-Bromofluorobenzene	0.0243	0.0300	81	80-120	

Lab Batch #: 786220 **Sample:** 355467-002 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/18/09 01:53

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0309	0.0300	103	80-120	
4-Bromofluorobenzene	0.0334	0.0300	111	80-120	

Lab Batch #: 786220 **Sample:** 355467-002 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/18/09 02:16

BTEX by EPA 8021 Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0282	0.0300	94	80-120	
4-Bromofluorobenzene	0.0313	0.0300	104	80-120	

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

Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station 6-Inch # 2

Work Orders : 355577,

Project ID: 2009-039

Lab Batch #: 786316 **Sample:** 545778-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/18/09 10:20

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.050	0.050	100	43-116	
2-Fluorophenol	0.041	0.050	82	21-100	
Nitrobenzene-d5	0.051	0.050	102	35-114	
Phenol-d6	0.026	0.050	52	10-94	
Terphenyl-D14	0.057	0.050	114	33-141	
2,4,6-Tribromophenol	0.052	0.050	104	10-123	

Lab Batch #: 786316 **Sample:** 545778-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/18/09 10:58

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.044	0.050	88	43-116	
2-Fluorophenol	0.036	0.050	72	21-100	
Nitrobenzene-d5	0.045	0.050	90	35-114	
Phenol-d6	0.026	0.050	52	10-94	
Terphenyl-D14	0.047	0.050	94	33-141	
2,4,6-Tribromophenol	0.046	0.050	92	10-123	

Lab Batch #: 786316 **Sample:** 545778-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/18/09 11:36

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.042	0.050	84	43-116	
2-Fluorophenol	0.034	0.050	68	21-100	
Nitrobenzene-d5	0.043	0.050	86	35-114	
Phenol-d6	0.025	0.050	50	10-94	
Terphenyl-D14	0.044	0.050	88	33-141	
2,4,6-Tribromophenol	0.044	0.050	88	10-123	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station 6-Inch # 2

Work Orders : 355577,

Project ID: 2009-039

Lab Batch #: 786316 **Sample:** 355933-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/18/09 12:53

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.195	0.250	78	43-116	
2-Fluorophenol	0.147	0.250	59	21-100	
Nitrobenzene-d5	0.192	0.250	77	35-114	
Phenol-d6	0.161	0.250	64	10-94	
Terphenyl-D14	0.204	0.250	82	33-141	
2,4,6-Tribromophenol	0.188	0.250	75	10-123	

Lab Batch #: 786316 **Sample:** 355577-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/18/09 14:47

SVOA PAHs List Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.041	0.050	82	43-116	
2-Fluorophenol	0.033	0.050	66	21-100	
Nitrobenzene-d5	0.042	0.050	84	35-114	
Phenol-d6	0.017	0.050	34	10-94	
Terphenyl-D14	0.043	0.050	86	33-141	
2,4,6-Tribromophenol	0.039	0.050	78	10-123	

Lab Batch #: 786690 **Sample:** 546087-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/22/09 01:37

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.1	10.0	111	70-135	
o-Terphenyl	4.94	5.00	99	70-135	

Lab Batch #: 786690 **Sample:** 546087-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/22/09 02:04

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.2	10.0	112	70-135	
o-Terphenyl	4.98	5.00	100	70-135	

* 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-Inch # 2

Work Orders : 355577,

Project ID: 2009-039

Lab Batch #: 786690 **Sample:** 546087-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/22/09 02:32

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	7.89	10.0	79	70-135	
o-Terphenyl	4.55	5.00	91	70-135	

Lab Batch #: 786690 **Sample:** 355577-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/22/09 08:26

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.5	10.0	115	70-135	
o-Terphenyl	5.44	5.00	109	70-135	

Lab Batch #: 786690 **Sample:** 355780-006 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 12/22/09 08:53

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	11.1	10.0	111	70-135	
o-Terphenyl	5.01	5.00	100	70-135	

* 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-Inch # 2

Work Order #: 355577 **Project ID:** 2009-039

Analyst: BRB **Date Prepared:** 12/17/2009 **Date Analyzed:** 12/17/2009

Lab Batch ID: 786220 **Sample:** 545803-1-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	ND	0.1000	0.1001	100	0.1	0.1008	101	1	70-125	25	
Toluene	ND	0.1000	0.1010	101	0.1	0.1010	101	0	70-125	25	
Ethylbenzene	ND	0.1000	0.1007	101	0.1	0.1011	101	0	71-129	25	
m,p-Xylenes	ND	0.2000	0.2082	104	0.2	0.2089	104	0	70-131	25	
o-Xylene	ND	0.1000	0.1068	107	0.1	0.1073	107	0	71-133	25	

