

1R - 2136

Annual GW Mon. REPORTS

DATE:

2009



PLAINS ALL AMERICAN

March 30, 2010

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

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APP - 1 2010

Environmental Bureau
Oil Conservation Division

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
Remediation Coordinator
Plains All American

CC: Larry Johnson, NMOCD, Hobbs, NM
Enclosures

Basin Environmental Consulting, LLC

2800 Plains Highway
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Lovington, New Mexico 88260
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2009 ANNUAL MONITORING REPORT

APR - 1 2010
Environmental Bureau
Oil Conservation Division

DCP PLANT TO LEA STATION 6-INCH #2
SE ¼ NW ¼ SECTION 31, TOWNSHIP 20 SOUTH, RANGE 37 EAST
LATITUDE 32.5316667° NORTH, LONGITUDE 103.2911111° WEST
LEA COUNTY, NEW MEXICO
PLAINS SRS NUMBER: 2009-039
NMOCD REF: 1RP-2136

PREPARED FOR:



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

PREPARED BY:

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

March 2010

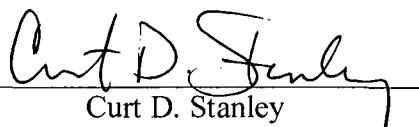

Curt D. Stanley
Project Manager

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INTRODUCTION

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 annual and 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 quarter 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 of each well exhibiting sufficient recharge. Pursuant to an NMOCD request, groundwater from monitor wells containing PSH was sampled annually.

SITE DESCRIPTION AND BACKGROUND INFORMATION

The legal description of the release site is Unit Letter "F" (SE ¼ NW ¼), Section 31, Township 20 South, Range 37 East, in Lea County, New Mexico. The property affected by the release is owned by The State of New Mexico and is administered by the New Mexico State Land Office (ROE permit #1777). The release site GPS coordinates are 32.5316667° North and 103.2911111° West. On February 12, 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. Approximately twenty-five (25) barrels of crude oil was released from the Plains pipeline, resulting in a surface stain measuring approximately ten (10) feet in width and twelve (12) feet in length. Plains notified the New Mexico Oil Conservation Division (NMOCD) Hobbs District Office of the release and a Release Notification and Corrective Action (Form C-141) was submitted. The cause of the release was attributed to external corrosion of the pipeline.

On February 17, 2009, following initial response activities, excavation of the hydrocarbon impacted soil began at the site. Excavated soil was stockpiled on-site on a plastic liner to mitigate the potential leaching of contaminants into the vadose zone. Approximately 2,700 cubic yards (cy) of soil was stockpiled on-site during excavation activities. The final dimensions of the excavation were approximately sixty-six (66) feet in width, approximately eighty (80) feet in length and fifteen (15) feet in depth. On completion of the excavation activities, confirmation soil samples were collected from the excavation and stockpiles. Review of the analytical results indicated soil samples collected from the final excavation limits and stockpiles exhibited contaminant concentrations less than the NMOCD regulatory standards.

On April 15, 2009, a soil boring (SB-1) was advanced at the release site to evaluate the vertical extent of soil impact. During the advancement of the soil boring, groundwater was encountered at approximately sixty-one (61) feet drilling depth or approximately seventy-six (76) feet bgs. A temporary casing was installed in the soil boring to allow a groundwater sample to be collected

for analysis. During the collection of the groundwater sample phase-separated hydrocarbons (PSH) were observed on the groundwater. Plains immediately notified NMOCD representatives at the NMOCD Hobbs District Office and the NMOCD Santa Fe Office of the impact to groundwater at the release site. On April 16, 2009, soil boring SB-1 was converted to a four (4) inch monitor well (MW-1).

On June 29, 2009, three (3) additional monitor wells (MW-2, MW-3 and MW-4) were installed to evaluate the status of the groundwater at the site. Monitor well MW-2 is located approximately seventy-five (75) feet northwest of the release point, in an up gradient position. Monitor well MW-2 was installed to a total depth of approximately ninety (90) feet bgs. Monitor well MW-3 is located approximately seventy-five (75) feet southwest of the release point, in a cross gradient position. Monitor well MW-3 was installed to a total depth of approximately ninety (90) feet bgs. Monitor well MW-4 is located approximately seventy-five (75) feet southeast of the release point, in a down gradient position. Monitor well MW-4 was installed to a total depth of approximately eighty-eight (88) feet bgs. PSH was not observed in monitor wells MW-2, MW-3 or MW-4 during the reporting period.

On August 25, 2009, a twenty (20) mil polyurethane liner was installed in base of the excavation. Monitor well (MW-1), located within the excavation was extended to the top of the excavation using a four (4) inch diameter PVC riser pipe. The four (4) inch riser was fitted with a forty (40) mil boot, which was chemically welded to the twenty (20) mil liner, to protect to impermeability of the liner. The liner was cushioned by a six (6) inch layer of sand above and below the liner, to protect the liner from damage during excavation backfilling activities. The excavation was backfilled with the stockpiled soil and compacted in twelve (12) inch lifts. The disturbed areas were contoured and will be reseeded with vegetation acceptable to the landowner.

Currently, four (4) monitor wells are located on the DCP Plant to Lea Station 6-Inch #2 release site. Monitor wells MW-2, MW-3 and MW-4 are gauged and sampled on a quarterly schedule. PSH is recovered bi-weekly at monitor well MW-1. During the reporting period, approximately 555 gallons (13.2 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 the initial site investigation. The average PSH thickness reported in monitor well MW-1 during the reporting period was 5.14 feet. The maximum PSH thickness was 5.69 feet on May 26, 2009. Currently, all recovered fluids are being disposed of at a NMOCD approved disposal.

The site monitor wells were gauged and sampled on July 1 and December 10, 2009. During the sampling events, the monitoring wells were purged of a minimum of three (3) well volumes of water or until the wells were dry using a PVC bailer or electrical Grundfos Pump. Groundwater was allowed to recharge and samples were obtained using disposable Teflon bailers. Water samples were stored in clean, glass containers provided by the laboratory and placed on ice in the

field. Purge water was collected in a trailer mounted polystyrene tank and disposed at an NMOCD approved disposal facility.

Locations of the groundwater monitoring 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 Groundwater Gradient Map, Figure 2B, indicated a general gradient of approximately 0.0017 feet/foot to the southeast as measured between groundwater monitor wells MW-2 and MW-4. On December 10, 2009, the corrected groundwater elevation ranged between 3,459.52 and 3,459.94 feet above mean sea level, in monitor wells MW-4 and MW-2, respectively. The 2009 Groundwater Elevation Data is provided as Table 1.

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 NMOCD requests, an annual groundwater sample was collected December 10, 2009, and analyzed 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, Total Petroleum Hydrocarbons (TPH) and PAH concentrations. The analytical results of the groundwater collected from monitor well MW-1 indicated a benzene concentration of 15.08 mg/L, a toluene concentration of 12.29 mg/L, an ethylbenzene concentration of 0.79 mg/L and a total xylene concentration of 2.345 mg/L. 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 612.9 mg/L. Analytical results indicated PAH concentrations were less than the appropriate laboratory method detection limit (MDL) for each constituent during the 4th quarter of the reporting period. A summary of TPH Concentrations 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, indicated all reported constituent concentrations were less than the appropriate laboratory MDL during the 3rd quarter of the reporting period. 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 aluminum, barium, iron and manganese, which exhibited concentrations of 35.4 mg/L, 1.55 mg/L, 39.4 mg/L and 0.798 mg/L, respectively. The maximum contaminant level NMWQCC drinking water standard for aluminum, barium, iron and manganese are 5.0 mg/L, 1.0 mg/L, 1.0 mg/L and 0.2 mg/L, respectively. A summary of Concentrations of RCRA and NMWQCC Metals in Groundwater is provided as Table 6.

The analytical results for anions and cations using EPA SW 375.4, 325.3, 310, 160.1 and SW 846 6010B, indicated all NMWQCC regulatory constituent concentrations were less than the maximum contaminant level NMWQCC drinking water standards, with the exception of chloride, which exhibited a concentration of 495 mg/L. The maximum contaminant level NMWQCC drinking water standard for chloride is 250 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 0.0069 mg/L during the 4th quarter. Benzene concentrations were less than the NMOCD regulatory standard during the 3rd and 4th quarters of the reporting period. Toluene concentrations ranged from less than the laboratory MDL during the 3rd quarter to 0.0027 mg/L during the 4th quarter. Toluene concentrations were less than 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 during the 3rd quarter of the reporting period.

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, iron and manganese, which exhibited concentrations of 28.3 mg/L, 26 mg/L and 1.01 mg/L, respectively.

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, which exhibited a concentration of 663 mg/L.

Monitor well MW-4 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 0.0015 mg/L during the 4th quarter. 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 during the 3rd quarter of the reporting period.

The analytical results for RCRA and NMWQCC metals indicated all reported constituent concentrations were less than the maximum contaminant level NMWQCC drinking water standards during the 3rd quarter of the reporting period.

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, which exhibited a concentration of 510 mg/L. The maximum contaminant level NMWQCC drinking water standard for chloride is 250 mg/L.

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 20.6.2.3103 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 through MW-4) on-site.

The most recent Groundwater Gradient Map figure 2B, indicates a general gradient of approximately 0.0017 feet/foot to the southeast as measured between monitor wells MW-2 and MW-4 on December 10, 2009.

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 5.14 feet. The maximum PSH thickness was 5.69 feet on May 26, 2009.

During the reporting period approximately 555 gallons (13.2 barrels) of PSH has been 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.

ANITICIPATED ACTIONS

PSH recovery will continue on a bi-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 expressed consent of Basin and/or Plains.