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

BS / BSD Recoveries

Project Name: DCP Plant to Lea Station 6-Inch # 2

Work Order #: 355577 **Project ID:** 2009-039

Analyst: KAN **Date Prepared:** 12/17/2009 **Date Analyzed:** 12/18/2009

Lab Batch ID: 786316 **Sample:** 545778-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

SVOA PAHs List Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Acenaphthene	ND	0.050	0.046	92	0.05	0.045	90	2	27-132	31	
Acenaphthylene	ND	0.050	0.046	92	0.05	0.045	90	2	46-108	25	
Anthracene	ND	0.050	0.047	94	0.05	0.046	92	2	47-145	25	
Benzo(a)anthracene	ND	0.050	0.048	96	0.05	0.047	94	2	33-143	25	
Benzo(a)pyrene	ND	0.050	0.048	96	0.05	0.047	94	2	65-135	25	
Benzo(b)fluoranthene	ND	0.050	0.051	102	0.05	0.049	98	4	24-159	25	
Benzo(k)fluoranthene	ND	0.050	0.047	94	0.05	0.048	96	2	25-125	25	
Benzo(g,h,i)perylene	ND	0.050	0.047	94	0.05	0.045	90	4	65-135	25	
Chrysene	ND	0.050	0.045	90	0.05	0.044	88	2	65-135	25	
Dibenz(a,h)anthracene	ND	0.050	0.049	98	0.05	0.048	96	2	50-125	25	
Fluoranthene	ND	0.050	0.048	96	0.05	0.048	96	0	47-125	25	
Fluorene	ND	0.050	0.048	96	0.05	0.047	94	2	48-139	25	
Indeno(1,2,3-c,d)Pyrene	ND	0.050	0.049	98	0.05	0.048	96	2	27-160	25	
Naphthalene	ND	0.050	0.044	88	0.05	0.044	88	0	26-175	25	
Phenanthrene	ND	0.050	0.046	92	0.05	0.046	92	0	65-135	25	
Pyrene	ND	0.050	0.047	94	0.05	0.046	92	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

BS / BSD Recoveries

Project Name: DCP Plant to Lea Station 6-Inch # 2

Work Order #: 355577 **Project ID:** 2009-039

Analyst: BEV **Date Prepared:** 12/21/2009 **Date Analyzed:** 12/22/2009

Lab Batch ID: 786690 **Sample:** 546087-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH by SW8015 Mod 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
C6-C12 Gasoline Range Hydrocarbons	ND	100	104	104	100	104	104	0	70-135	25	
C12-C28 Diesel Range Hydrocarbons	ND	100	87.9	88	100	70.3	70	22	70-135	25	

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

Form 3 - MS Recoveries

Project Name: DCP Plant to Lea Station 6-Inch # 2

Work Order #: 355577

Lab Batch #: 786316 **Project ID:** 2009-039

Date Analyzed: 12/18/2009 **Date Prepared:** 12/17/2009 **Analyst:** KAN

QC- Sample ID: 355933-001 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

SVOA PAHs List 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
Acenaphthene	ND	0.250	0.207	83	27-132	
Acenaphthylene	ND	0.250	0.210	84	46-108	
Anthracene	ND	0.250	0.207	83	47-145	
Benzo(a)anthracene	ND	0.250	0.209	84	33-143	
Benzo(a)pyrene	ND	0.250	0.208	83	65-135	
Benzo(b)fluoranthene	ND	0.250	0.239	96	24-159	
Benzo(k)fluoranthene	ND	0.250	0.220	88	25-125	
Benzo(g,h,i)perylene	ND	0.250	0.215	86	65-135	
Chrysene	ND	0.250	0.199	80	65-135	
Dibenz(a,h)anthracene	ND	0.250	0.217	87	50-125	
Fluoranthene	ND	0.250	0.217	87	47-125	
Fluorene	ND	0.250	0.222	89	48-139	
Indeno(1,2,3-c,d)Pyrene	ND	0.250	0.219	88	27-160	
Naphthalene	ND	0.250	0.191	76	26-175	
Phenanthrene	ND	0.250	0.205	82	65-135	
Pyrene	ND	0.250	0.210	84	23-152	

Lab Batch #: 786690

Date Analyzed: 12/22/2009 **Date Prepared:** 12/21/2009 **Analyst:** BEV

QC- Sample ID: 355780-006 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

TPH by SW8015 Mod	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
C6-C12 Gasoline Range Hydrocarbons	7.53	100	108	100	70-135	
C12-C28 Diesel Range Hydrocarbons	5.84	100	72.0	66	70-135	X