DISTRIBUTION

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Figures

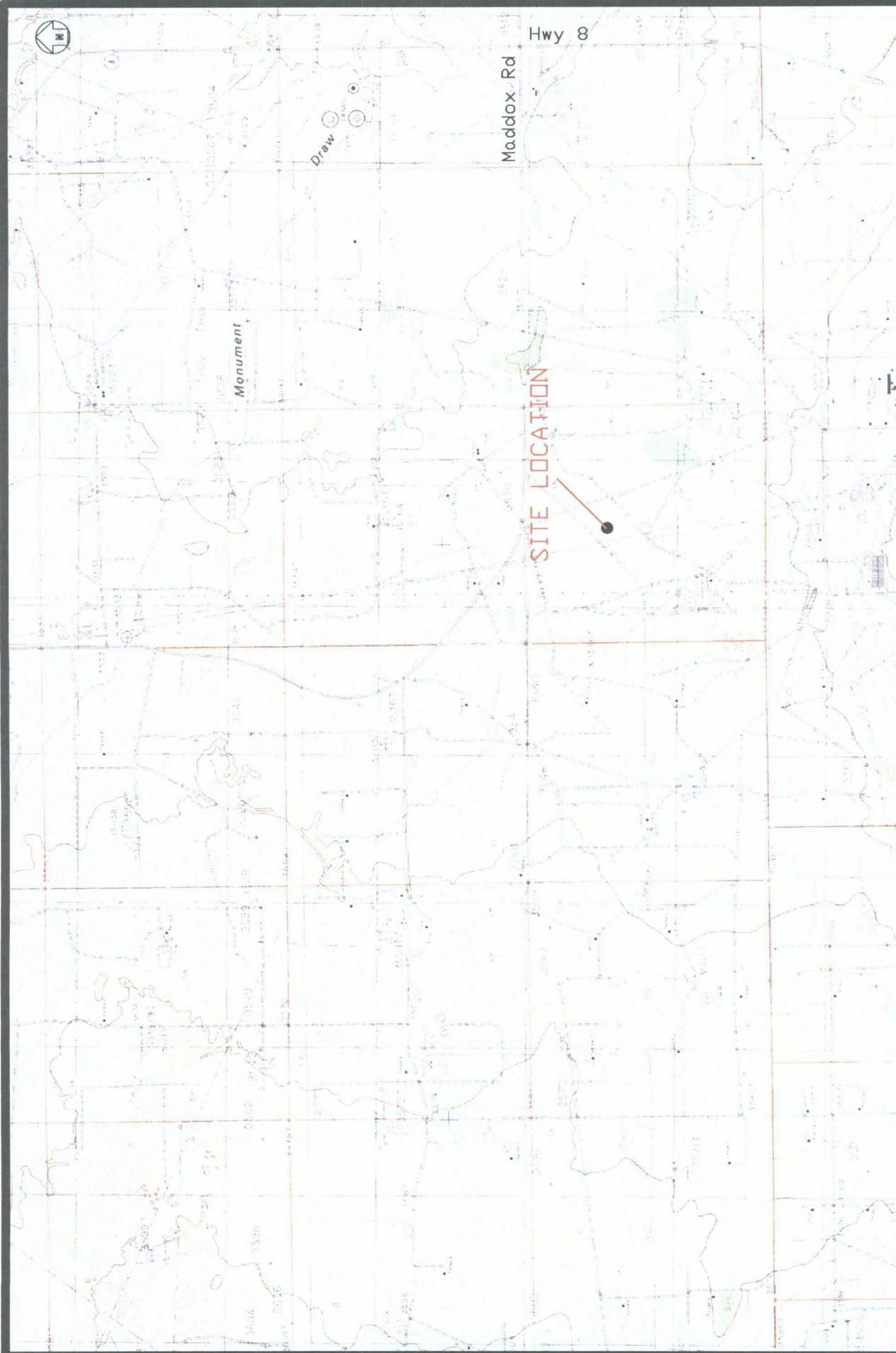
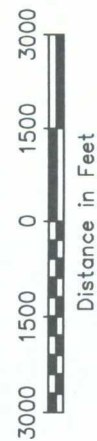


Figure 1

Site Location Map
 Plains Marketing, L.P.
 DCP Plant to Lea Station 6-inch #2
 Lea County, New Mexico
 SRS 2009-039
 1RP-2136



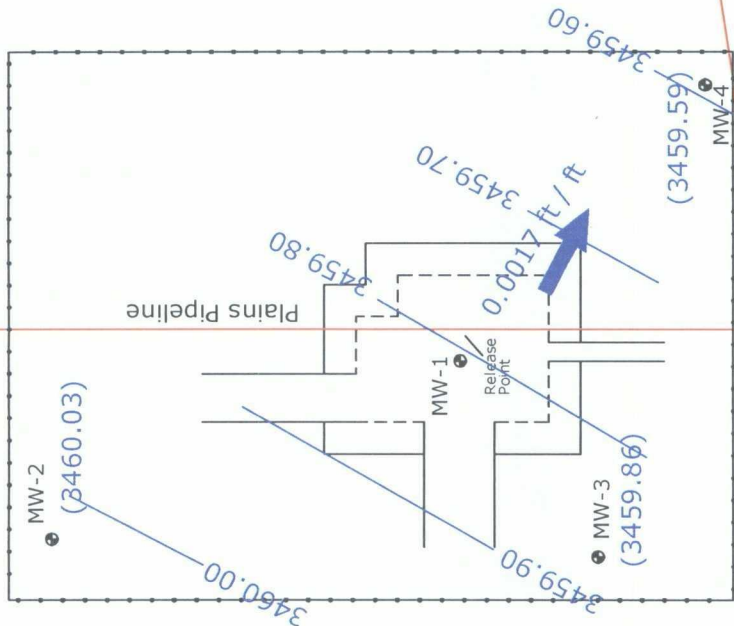
Basin Environmental Services

Prep By: CDS
 March 16, 2009
 Checked By: CDS
 Scale 1"=3000'



Powerline

Pipeline Right-of-Way
Pipeline Right-of-Way



Southern Union Gas Pipeline

El Paso Pipeline

Pipeline Right-of-Way
Pipeline Right-of-Way

Groundwater-Gradient magnitude measured
between monitor wells MW-2 and MW-4
Monitor Well MW-1 was not used in map construction

Legend:

Excavation Extents

Pipeline

Groundwater Gradient Contour Line

Groundwater Elevation (feet)

Groundwater Gradient Direction and Magnitude

MW-1 Monitor Well

Powerline

Fence

Figure 2A

Inferred Groundwater
Gradient Map
(7/1/2009)

Plains Marketing, L.P.
DCP Plant to Lea Station 6-Inch #2
Lea County, NM
1RP-2136

Basin Environmental Consulting

Prep By: CDS

March 25, 2010

Checked By: CJB

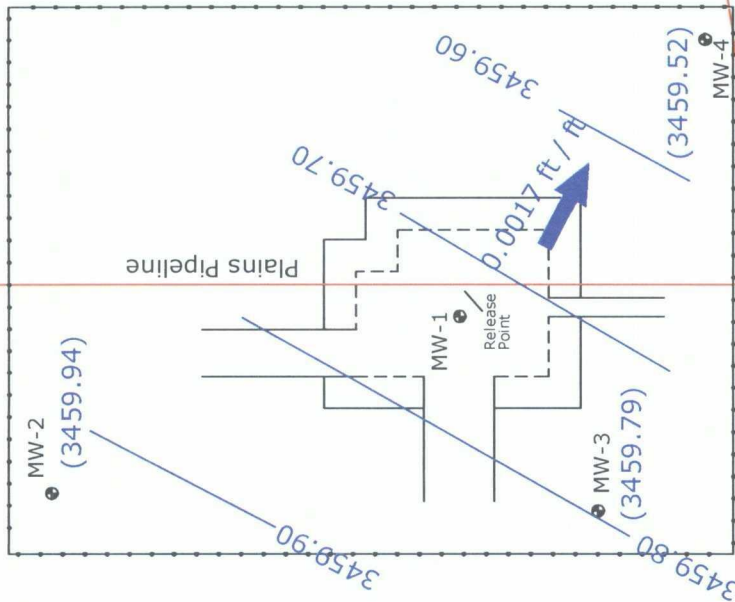
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Powerline

Pipeline Right-of-Way
Pipeline Right-of-Way



Southern Union Gas Pipeline

El Paso Pipeline

Groundwater Gradient magnitude measured
between monitor wells MW-2 and MW-4
Monitor Well MW-1 was not used in map construction

Legend:

Excavation Extents
Pipeline

Groundwater Gradient Contour Line

Groundwater Elevation (feet)

Groundwater Gradient Direction and Magnitude

MW-1
Monitor Well

Powerline

Fence

Figure 2B

Inferred Groundwater
Gradient Map
(12/10/2009)

Plains Marketing, L.P.
DCP Plant to Lea Station 6-Inch #2
Lea County, NM
1RP-2136

Basin Environmental Consulting

Prep By: CDS

Checked By: CJB

March 25, 2010

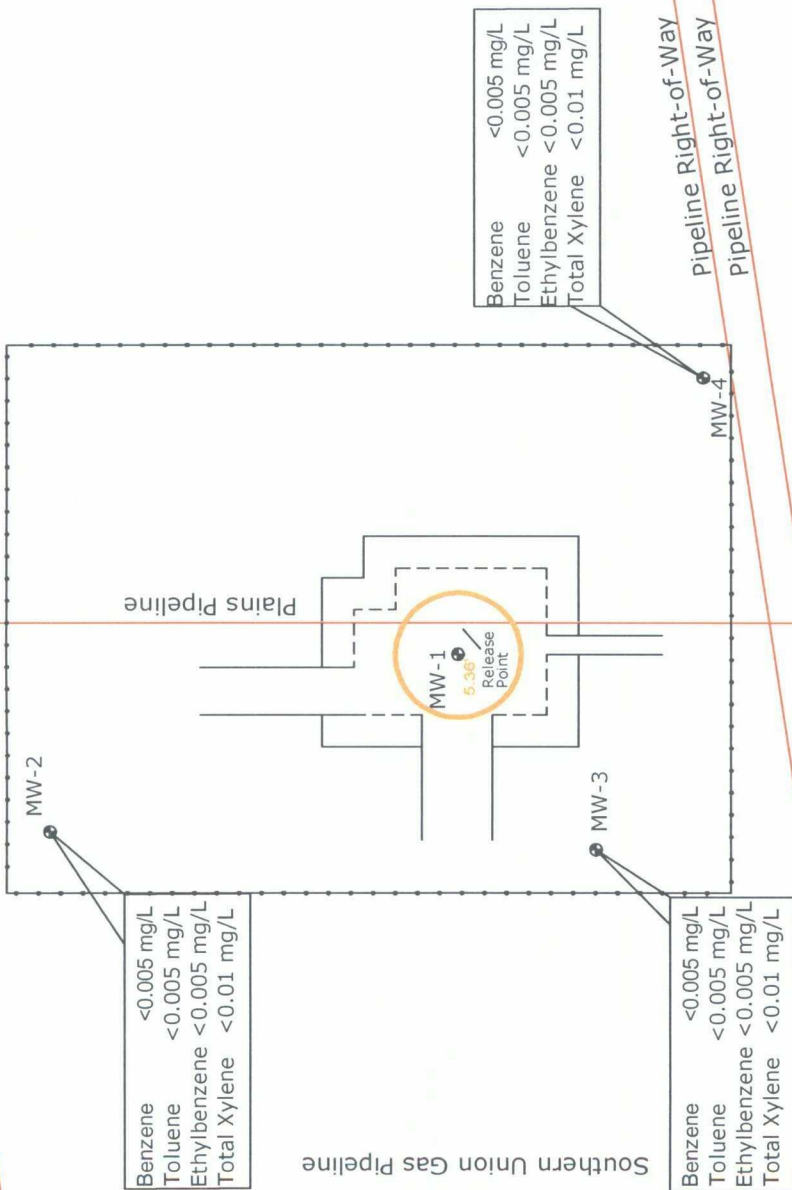
Scale 1"=60'





Powerline

Pipeline Right-of-Way
Pipeline Right-of-Way



Groundwater Concentration
and Inferred PSH Extent
Map (11/12/08)

Figure 3A
**Groundwater Concentration
and Inferred PSH Extent Map
(7/1/2009)**
Plains Marketing, L.P.
DCP Plant to Lea Station 6-Inch #2
Lea County, NM
1RP-2136

Basin Environmental Consulting

Legend:

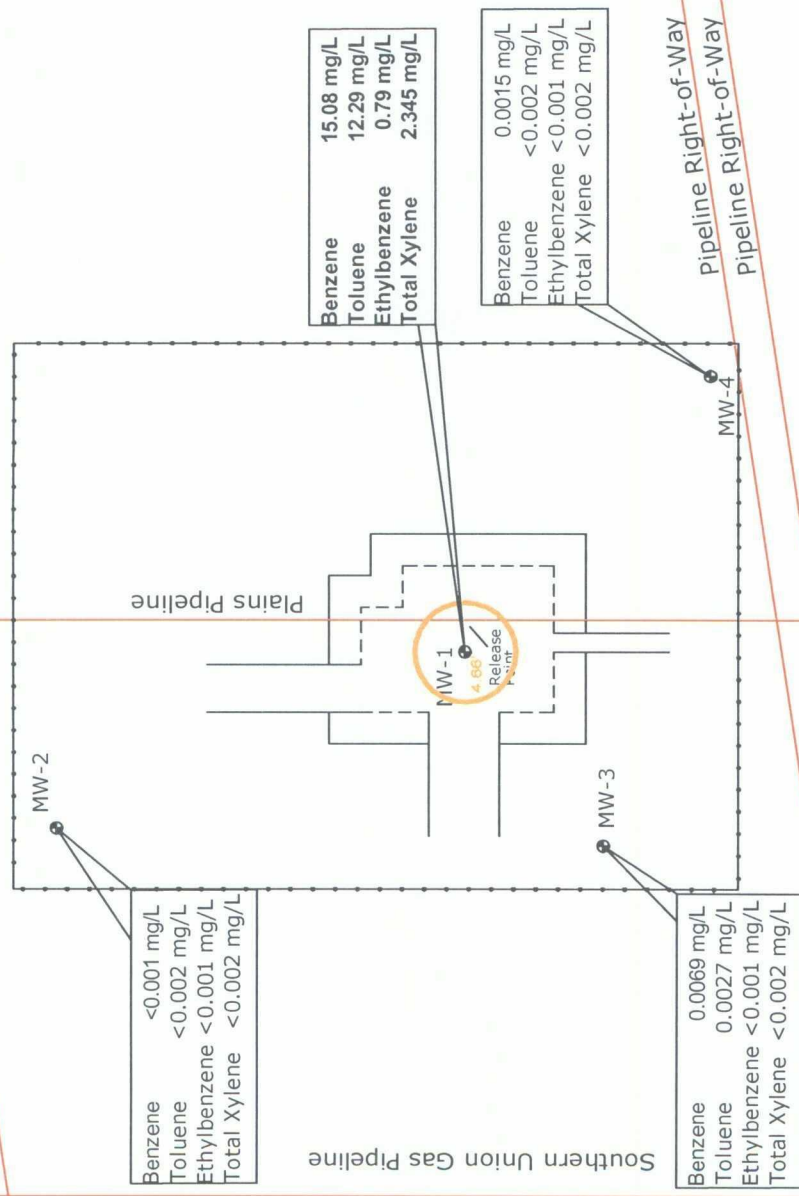
- Excavation Extents
- Pipeline
- Monitor Well
- Powerline
- Fence
- Inferred PSH Extent
- Thickness of PSH (in feet)
- 1.04'
- <0.001
- Constituent Concentration (mg/L)

Prep By: CDS
March 25, 2010
Scale 1"=60'
Checked By: CJB



Powerline

Pipeline Right-of-Way
Pipeline Right-of-Way



Groundwater Concentration and Inferred PSH Extent Map (11/12/09)

Figure 3B
Groundwater Concentration and Inferred PSH Extent Map (12/10/2009)
Plains Marketing, L.P.
DCP Plant to Lea Station 6-Inch #2
Lea County, NM
1RP-2136

Basin Environmental Consulting

Tables

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
 DCP PLANT TO LEA STATION 6-INCH #2
 LEA COUNTY, NEW MEXICO
 PLAINS SRS NO: 2009-039
 NMOCD REF NO: 1RP-2136

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW-1	04/28/09	3,540.25	64.59	67.40	2.81	3,475.24
MW-1	04/30/09	3,540.25	64.65	67.24	2.59	3,475.21
MW-1	05/05/09	3,540.25	64.09	68.74	4.65	3,475.46
MW-1	05/07/09	3,540.25	64.23	68.39	4.16	3,475.40
MW-1	05/13/09	3,540.25	63.84	69.52	5.68	3,475.56
MW-1	05/15/09	3,540.25	63.84	69.40	5.56	3,475.58
MW-1	05/19/09	3,540.25	63.83	69.51	5.68	3,475.57
MW-1	05/21/09	3,540.25	63.88	69.44	5.58	3,475.55
MW-1	05/26/09	3,540.25	63.82	69.51	5.69	3,475.58
MW-1	05/28/09	3,540.25	63.85	69.41	5.56	3,475.57
MW-1	06/01/09	3,540.25	63.83	69.47	5.64	3,475.57
MW-1	06/03/09	3,540.25	63.89	69.40	5.51	3,475.53
MW-1	06/07/09	3,540.25	63.85	69.42	5.57	3,475.56
MW-1	06/08/09	3,540.25	63.87	69.50	5.63	3,475.54
MW-1	06/10/09	3,540.25	63.87	69.44	5.57	3,475.54
MW-1	06/19/09	3,540.25	63.85	69.51	5.06	3,475.04
MW-1	06/22/09	3,540.25	63.87	69.47	5.60	3,475.54
MW-1	06/25/09	3,540.25	63.90	69.44	5.54	3,475.52
MW-1	06/29/09	3,540.25	63.88	69.45	5.57	3,475.53
MW-1	07/01/09	3,540.25	63.95	69.31	5.36	3,475.50
MW-1	07/08/09	3,540.25	63.92	69.37	5.45	3,475.51
MW-1	07/14/09	3,540.25	63.88	69.43	5.55	3,475.54
MW-1	07/27/09	3,540.25	63.91	69.46	5.55	3,475.51
MW-1	07/28/09	3,540.25	63.95	69.25	5.30	3,475.51
MW-1	08/03/09	3,540.25	63.45	69.40	5.45	3,475.48
MW-1	08/05/09	3,540.25	63.95	69.31	5.36	3,475.50
MW-1	08/11/09	3,540.25	63.97	69.36	5.39	3,475.47
MW-1	08/18/09	3,540.25	63.97	69.47	5.30	3,475.29
MW-1	08/28/09	3,540.25	63.98	69.38	5.40	3,475.46
MW-1	09/01/09	3,540.25	73.96	79.34	5.38	3,465.48
MW-1	09/03/09	3,540.25	79.03	84.27	5.24	3,460.43
MW-1	09/10/09	3,540.25	79.03	84.37	5.34	3,460.42
MW-1	09/17/09	3,540.25	79.04	84.35	5.31	3,460.41
MW-1	09/18/09	3,540.25	79.09	84.12	5.03	3,460.41
MW-1	09/22/09	3,540.25	79.09	84.30	5.21	3,460.38

TABLE 1

GROUNDWATER ELEVATION DATA

PLAINS MARKETING, L.P.
 DCP PLANT TO LEA STATION 6-INCH #2
 LEA COUNTY, NEW MEXICO
 PLAINS SRS NO: 2009-039
 NMOCD REF NO: 1RP-2136