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

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: DCP Plant to Lea Station 6-Inch # 2

Work Order # : 355577 **Project ID:** 2009-039

Lab Batch ID: 786220 **QC- Sample ID:** 355467-002 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 12/18/2009 **Date Prepared:** 12/17/2009 **Analyst:** BRB

Reporting Units: mg/L

	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
BTEX by EPA 8021 **Analytes**	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.1045	105	0.1000	0.0987	99	6	70-125	25	
Toluene	ND	0.1000	0.1052	105	0.1000	0.0975	98	8	70-125	25	
Ethylbenzene	ND	0.1000	0.1046	105	0.1000	0.0969	97	8	71-129	25	
m,p-Xylenes	ND	0.2000	0.2121	106	0.2000	0.1997	100	6	70-131	25	
o-Xylene	ND	0.1000	0.1111	111	0.1000	0.1048	105	6	71-133	25	

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

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

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

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

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

Project Manager: Curt Stanley PAGE 01 OF 01 Project Name: DCP Plant to Lea Station 6-Inch #2

Company Name: Basin Environmental Service Technologies, LLC Project #: 2009-039

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

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

Telephone No: (505) 441-2244 Fax No: (505) 396-1429 Report Format: [X] Standard [ ] TRRP [ ] NPDES

Sampler Signature: C. Ryan Stanley for C. Ryan Stanley e-mail: cstanley@basinenv.com

(lab use only)
ORDER #: 355577

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 8270	TDS (EPA METHOD SM 2540c)	CHLORIDES E 300	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	MW-2			12/10/2009	1245		3	X		X						GW										X							X
02	MW-3			12/10/2009	1330		3	X		X						GW										X							X
03	MW-4			12/10/2009	1415		3	X		X						GW										X							X
04	MW-1			12/10/2009	1500		7	X		X						GW	X									X			X				X

Special Instructions: MW1 - 1 liter amber glass/neat
6 4oz glass/HCl

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	12/14/09	1720			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Jeanne Fitch	12-14-09	1720

Laboratory Comments:
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N
Labels on container(s) Y N
Custody seals on container(s) 7 labels Y N
Custody seals on cooler(s) Y N
Sample Hand Delivered by Sampler/Client Rep.? Y N
by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt: 2.6 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Plains / Basin

Date/ Time: 12-14-09 @ 1720

Lab ID # : 355577

Initials: JMF

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	2.6 °C	
#2	Shipping container in good condition?	(Yes)	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	(Not Present)	
#4	Custody Seals intact on sample bottles/ container? / labels	(Yes)	No	Not Present	
#5	Chain of Custody present?	(Yes)	No		
#6	Sample instructions complete of Chain of Custody?	(Yes)	No		
#7	Chain of Custody signed when relinquished/ received?	(Yes)	No		
#8	Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	(Yes)	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		
#11	Containers supplied by ELOT?	(Yes)	No		
#12	Samples in proper container/ bottle?	(Yes)	No	See Below	
#13	Samples properly preserved?	(Yes)	No	See Below	
#14	Sample bottles intact?	(Yes)	No		
#15	Preservations documented on Chain of Custody?	(Yes)	No		
#16	Containers documented on Chain of Custody?	(Yes)	No		
#17	Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18	All samples received within sufficient hold time?	(Yes)	No	See Below	
#19	Subcontract of sample(s)?	(Yes)	No	Not Applicable	PAH → Xenco Houston
#20	VOC samples have zero headspace?	(Yes)	No	Not Applicable	

Variance Documentation

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

Regarding: _____

Corrective Action Taken:

Check all that Apply:

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

Appendix B
Monitor Well Logs

Monitor Well MW-1

PID Reading	Petroleum Odor	Petroleum Stain
1836	Heavy	Slight
(747)	Very Heavy	Slight
779	Heavy	None
(848)	Heavy	None
1449	Heavy	None
(1463)	Heavy	None
1078	Heavy	None
(936)	Heavy	None
1522	Heavy	None
(1438)	Heavy	None
1851	Heavy	None
(1550)	Very Heavy	None
863	Very Heavy	None

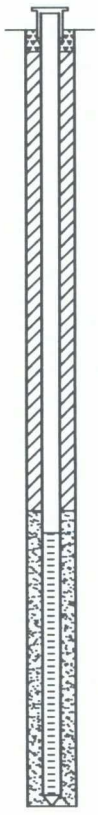
Soil Description

0 - 5' - Sand, brown with caliche nodules

5 - 18' - Caliche, grey, hard, dry, sandy

18 - 25' - Sand, brown, very fine grained, dry with caliche nodules

25 - 71' - Sand, brown, very fine grained, moist to wet at approximately 70 feet. Monitor well was completed using water