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW-1	09/30/09	3,540.25	78.97	84.24	5.27	3,460.49
MW-1	10/02/09	3,540.25	79.02	84.12	5.10	3,460.47
MW-1	10/06/09	3,540.25	79.09	84.30	5.21	3,460.38
MW-1	10/08/09	3,540.25	79.08	84.18	5.10	3,460.41
MW-1	10/13/09	3,540.25	79.05	84.20	5.15	3,460.43
MW-1	10/15/09	3,540.25	79.20	84.02	4.82	3,460.33
MW-1	10/20/09	3,540.25	79.05	84.15	5.10	3,460.44
MW-1	10/23/09	3,540.25	79.18	84.08	4.90	3,460.34
MW-1	10/29/09	3,540.25	79.10	84.13	5.03	3,460.40
MW-1	11/03/09	3,540.25	79.14	84.06	4.92	3,460.37
MW-1	11/10/09	3,540.25	79.22	84.25	5.03	3,460.28
MW-1	11/17/09	3,540.25	79.18	84.18	5.00	3,460.32
MW-1	11/20/09	3,540.25	79.18	83.99	4.81	3,460.35
MW-1	11/24/09	3,540.25	79.26	83.98	4.72	3,460.28
MW-1	12/09/09	3,540.25	79.23	84.20	4.97	3,460.27
MW-1	12/10/09	3,540.25	79.24	83.90	4.66	3,460.31
MW-1	12/15/09	3,540.25	79.26	84.01	4.75	3,460.28
MW-1	12/17/09	3,540.25	79.18	84.17	4.99	3,460.32
MW-1	12/21/09	3,540.25	79.21	84.16	4.95	3,460.30
MW-1	12/28/09	3,540.25	79.26	84.17	5.36	3,460.64
MW-2	07/01/09	3,538.31	-	78.28	0.00	3,460.03
MW-2	12/10/09	3,538.31	-	78.37	0.00	3,459.94
MW-3	07/01/09	3,539.03	-	79.17	0.00	3,459.86
MW-3	12/10/09	3,539.03	-	79.24	0.00	3,459.79
MW-4	07/01/09	3,539.66	-	80.07	0.00	3,459.59
MW-4	12/10/09	3,539.66	-	80.14	0.00	3,459.52

TABLE 2

CONCENTRATIONS OF BENZENE, BTX AND CHLORIDES IN GROUNDWATER

PLAINS MARKETING, L.P.
DCP PLANT TO LEA STATION 6-INCH #2
LEA COUNTY, NEW MEXICO
PLAINS SRS NO. 2009-039
NMOCD REFERENCE NO: 1R-2136

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8260b						E 300 CHLORIDES (mg/L)
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P-XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL BTX (mg/L)	
MW-1	12/10/09	15.08	12.29	0.79	1.776	0.569	30.51	-
MW-2	07/01/09	<0.005	<0.005	<0.005	<0.01	<0.005	<0.01	495
MW-2	12/10/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	-
MW-3	07/01/09	<0.005	<0.005	<0.005	<0.01	<0.005	<0.01	663
MW-3	12/10/09	0.0069	0.0027	<0.0010	<0.0020	<0.0010	0.0096	-
MW-4	07/01/09	<0.005	<0.005	<0.005	<0.01	<0.005	<0.01	510
MW-4	12/10/09	0.0015	<0.0020	<0.0010	<0.0020	<0.0010	0.0015	-
NMOCD CRITERIA		0.01	0.75	0.75	TOTAL XYLENES 0.62			250

TABLE 3
CONCENTRATIONS OF POLY AROMATIC HYDROCARBONS (SEMI-VOLATILE) IN GROUNDWATER

PLAINS MARKETING, L.P.
DCP PLANT TO LEA STATION 6-INCH #2
LEA COUNTY, NEW MEXICO
NMOCID REFERENCE NUMBER IRP-2136

[illegible]

TABLE 4

CONCENTRATIONS OF TPH IN GROUNDWATER

PLAINS MARKETING, L.P.
DCP PLANT TO LEA STATION 6-INCH #2
LEA COUNTY, NEW MEXICO
PLAINS SRS NO: 2009-039
NMOCD REF NO: 1RP-2136

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	582	30.9	<7.5	612.9

Table 5

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS IN WATER

PLAINS MARKETING, LP

DCP PLANT TO LEA STATION 6-INCH #2

LEA COUNTY, NEW MEXICO

NMOC REFERENCE NUMBER 1R9-2136

All water concentrations are in mg/L

Date Sampled	Sample Location	Acetone	Acrylonitrile	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	2-Butanone	MTBE	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane
07/01/09	MW-2	<0.1	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.01
07/01/09	MW-3	<0.1	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.01
07/01/09	MW-4	<0.1	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.01
Maximum Contaminant Levels from NMWQCC Drinking water standards Sections 1-101.UU and 3-103.A.		-	-	0.01 mg/L	-	-	-	-	-	-	-	-	-	-	-	0.01 mg/L	-	-

Table 5

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS IN WATER

PLAINS MARKETING, LP

DCP PLANT TO LEA STATION 6-INCH #2

LEA COUNTY, NEW MEXICO

NMOCD REFERENCE NUMBER 1RP-2136

All water concentrations are in mg/L

Date Sampled	Sample Location	2-Chloroethyl vinyl ether	Chloroform	Chloromethane	2-Chlorotoluene	4-Chlorotoluene	p-Cymene(p-Isopropyltoluene)	Dibromochloromethane	1,2-Dibromo-3-chloropropane	1,2-Dibromomethane (EDB)	Dibromomethane (methylene bromide)	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	0.1mg/L
07/01/09	MW-2	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
07/01/09	MW-3	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
07/01/09	MW-4	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Maximum Contaminant Levels from NMWQCC Drinking water standards Sections 1-101.UU and 3-103.A.		-	0.1mg/L	-	-	-	-	-	-	0.0001 mg/L	-	-	-	-	-	-	0.005 mg/L	0.01 mg/L	0.005 mg/L

Table 5

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS IN WATER

PLAINS MARKETING, LP

DCP PLANT TO LEA STATION 6-INCH #2

LEA COUNTY, NEW MEXICO

NMOCD REFERENCE NUMBER 1RP-2136

All water concentrations are in mg/L

Date Sampled	Sample Location	trans-1,2-Dichloroethene	1,2-Dichloropropane	1,3-Dichloropropane	2,2-Dichloropropane	1,1-Dichloropropane	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene	Ethylbenzene	Hexachlorobutadiene	2-Hexanone	Isopropylbenzene	Methylene chloride	4-Methyl-2-pentanone (MIBK)	Naphthalene	n-Propylbenzene	Styrene	1,1,1,2-Tetrachloroethane
07/01/09	MW-2	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.05	<0.01	<0.005	<0.005	<0.005
07/01/09	MW-3	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.05	<0.01	<0.005	<0.005	<0.005
07/01/09	MW-4	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.05	<0.01	<0.005	<0.005	<0.005
Maximum Contaminant Levels from NMWQCC Drinking water standards Sections 1-101.UU and 3-103.A.		-	-	-	-	-	-	-	0.75 mg/L	-	-	-	0.1mg/L	-	0.03 mg/L	-	-	-

Table 5

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER

DCP PLANT TO LEA STATION 6-INCH #2

PLAINS MARKETING, LP

LEA COUNTY, NEW MEXICO

NMOC REFERENCE NUMBER 1RP-2136

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	0.01 mg/L	-	-	Trichlorofluoromethane	1,2,3-Trichloropropane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	o-Xylene	m,p-Xylene	-	0.001 mg/L
07/01/09	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	<0.005	<0.005	<0.01	<0.05	<0.002
07/01/09	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	<0.005	<0.005	<0.01	<0.05	<0.002
07/01/09	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	<0.005	<0.005	<0.01	<0.05	<0.002
Maximum Contaminant Levels from NMWQCC Drinking water standards Sections 1-101.UU and 3-103.A.				0.75 mg/L	-	-	-	0.06 mg/L	-	0.01 mg/L	-	-	-	-	-	Total Xylene	0.62 mg/L	-	


TABLE 7
CONCENTRATIONS OF ANIONS/CATIONS IN GROUNDWATER
PLAINS MARKETING L.P.
DCP PLANT TO LEA STATION 6-INCH #2
LEA COUNTY, NEW MEXICO
NMOC REFERENCE NUMBER 1RP-2136

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
7/1/2009	MW-2	77.5	23.5	39.4	335	495	88	192	<4	3.65	<12.5	<12.5
7/1/2009	MW-3	156	74	<50	493	663	338	260	<4	<10	<25	<25
7/1/2009	MW-4	73	19.4	<25	338	510	87.4	180	<4	2.98	<10	<10
Maximum Contaminant Levels from NM WQCC Drinking water standards Sections 1-101.UU and 3-103.A.		250 mg/L	600 mg/L	.	.	10 mg/L	.	1.6 mg/L



Appendices



Appendix A

Laboratory Reports

Analytical Report 337170

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

DCP Plant to Lea Stat 6" # 2

2009-039

09-JUL-09



12600 West I-20 East Odessa, Texas 79765

Texas certification numbers:

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

Florida certification numbers:

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

Arizona certification numbers:

Houston, TX AZ0738

South Carolina certification numbers:

Norcross(Atlanta), GA 98015

North Carolina certification numbers:

Norcross(Atlanta), GA 483

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



09-JUL-09

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

Reference: XENCO Report No: **337170**
DCP Plant to Lea Stat 6" # 2
Project Address: Lea Co., 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 337170. 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. 337170 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

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Sample Cross Reference 337170



PLAINS ALL AMERICAN EH&S, Midland, TX

DCP Plant to Lea Stat 6" # 2

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-2	W	Jul-02-09 13:22		337170-001
MW-3	W	Jul-02-09 13:34		337170-002
MW-4	W	Jul-02-09 13:45		337170-003



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

Project Name: DCP Plant to Lea Stat 6" # 2

Project ID: 2009-039

Work Order Number: 337170

Report Date: 09-JUL-09

Date Received: 07/02/2009

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-764829 SVOCs by SW-846 8270C
SW8270C

Batch 764829, 4-Nitroaniline, Isophorone recovered above QC limits in the Blank Spike & Blank Spike Duplicate; Isophorone passes in Matrix Spike. 2-Nitrophenol recovered above QC limits in the Blank Spike Duplicate; 2-Nitrophenol passes in Matrix Spike. No 4-Nitroaniline analytes were found in the samples so results were reported as is.

Samples affected are: 337170-002, -001, -003.

SW8270C

Batch 764829, 4-Nitroaniline, Pyrene recovered above QC limits in the Matrix Spike.

Samples affected are: 337170-002, -001, -003.

The Laboratory Control Sample for Pyrene is within laboratory Control Limits.



Certificate of Analysis Summary 337170
PLAINS ALL AMERICAN EH&S, Midland, TX



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

Project Name: DCP Plant to Lea Stat 6" # 2

Date Received in Lab: Thu Jul-02-09 04:34 pm
Report Date: 09-JUL-09
Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	337170-001	337170-002	337170-003	
	Field Id: Depth: Matrix: Sampled: Extracted: Analyzed: Units/RL:	MW-2 WATER Jul-02-09 13:22 mg/L RL Jul-07-09 10:18 Jul-08-09 15:52	MW-3 WATER Jul-02-09 13:34 mg/L RL Jul-07-09 10:21 Jul-08-09 16:32	MW-4 WATER Jul-02-09 13:45 mg/L RL Jul-07-09 10:24 Jul-08-09 17:12	
SVOAs by EPA 8270C					
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	

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Brent Barron
Odessa Laboratory Director



Certificate of Analysis Summary 337170

PLAINS ALL AMERICAN EH&S, Midland, TX



Project Id: 2009-039

Contact: Jason Henry

Project Location: Lea Co., NM

Date Received in Lab: Thu Jul-02-09 04:34 pm


Report Date: 09-JUL-09

Project Manager: Brent Barron, IL

Analysis Requested	Lab Id:	337170-001	337170-002	337170-003	
	Field Id:	MW-2	MW-3	MW-4	
	Depth:				
	Matrix:	WATER	WATER	WATER	
	Sampled:	Jul-02-09 13:22	Jul-02-09 13:34	Jul-02-09 13:45	
SVOAs by EPA 8270C	Extracted:	Jul-07-09 10:18	Jul-07-09 10:21	Jul-07-09 10:24	
	Analyzed:	Jul-08-09 15:52	Jul-08-09 16:32	Jul-08-09 17:12	
	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	

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Brent Barron
Odessa Laboratory Director



Certificate of Analysis Summary 337170

PLAINS ALL AMERICAN EH&S, Midland, TX



Project Id: 2009-039

Contact: Jason Henry

Project Location: Lea Co., NM

Project Name: DCP Plant to Lea Stat 6" # 2

Date Received in Lab: Thu Jul-02-09 04:34 pm

Report Date: 09-JUL-09

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	337170-001	337170-002	337170-003	
	Field Id:	MW-2	MW-3	MW-4	
	Depth:				
	Matrix:	WATER	WATER	WATER	
	Sampled:	Jul-02-09 13:22	Jul-02-09 13:34	Jul-02-09 13:45	
SVOAs by EPA 8270C	Extracted:	Jul-07-09 10:18	Jul-07-09 10:21	Jul-07-09 10:24	
	Analyzed:	Jul-08-09 15:52	Jul-08-09 16:32	Jul-08-09 17:12	
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	
		ND 0.010	ND 0.010	ND 0.010	
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	

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Brent Barron
Odessa Laboratory Director



Flagging Criteria



- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the MQL and above the SQL.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

* Outside XENCO's scope of NELAC Accreditation.

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Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Stat 6" # 2

Work Orders : 337170,

Project ID: 2009-039

Lab Batch #: 764829

Sample: 533210-1-BLK / BLK

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 07/08/09 12:35

SURROGATE RECOVERY STUDY

SVOAs by EPA 8270C Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.051	0.050	102	43-116	
2-Fluorophenol	0.035	0.050	70	21-100	
Nitrobenzene-d5	0.045	0.050	90	35-114	
Phenol-d6	0.022	0.050	44	10-94	
Terphenyl-D14	0.052	0.050	104	33-141	
2,4,6-Tribromophenol	0.041	0.050	82	10-123	

Lab Batch #: 764829

Sample: 533210-1-BKS / BKS

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 07/08/09 13:14

SURROGATE RECOVERY STUDY

SVOAs by EPA 8270C Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.049	0.050	98	43-116	
2-Fluorophenol	0.036	0.050	72	21-100	
Nitrobenzene-d5	0.046	0.050	92	35-114	
Phenol-d6	0.026	0.050	52	10-94	
Terphenyl-D14	0.052	0.050	104	33-141	
2,4,6-Tribromophenol	0.043	0.050	86	10-123	

Lab Batch #: 764829

Sample: 533210-1-BSD / BSD

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 07/08/09 13:53

SURROGATE RECOVERY STUDY

SVOAs by EPA 8270C Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.049	0.050	98	43-116	
2-Fluorophenol	0.035	0.050	70	21-100	
Nitrobenzene-d5	0.046	0.050	92	35-114	
Phenol-d6	0.025	0.050	50	10-94	
Terphenyl-D14	0.053	0.050	106	33-141	
2,4,6-Tribromophenol	0.043	0.050	86	10-123	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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



Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Stat 6" # 2

Work Orders : 337170,

Project ID: 2009-039

Lab Batch #: 764829

Sample: 336954-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/L

Date Analyzed: 07/08/09 15:12

SURROGATE RECOVERY STUDY

SVOAs by EPA 8270C Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.242	0.250	97	43-116	
2-Fluorophenol	0.212	0.250	85	21-100	
Nitrobenzene-d5	0.239	0.250	96	35-114	
Phenol-d6	0.181	0.250	72	10-94	
Terphenyl-D14	0.271	0.250	108	33-141	
2,4,6-Tribromophenol	0.227	0.250	91	10-123	

Lab Batch #: 764829

Sample: 337170-001 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 07/08/09 15:52

SURROGATE RECOVERY STUDY

SVOAs by EPA 8270C Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.049	0.050	98	43-116	
2-Fluorophenol	0.023	0.050	46	21-100	
Nitrobenzene-d5	0.043	0.050	86	35-114	
Phenol-d6	0.015	0.050	30	10-94	
Terphenyl-D14	0.049	0.050	98	33-141	
2,4,6-Tribromophenol	0.038	0.050	76	10-123	

Lab Batch #: 764829

Sample: 337170-002 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 07/08/09 16:32

SURROGATE RECOVERY STUDY

SVOAs by EPA 8270C 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	0.025	0.050	50	21-100	
Nitrobenzene-d5	0.041	0.050	82	35-114	
Phenol-d6	0.014	0.050	28	10-94	
Terphenyl-D14	0.051	0.050	102	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 Stat 6" # 2

Work Orders : 337170,

Project ID: 2009-039

Lab Batch #: 764829

Sample: 337170-003 / SMP

Batch: 1 Matrix: Water

Units: mg/L

Date Analyzed: 07/08/09 17:12

SURROGATE RECOVERY STUDY

SVOAs by EPA 8270C Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.048	0.050	96	43-116	
2-Fluorophenol	0.022	0.050	44	21-100	
Nitrobenzene-d5	0.042	0.050	84	35-114	
Phenol-d6	0.015	0.050	30	10-94	
Terphenyl-D14	0.052	0.050	104	33-141	
2,4,6-Tribromophenol	0.038	0.050	76	10-123	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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

Project Name: DCP Plant to Lea Stat 6" # 2

Work Order #: 337170

Analyst: KAN

Lab Batch ID: 764829

Sample: 533210-1-BKS

Date Prepared: 07/07/2009

Batch #: 1

Project ID: 2009-039

Date Analyzed: 07/08/2009

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
Units: mg/L											
SVOAs by EPA 8270C	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
Analytes											
Acenaphthene	ND	0.050	0.049	98	0.05	0.050	100	2	54-114	25	
Acenaphthylene	ND	0.050	0.050	100	0.05	0.050	100	0	53-113	25	
Aniline (Phenylamine, Aminobenzene)	ND	0.050	0.048	96	0.05	0.049	98	2	35-104	25	
Anthracene	ND	0.050	0.050	100	0.05	0.051	102	2	56-116	25	
Benzo(a)anthracene	ND	0.050	0.053	106	0.05	0.053	106	0	59-116	25	
Benzo(a)pyrene	ND	0.050	0.053	106	0.05	0.054	108	2	58-118	25	
Benzo(b)fluoranthene	ND	0.050	0.053	106	0.05	0.053	106	0	54-123	25	
Benzo(k)fluoranthene	ND	0.050	0.051	102	0.05	0.052	104	2	52-122	25	
Benzo(g,h,i)perylene	ND	0.050	0.040	80	0.05	0.041	82	2	47-129	25	
Benzoic Acid	ND	0.150	0.103	69	0.15	0.106	71	3	4-113	25	
Benzyl Butyl Phthalate	ND	0.050	0.055	110	0.05	0.055	110	0	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	0.043	86	0.05	0.042	84	2	57-108	25	
bis(2-chloroisopropyl) ether	ND	0.050	0.029	58	0.05	0.029	58	0	54-111	25	
bis(2-ethylhexyl) phthalate	ND	0.050	0.047	94	0.05	0.048	96	2	59-119	25	
4-Bromophenyl-phenylether	ND	0.050	0.049	98	0.05	0.050	100	2	58-112	25	
4-chloro-3-methylphenol	ND	0.050	0.051	102	0.05	0.051	102	0	58-116	25	
4-Chloroaniline	ND	0.050	0.058	116	0.05	0.061	122	5	2-123	25	
2-Chloronaphthalene	ND	0.050	0.049	98	0.05	0.049	98	0	58-105	25	
2-Chlorophenol	ND	0.050	0.047	94	0.05	0.047	94	0	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