Monitor Well MW-1

Date Drilled: September 24, 2009
Thickness of Bentonite Seal: 57 Ft
Depth of Exploratory Boring: 86 Ft bgs
Depth to Groundwater: _____
Ground Water Elevation: _____

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

Completion Notes

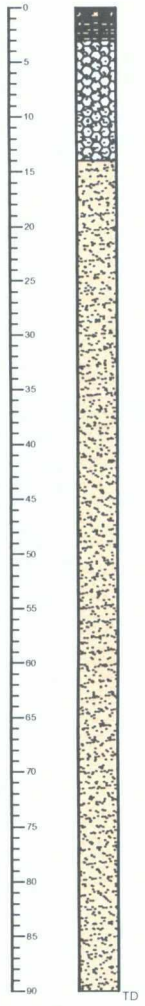
1.) The monitor well was advanced on date using air / water rotary drilling techniques.
2.) The well was constructed with 4" ID, 0.020 inch factory slotted, threaded joint, schedule 40 PVC pipe.
3.) The well is protected with a locked stick up steel cover and compression cap.
4.) The lines between material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

Monitor Well MW-1
DCP Plant to Lea Station 6-Inch Sec 31
Lea County, New Mexico
Plains Pipeline, L.P.

Basin Environmental Consulting

Prep By: CDS	Checked By: CDS
October 7, 2009	

Monitor Well MW-2



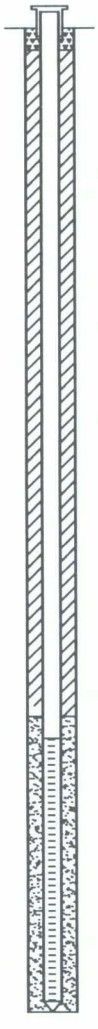
Drilling Depth	PID Reading	Petroleum Odor	Petroleum Stain
		None	None
	0.3		
		None	None
	0.2		
		None	None
	(20.5)		
		None	None
	16.8		
		None	None
	39.7		
		None	None
	(37.1)		
		None	None
	46.6		
		None	None
	46.9		
		None	None
	(48.1)		
		None	None
	35.4		
		None	None
	47.9		
		None	None
	(48.9)		
		None	None
	46.2		
		None	None
	45.4		
		None	None
	(43.4)		
		None	None
	44.3		

Soil Description

0 - 3' bgs - Sand, light brown, clayey with caliche nodules

2 - 14' bgs - Caliche, white, soft, dry, sandy

14 - 90' bgs - Sand, brown, very fine grained, dry, hard 18 - 23 feet. Lost circulation at 80 feet bgs and completed drilling with water



Monitor Well MW-2

Date Drilled September 21, 2009
Thickness of Bentonite Seal 61 Ft
Depth of Exploratory Boring 90 Ft bgs
Depth to Groundwater
Ground Water Elevation

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

Grout Surface Seal
Bentonite Pellet Seal
Sand Pack
Screen

Completion Notes

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

Monitor Well MW-2
DCP Plant to Lea Station 6-Inch Sec 31
Lea County, New Mexico
Plains Pipeline, L.P.

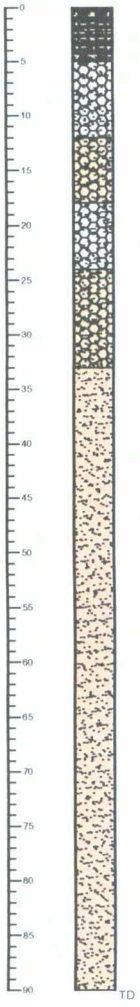
Basin Environmental Consulting

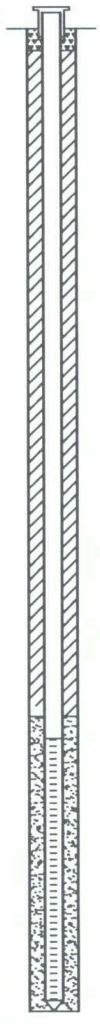
Prep By: CDS	Checked By: CDS
October 7, 2009	