Project Name: DCP Plant to Lea Stat 6" # 2

Work Order #: 337170

Analyst: KAN

Lab Batch ID: 764829

Sample: 533210-1-BKS

Units: mg/L

Project ID: 2009-039

Date Analyzed: 07/08/2009

Matrix: Water

Date Prepared: 07/07/2009

Batch #: 1

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	0.049	98	0.05	0.049	98	0	59-109	25	
Chrysene	ND	0.050	0.051	102	0.05	0.052	104	2	58-116	25	
Dibenz(a,h)Anthracene	ND	0.050	0.050	100	0.05	0.051	102	2	46-131	25	
Dibenzofuran	ND	0.050	0.049	98	0.05	0.049	98	0	56-111	25	
di-n-Butyl Phthalate	ND	0.050	0.049	98	0.05	0.050	100	2	60-118	25	
1,2-Dichlorobenzene	ND	0.050	0.046	92	0.05	0.046	92	0	53-106	25	
1,3-Dichlorobenzene	ND	0.050	0.047	94	0.05	0.046	92	2	52-105	25	
1,4-Dichlorobenzene	ND	0.050	0.046	92	0.05	0.046	92	0	54-105	25	
3,3'-Dichlorobenzidine	ND	0.050	0.055	110	0.05	0.059	118	7	36-123	25	
2,4-Dichlorophenol	ND	0.050	0.049	98	0.05	0.051	102	4	60-110	25	
Diethyl Phthalate	ND	0.050	0.049	98	0.05	0.049	98	0	62-114	25	
Dimethyl Phthalate	ND	0.050	0.039	78	0.05	0.049	98	23	59-113	25	
2,4-Dimethylphenol	ND	0.050	0.046	92	0.05	0.049	98	6	50-108	25	
4,6-dinitro-2-methyl phenol	ND	0.050	0.050	100	0.05	0.051	102	2	57-119	25	
2,4-Dinitrophenol	ND	0.050	0.035	70	0.05	0.036	72	3	52-111	25	
2,4-Dinitrotoluene	ND	0.050	0.052	104	0.05	0.051	102	2	60-116	25	
2,6-Dinitrotoluene	ND	0.050	0.050	100	0.05	0.050	100	0	60-115	25	
di-n-Octyl Phthalate	ND	0.050	0.050	100	0.05	0.052	104	4	49-129	25	
Fluoranthene	ND	0.050	0.050	100	0.05	0.051	102	2	55-120	25	
Fluorene	ND	0.050	0.049	98	0.05	0.049	98	0	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

Project Name: DCP Plant to Lea Stat 6" # 2

Work Order #: 337170

Analyst: KAN

Lab Batch ID: 764829

Sample: 533210-1-BKS

Units: mg/L

Project ID: 2009-039

Date Analyzed: 07/08/2009

Matrix: Water

Date Prepared: 07/07/2009

Batch #: 1

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	0.050	100	0.05	0.050	100	0	60-109	25	
Hexachlorobutadiene	ND	0.050	0.046	92	0.05	0.046	92	0	52-107	25	
Hexachlorocyclopentadiene	ND	0.050	0.049	98	0.05	0.049	98	0	32-115	25	
Hexachloroethane	ND	0.050	0.045	90	0.05	0.045	90	0	46-115	25	
Indeno(1,2,3-c,d)Pyrene	ND	0.050	0.051	102	0.05	0.051	102	0	44-132	25	
Isophorone	ND	0.050	0.054	108	0.05	0.056	112	4	57-107	25	H
2-Methylnaphthalene	ND	0.050	0.051	102	0.05	0.052	104	2	57-106	25	
2-methylphenol	ND	0.050	0.042	84	0.05	0.043	86	2	52-106	25	
3&4-Methylphenol	ND	0.100	0.084	84	0.1	0.087	87	4	23-140	25	
Naphthalene	ND	0.050	0.047	94	0.05	0.047	94	0	53-110	25	
2-Nitroaniline	ND	0.050	0.047	94	0.05	0.047	94	0	55-120	25	
3-Nitroaniline	ND	0.050	0.058	116	0.05	0.060	120	3	49-120	25	
4-Nitroaniline	ND	0.050	0.066	132	0.05	0.065	130	2	52-118	25	H
Nitrobenzene	ND	0.050	0.046	92	0.05	0.047	94	2	56-107	25	
2-Nitrophenol	ND	0.050	0.052	104	0.05	0.053	106	2	57-105	25	H
4-Nitrophenol	ND	0.050	0.027	54	0.05	0.025	50	8	18-104	25	
N-Nitrosodi-n-Propylamine	ND	0.050	0.058	116	0.05	0.060	120	3	21-137	25	
N-Nitrosodiphenylamine	ND	0.050	0.050	100	0.05	0.050	100	0	50-121	25	
Pentachlorophenol	ND	0.050	0.025	50	0.05	0.025	50	0	36-132	25	
Phenanthrene	ND	0.050	0.050	100	0.05	0.051	102	2	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 Stat 6" # 2

Work Order #: 337170

Analyst: KAN

Lab Batch ID: 764829

Sample: 533210-1-BKS

Units: mg/L

Project ID: 2009-039

Date Analyzed: 07/08/2009

Matrix: Water

Date Prepared: 07/07/2009

Batch #: 1

SVOAs by EPA 8270C		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
Analytes												
Phenol		ND	0.050	0.028	56	0.05	0.028	56	0	19-89	25	
Pyrene		ND	0.050	0.057	114	0.05	0.057	114	0	57-119	25	
Pyridine		ND	0.050	0.028	56	0.05	0.032	64	13	5-94	25	
1,2,4-Trichlorobenzene		ND	0.050	0.048	96	0.05	0.047	94	2	56-104	25	
2,4,5-Trichlorophenol		ND	0.050	0.046	92	0.05	0.046	92	0	55-114	25	
2,4,6-Trichlorophenol		ND	0.050	0.050	100	0.05	0.051	102	2	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 Stat 6" # 2

Work Order #: 337170

Lab Batch #: 764829

Date Analyzed: 07/08/2009

Date Prepared: 07/07/2009

Project ID: 2009-039

Analyst: KAN

QC- Sample ID: 336954-001 S

Batch #: 1

Matrix: Soil

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY						
SVOAs by SW-846 8270C	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Accenaphthene	0.801	0.250	1.03	92	54-114	
Accenaphthylene	0.028	0.250	0.277	100	53-113	
Aniline (Phenylamine, Aminobenzene)	ND	0.250	0.201	80	35-104	
Anthracene	0.042	0.250	0.298	102	56-116	
Benzo(a)anthracene	ND	0.250	0.287	115	59-116	
Benzo(a)pyrene	ND	0.250	0.271	108	58-118	
Benzo(b)fluoranthene	ND	0.250	0.284	114	54-123	
Benzo(k)fluoranthene	ND	0.250	0.232	93	52-122	
Benzo(g,h,i)perylene	ND	0.250	0.198	79	47-129	
Benzoic Acid	ND	0.750	0.479	64	4-113	
Benzyl Butyl Phthalate	ND	0.250	0.285	114	57-122	
bis(2-chlorooctoxy) methane	ND	0.250	0.190	76	53-112	
bis(2-chloroethyl) ether	ND	0.250	0.239	96	57-108	
bis(2-chloroisopropyl) ether	ND	0.250	0.155	62	54-111	
bis(2-ethylhexyl) phthalate	ND	0.250	0.236	94	59-119	
4-Bromophenyl-phenylether	ND	0.250	0.249	100	58-112	
4-chloro-3-methylphenol	ND	0.250	0.250	100	58-116	
4-Chloroaniline	ND	0.250	0.237	95	2-123	
2-Chloronaphthalene	ND	0.250	0.228	91	58-105	
2-Chlorophenol	ND	0.250	0.240	96	58-106	
4-Chlorophenyl Phenyl Ether	ND	0.250	0.237	95	59-109	
Chrysene	ND	0.250	0.264	106	58-116	
Dibenz(a,h)Anthracene	ND	0.250	0.249	100	46-131	
Dibenzofuran	0.432	0.250	0.700	107	56-111	
di-n-Butyl Phthalate	ND	0.250	0.252	101	60-118	
1,2-Dichlorobenzene	ND	0.250	0.237	95	53-106	
1,3-Dichlorobenzene	ND	0.250	0.239	96	52-105	
1,4-Dichlorobenzene	ND	0.250	0.236	94	54-105	
3,3-Dichlorobenzidine	ND	0.250	0.257	103	36-123	
2,4-Dichlorophenol	ND	0.250	0.252	101	60-110	
Diethyl Phthalate	ND	0.250	0.251	100	62-114	
Dimethyl Phthalate	ND	0.250	0.251	100	59-113	
2,4-Dimethylphenol	ND	0.250	0.251	100	50-108	
4,6-dinitro-2-methyl phenol	ND	0.250	0.274	110	57-119	

Matrix Spike Percent Recovery [D] = $100 \cdot (C-A)/B$

Relative Percent Difference [E] = $200 \cdot (C-A)/(C+B)$

All Results are based on MDL and Validated for QC Purposes

NRL - Below Reporting Limit



Form 3 - MS Recoveries



Project Name: DCP Plant to Lea Stat 6" # 2

Work Order #: 337170

Lab Batch #: 764829

Date Analyzed: 07/08/2009

Date Prepared: 07/07/2009

Project ID: 2009-039

Analyst: KAN

QC- Sample ID: 336954-001 S

Batch #: 1

Matrix: Soil

Reporting Units: mg/L

SVOAs by SW-846 8270C		MATRIX / MATRIX SPIKE RECOVERY STUDY				
Analytes		Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
2,4-Dinitrophenol	ND	0.250	0.219	88	52-111	
2,4-Dinitrotoluene	ND	0.250	0.261	104	60-116	
2,6-Dinitrotoluene	ND	0.250	0.253	101	60-115	
di-n-Octyl Phthalate	ND	0.250	0.259	104	49-129	
Fluoranthene	0.117	0.250	0.392	110	55-120	
Fluorene	0.445	0.250	0.698	101	56-114	
Hexachlorobenzene	ND	0.250	0.254	102	60-109	
Hexachlorobutadiene	ND	0.250	0.240	96	52-107	
Hexachlorocyclopentadiene	ND	0.250	0.251	100	32-115	
Hexachloroethane	ND	0.250	0.226	90	46-115	
Indeno(1,2,3-c,d)Pyrene	ND	0.250	0.252	101	44-132	
Isophorone	ND	0.250	0.256	102	57-107	
2-Methylnaphthalene	0.678	0.250	0.840	65	57-106	
2-methylphenol	ND	0.250	0.213	85	52-106	
3&4-Methylphenol	ND	0.500	0.439	88	23-140	
Naphthalene	0.512	0.250	0.716	82	53-110	
2-Nitroaniline	ND	0.250	0.244	98	55-120	
3-Nitroaniline	ND	0.250	0.288	115	49-120	
4-Nitroaniline	ND	0.250	0.320	128	52-118	X
Nitrobenzene	ND	0.250	0.246	98	56-107	
2-Nitrophenol	ND	0.250	0.263	105	57-105	
4-Nitrophenol	ND	0.250	0.067	27	18-104	
N-Nitrosodi-n-Propylamine	ND	0.250	0.252	101	21-137	
N-Nitrosodiphenylamine	ND	0.250	0.253	101	50-121	
Pentachlorophenol	ND	0.250	0.173	69	36-132	
Phenanthrene	0.560	0.250	0.826	106	56-116	
Phenol	ND	0.250	0.217	87	19-89	
Pyrene	0.075	0.250	0.387	125	57-119	X
Pyridine	ND	0.250	0.125	50	5-94	
1,2,4-Trichlorobenzene	ND	0.250	0.244	98	56-104	
2,4,5-Trichlorophenol	ND	0.250	0.236	94	55-114	
2,4,6-Trichlorophenol	ND	0.250	0.256	102	57-113	

Matrix Spike Percent Recovery [D] = $100 \times (C-A)/B$

Relative Percent Difference [E] = $200 \times (C-A)/(C+B)$

All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Environmental Lab of Texas
Variance/ Corrective Action Report- Sample Log-In

Client: Basin Env. / Plains
Date/ Time: 7-7-09 16:34
Lab ID #: 337170
Initials: AL

Sample Receipt Checklist

				Client Initials
#1 Temperature of container/ cooler?	(Yes)	No	7.6 °C	
#2 Shipping container in good condition?	(Yes)	No		
#3 Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4 Custody Seals intact on sample bottles/ container?	(Yes)	No	Not Present	
#5 Chain of Custody present?	(Yes)	No		
#6 Sample instructions complete of Chain of Custody?	(Yes)	No		
#7 Chain of Custody signed when relinquished/ received?	(Yes)	No		
#8 Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont/ Lid	
#9 Container label(s) legible and intact?	(Yes)	No	Not Applicable	
#10 Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		
#11 Containers supplied by ELOT?	(Yes)	No		
#12 Samples in proper container/ bottle?	(Yes)	No	See Below	
#13 Samples properly preserved?	(Yes)	No	See Below	
#14 Sample bottles intact?	(Yes)	No		
#15 Preservations documented on Chain of Custody?	(Yes)	No		
#16 Containers documented on Chain of Custody?	(Yes)	No		
#17 Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18 All samples received within sufficient hold time?	(Yes)	No	See Below	
#19 Subcontract of sample(s)?	Yes	No	Not Applicable	
#20 VOC samples have zero headspace?	Yes	No	Not Applicable	

Variance Documentation

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

Regarding: _____

Corrective Action Taken: _____

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

Analytical Report 337000

for

PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

DCP Plant to Lea Station 6-Inch # 2

2009-039

13-JUL-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 (AAL11), West Virginia (362), Kentucky (85)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)

Xenco-Miramar (EPA Lab code: FL01246): Florida (E86349)

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)

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13-JUL-09

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

Reference: XENCO Report No: **337000**
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 337000. 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. 337000 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

Odessa Laboratory Director

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Sample Cross Reference 337000



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	Jul-01-09 09:20		337000-001
MW-3	W	Jul-01-09 11:00		337000-002
MW-4	W	Jul-01-09 13:30		337000-003



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

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

Project ID: 2009-039

Work Order Number: 337000

Report Date: 13-JUL-09

Date Received: 07/02/2009

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-764363 Mercury by SW-846 7470A

None

Batch: LBA-764364 Metals per ICP by SW846 6010B

None

Batch: LBA-764628 Inorganic Anions by EPA 300

These samples were previously analyzed on July 3rd. The batch QC for these samples failed necessitating re-analysis. The data reported is from that reanalysis, which was performed outside of the regulatory holding time for Nitrate-N, however, the results were very comparable to those from the initial analysis and are considered valid.

Batch: LBA-764664 VOAs by SW-846 8260B

SW8260B

Batch 764664, MTBE recovered above QC limits in the laboratory control sample.

Samples affected are: 337000-002, -001, -003.

SW8260B

Batch 764664, 2-Butanone, 2-Chloroethyl Vinyl Ether, Acetone, Iodomethane (Methyl Iodide), trans-1,4-dichloro-2-butene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.

Samples affected are: 337000-002, -001, -003.

The Laboratory Control Sample for Acetone, Iodomethane (Methyl Iodide), 2-Chloroethyl Vinyl Ether, trans-1,4-dichloro-2-butene, 2-Butanone is within laboratory Control Limits



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

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

Project ID: 2009-039

Work Order Number: 337000

Report Date: 13-JUL-09

Date Received: 07/02/2009

*Batch: LBA-764709 Metals per ICP/MS by EPA 200.8
SW6020*

Batch 764709, Selenium, Silver recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Aluminum, Iron recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate.

Samples affected are: 337000-002, -001, -003.

The Laboratory Control Sample for Silver, Iron, Selenium is within laboratory Control Limits

SW6020

Batch 764709, Aluminum recovered below QC limits in the laboratory control sample.

Samples affected are: 337000-002, -001, -003.

SW6020

Batch 764709, Iron RPD is outside the QC limit. This is most likely due to sample non-homogeneity.

Samples affected are: 337000-002, -001, -003.

Batch: LBA-764869 Alkalinity by SM2320B

None



Certificate of Analysis Summary 337000
PLAINS ALL AMERICAN EH&S, Midland, TX



Project Id: 2009-039

Contact: Jason Henry

Project Location: Lea County, NM

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

Date Received in Lab: Thu Jul-02-09 09:25 am

Report Date: 13-JUL-09

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	Field Id:	Depth:	Matrix:	Sampled:	337000-001	337000-002	337000-003	
	Field Id:	Depth:	Matrix:	Sampled:	Sampled:	MW-2	MW-3	MW-4	
	Depth:	Matrix:	Sampled:	Sampled:	Sampled:	WATER	WATER	WATER	
	Matrix:	Sampled:	Sampled:	Sampled:	Sampled:	Jul-01-09 09:20	Jul-01-09 11:00	Jul-01-09 13:30	
	Sampled:	Sampled:	Sampled:	Sampled:	Sampled:	Jul-08-09 12:20	Jul-08-09 12:20	Jul-08-09 12:20	
Alkalinity by SM2320B	Extracted:	Analyzed:	Units/RL:	Units/RL:	Units/RL:	mg/L	mg/L	mg/L	
	Analyzed:	Units/RL:	Units/RL:	Units/RL:	Units/RL:	RL	RL	RL	
	Units/RL:	Units/RL:	Units/RL:	Units/RL:	Units/RL:	192	260	180	
	Units/RL:	Units/RL:	Units/RL:	Units/RL:	Units/RL:	4.00	4.00	4.00	
	Units/RL:	Units/RL:	Units/RL:	Units/RL:	Units/RL:	ND	ND	ND	
Anions by EPA 300	Extracted:	Analyzed:	Units/RL:	Units/RL:	Units/RL:	192	260	180	
	Analyzed:	Units/RL:	Units/RL:	Units/RL:	Units/RL:	4.00	4.00	4.00	
	Units/RL:	Units/RL:	Units/RL:	Units/RL:	Units/RL:	4.00	4.00	4.00	
	Units/RL:	Units/RL:	Units/RL:	Units/RL:	Units/RL:	4.00	4.00	4.00	
	Units/RL:	Units/RL:	Units/RL:	Units/RL:	Units/RL:	4.00	4.00	4.00	
Chloride		Jul-06-09 14:02	mg/L	RL	RL	495	663	510	
Fluoride		Jul-06-09 14:02	mg/L	RL	RL	ND	ND	ND	
Nitrate-N		Jul-06-09 14:02	mg/L	RL	RL	3.65	ND	2.98	
Ortho-Phosphate		Jul-06-09 14:02	mg/L	RL	RL	ND	ND	ND	
Sulfate		Jul-06-09 14:02	mg/L	RL	RL	88.0	338	87.4	

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Brent Barron
Odessa Laboratory Director