Monitor Well MW-3

Soil Description

Drilling Depth	Soil Columns	PID Reading	Petroleum Odor	Petroleum Stain	
			None	None	0 - 5' bgs - Clay, light brown, sandy with caliche nodules, some organics
		2.5			
			None	None	5 - 12' bgs - Caliche, white, soft, dry, sandy
		9.4			
			None	None	
		(10.5)			12 - 18' bgs - Sand, light brown, very fine grained with some caliche nodules
			None	None	
		11.1			
			None	None	18 - 24' bgs - Caliche, white, soft, dry, sandy
		15.1			
			None	None	24 - 33' bgs - Sand, light brown and Caliche, white, soft, dry
		(8.0)			
			None	None	
		8.2			
			None	None	
		4.9			
			None	None	
		(9.1)			
			None	None	
		13.9			
			None	None	33 - 90' bgs - Sand, reddish brown, very fine grained, dry. Lost circulation at 60 feet bgs and completed drilling with water
		8.6			
			None	None	
		(8.4)			





Monitor Well MW-3

Date Drilled September 22, 2009
Thickness of Bentonite Seal 61 Ft
Depth of Exploratory Boring 90 Ft bgs
Depth to Groundwater _____
Ground Water Elevation _____

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

Grout Surface Seal
Bentonite Pellet Seal
Sand Pack
Screen

Completion Notes

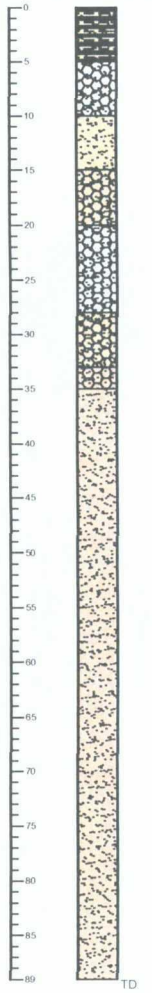
1.) The monitor well was advanced on date using air / water rotary drilling techniques.
2.) The well was constructed with 2" ID, 0.020 inch factory slotted, threaded joint, schedule 40 PVC pipe.
3.) The well is protected with a locked stick up steel cover and compression cap.
4.) The lines between material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

Monitor Well MW-3
DCP Plant to Lea Station 6-Inch Sec 31
Lea County, New Mexico
Plains Pipeline, L.P.

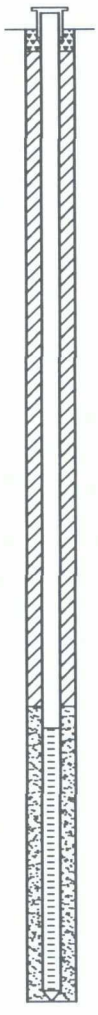
Basin Environmental Consulting

Prep By: CDS	Checked By: CDS
October 7, 2009	

Monitor Well MW-4



Drilling Depth	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
		None	None	0 - 5' bgs - Sand, light brown, clayey with caliche nodules, some organics
	18.5			
		None	None	5 - 10' bgs - Caliche, white, soft, dry, sandy
	27.2			
		None	None	10 -15' bgs - Sand, light brown, very fine grained, dry
	(29.8)			
		None	None	15 - 20' bgs - Sand, light brown, very fine grained, dry with some caliche nodules
	5.7			
		None	None	20 - 28' bgs - Caliche, white, hard, dry, sandy
	25.0			
		None	None	28 - 33' bgs - Sand, light brown, very fine grained, dry with caliche nodules
	(26.2)			
		None	None	33 - 35' bgs - Sand, reddish brown, very fine grained, dry with caliche nodules
	41.1			
		None	None	
	31.4			
		None	None	
	(27.9)			
		None	None	
	30.4			
		None	None	
	25.4			
		None	None	33 - 89' bgs - Sand, reddish brown, very fine grained, dry. Lost circulation at 60 feet bgs and completed drilling with water
	(33.9)			



Monitor Well MW-4

Date Drilled September 22, 2009
Thickness of Bentonite Seal 60 Ft
Depth of Exploratory Boring 89 Ft bgs
Depth to Groundwater _____
Ground Water Elevation _____

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

Grout Surface Seal

Bentonite Pellet Seal

Sand Pack

Screen

Completion Notes

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

Monitor Well MW-4
DCP Plant to Lea Station 6-Inch Sec 31
Lea County, New Mexico
Plains Pipeline, L.P.

Basin Environmental Consulting

Prep By: CDS	Checked By: CDS
October 7, 2009	

Appendix C
Release Notification and Corrective Action
(Form C-141)

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

State of New Mexico
Energy Minerals and Natural Resources

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

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 **NM SLO**	Mineral Owner	Lease No.

LOCATION OF RELEASE

NEARBY WELL API # 30.025.06300-00-00

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: L 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

FGRL0912057827