Certificate of Analysis Summary 337000
PLAINS ALL AMERICAN EH&S, Midland, TX



Project Id: 2009-039

Contact: Jason Henry

Project Location: Lea County, NM

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

Date Received in Lab: Thu Jul-02-09 09:25 am

Report Date: 13-JUL-09

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	337000-001	337000-002	337000-003	
	Field Id:	MW-2	MW-3	MW-4	
	Depth:				
	Matrix:	WATER	WATER	WATER	
	Sampled:	Jul-01-09 09:20	Jul-01-09 11:00	Jul-01-09 13:30	
ICP-MS Metals by SW 6020A	Extracted:	Jul-07-09 09:20	Jul-07-09 09:20	Jul-07-09 09:20	
	Analyzed:	Jul-07-09 19:53	Jul-07-09 19:58	Jul-07-09 20:03	
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	
	Aluminum	35.4 0.010	28.3 0.010	0.107 0.010	
	Arsenic	0.024 0.002	0.031 0.002	0.016 0.002	
	Barium	1.55 0.005	0.787 0.005	0.071 0.005	
	Boron	0.115 0.010	0.214 0.010	0.124 0.010	
	Cadmium	ND 0.001	ND 0.001	ND 0.001	
	Chromium	0.047 0.003	0.027 0.003	0.006 0.003	
	Cobalt	0.017 0.005	0.015 0.005	ND 0.005	
	Copper	0.034 0.003	0.027 0.003	ND 0.003	
	Iron	39.4 0.150	26.0 0.150	0.950 0.150	
	Lead	0.022 0.002	0.018 0.002	ND 0.002	
Mercury by EPA 7470A	Manganese	0.798 0.003	1.01 0.003	0.014 0.003	
	Molybdenum	0.007 0.004	0.004 0.004	0.007 0.004	
	Nickel	0.045 0.005	0.034 0.005	ND 0.005	
	Selenium	0.004 0.003	0.010 0.003	0.004 0.003	
	Silver	ND 0.002	ND 0.002	ND 0.002	
	Zinc	0.159 0.003	0.071 0.003	ND 0.003	
	Extracted:	Jul-02-09 10:00	Jul-02-09 10:00	Jul-02-09 10:00	
	Analyzed:	Jul-02-09 14:27	Jul-02-09 14:27	Jul-02-09 14:27	
	Units/RL:	mg/L RL	mg/L RL	mg/L RL	
	Mercury	ND 0.0001	ND 0.0001	ND 0.0001	

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Brent Barron
Odessa Laboratory Director



Certificate of Analysis Summary 337000
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: Thu Jul-02-09 09:25 am

Report Date: 13-JUL-09

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	Field Id:	Depth:	Matrix:	Sampled:	337000-001	337000-002	337000-003		
	Extracted:	Analyzed:	Units/RL:							
Metals per ICP by SW846 6010B										
Calcium						77.5 5.00	156 10.0	73.0 5.00		
Magnesium						23.5 0.500	74.0 1.00	19.4 0.500		
Potassium						39.4 25.0	ND 50.0	ND 25.0		
Sodium						335 25.0	493 50.0	338 25.0		

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Brent Barron
Odessa Laboratory Director



Certificate of Analysis Summary 337000
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: Thu Jul-02-09 09:25 am
Report Date: 13-JUL-09
Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	337000-001	337000-002	337000-003	
	Field Id: Depth: Matrix: Sampled: Extracted: Analyzed: Units/RL:	MW-2 WATER Jul-01-09 09:20 Jul-06-09 12:33 Jul-06-09 14:32 ug/L RL	MW-3 WATER Jul-01-09 11:00 Jul-06-09 12:35 Jul-06-09 14:54 ug/L RL	MW-4 WATER Jul-01-09 13:30 Jul-06-09 12:37 Jul-06-09 15:16 ug/L RL	
VOAs by SW-846 8260B	Acetone	ND 100	ND 100	ND 100	
	Acrylonitrile	ND 50.0	ND 50.0	ND 50.0	
	Benzene	ND 5.00	ND 5.00	ND 5.00	
	Bromobenzene	ND 5.00	ND 5.00	ND 5.00	
	Bromochloromethane	ND 5.00	ND 5.00	ND 5.00	
	Bromodichloromethane	ND 5.00	ND 5.00	ND 5.00	
	Bromoform	ND 5.00	ND 5.00	ND 5.00	
	Bromomethane	ND 5.00	ND 5.00	ND 5.00	
	2-Butanone	ND 50.0	ND 50.0	ND 50.0	
	MTBE	ND 5.00	ND 5.00	ND 5.00	
	n-Butylbenzene	ND 5.00	ND 5.00	ND 5.00	
	Sec-Butylbenzene	ND 5.00	ND 5.00	ND 5.00	
	tert-Butylbenzene	ND 5.00	ND 5.00	ND 5.00	
	Carbon Disulfide	ND 50.0	ND 50.0	ND 50.0	
	Carbon Tetrachloride	ND 5.00	ND 5.00	ND 5.00	
	Chlorobenzene	ND 5.00	ND 5.00	ND 5.00	
	Chloroethane	ND 10.0	ND 10.0	ND 10.0	
	2-Chloroethyl Vinyl Ether	ND 5.00	ND 5.00	ND 5.00	
	Chloroform	ND 5.00	ND 5.00	ND 5.00	
	Chloromethane	ND 10.0	ND 10.0	ND 10.0	
p-Cymene (p-Isopropyltoluene)	2-Chlorotoluene	ND 5.00	ND 5.00	ND 5.00	
	4-Chlorotoluene	ND 5.00	ND 5.00	ND 5.00	
	Dibromochloromethane	ND 5.00	ND 5.00	ND 5.00	
	1,2-Dibromo-3-Chloropropane	ND 5.00	ND 5.00	ND 5.00	

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Brent Barron
Odessa Laboratory Director

Project Manager: Brent Barron, II

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Brent Barron
Odessa Laboratory Director



Certificate of Analysis Summary 337000

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: Thu Jul-02-09 09:25 am

Report Date: 13-JUL-09

Project Manager: Brent Barron, IL



Analysis Requested	Lab Id:	337000-001	337000-002	337000-003	
	Field Id:	MW-2	MW-3	MW-4	
	Depth:				
	Matrix:	WATER	WATER	WATER	
	Sampled:	Jul-01-09 09:20	Jul-01-09 11:00	Jul-01-09 13:30	
VOAs by SW-846 8260B	Extracted:	Jul-06-09 12:33	Jul-06-09 12:35	Jul-06-09 12:37	
	Analyzed:	Jul-06-09 14:32	Jul-06-09 14:54	Jul-06-09 15:16	
	Units/RL:	ug/L RL	ug/L RL	ug/L RL	
		ND 5.00	ND 5.00	ND 5.00	
		ND 5.00	ND 5.00	ND 5.00	
Styrene		ND 5.00	ND 5.00	ND 5.00	
1,1,1,2-Tetrachloroethane		ND 5.00	ND 5.00	ND 5.00	
1,1,1,2,2-Tetrachloroethane		ND 5.00	ND 5.00	ND 5.00	
Tetrachloroethylene		ND 5.00	ND 5.00	ND 5.00	
Toluene		ND 5.00	ND 5.00	ND 5.00	
1,2,3-Trichlorobenzene		ND 5.00	ND 5.00	ND 5.00	
1,2,4-Trichlorobenzene		ND 5.00	ND 5.00	ND 5.00	
1,1,1-Trichloroethane		ND 5.00	ND 5.00	ND 5.00	
1,1,2-Trichloroethane		ND 5.00	ND 5.00	ND 5.00	
Trichloroethene		ND 5.00	ND 5.00	ND 5.00	
Trichlorofluoromethane		ND 5.00	ND 5.00	ND 5.00	
1,2,3-Trichloropropane		ND 5.00	ND 5.00	ND 5.00	
1,2,4-Trimethylbenzene		ND 5.00	ND 5.00	ND 5.00	
1,3,5-Trimethylbenzene		ND 5.00	ND 5.00	ND 5.00	
o-Xylene		ND 5.00	ND 5.00	ND 5.00	
m,p-Xylenes		ND 10.0	ND 10.0	ND 10.0	
Vinyl Acetate		ND 50.0	ND 50.0	ND 50.0	
Vinyl Chloride		ND 2.00	ND 2.00	ND 2.00	

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Brent Barron
Odessa Laboratory Director



Flagging Criteria



- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the MQL and above the SQL.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
- BRL** Below Reporting Limit.
- RL** Reporting Limit
- * Outside XENCO's scope of NELAC Accreditation.

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Form 2 - Surrogate Recoveries

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

Work Orders : 337000,

Project ID: 2009-039

Lab Batch #: 764664

Sample: 533201-1-BKS / BKS

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 07/06/09 11:28

SURROGATE RECOVERY STUDY

VOAs by SW-846 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	52.66	50.00	105	86-115	
Dibromofluoromethane	51.50	50.00	103	86-118	
1,2-Dichloroethane-D4	49.85	50.00	100	80-120	
Toluene-D8	48.81	50.00	98	88-110	

Lab Batch #: 764664

Sample: 533201-1-BLK / BLK

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 07/06/09 12:12

SURROGATE RECOVERY STUDY

VOAs by SW-846 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	48.75	50.00	98	86-115	
Dibromofluoromethane	49.96	50.00	100	86-118	
1,2-Dichloroethane-D4	49.63	50.00	99	80-120	
Toluene-D8	49.66	50.00	99	88-110	

Lab Batch #: 764664

Sample: 336893-001 S / MS

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 07/06/09 13:04

SURROGATE RECOVERY STUDY

VOAs by SW-846 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	50.85	50.00	102	86-115	
Dibromofluoromethane	47.20	50.00	94	86-118	
1,2-Dichloroethane-D4	43.12	50.00	86	80-120	
Toluene-D8	50.01	50.00	100	88-110	

Lab Batch #: 764664

Sample: 336893-001 SD / MSD

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 07/06/09 13:25

SURROGATE RECOVERY STUDY

VOAs by SW-846 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	49.50	50.00	99	86-115	
Dibromofluoromethane	47.77	50.00	96	86-118	
1,2-Dichloroethane-D4	46.99	50.00	94	80-120	
Toluene-D8	48.90	50.00	98	88-110	

* 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 : 337000,

Project ID: 2009-039

Lab Batch #: 764664

Sample: 337000-001 / SMP

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 07/06/09 14:32

SURROGATE RECOVERY STUDY

VOAs by SW-846 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	48.93	50.00	98	86-115	
Dibromofluoromethane	47.29	50.00	95	86-118	
1,2-Dichloroethane-D4	45.79	50.00	92	80-120	
Toluene-D8	50.40	50.00	101	88-110	

Lab Batch #: 764664

Sample: 337000-002 / SMP

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 07/06/09 14:54

SURROGATE RECOVERY STUDY

VOAs by SW-846 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	47.56	50.00	95	86-115	
Dibromofluoromethane	46.96	50.00	94	86-118	
1,2-Dichloroethane-D4	47.02	50.00	94	80-120	
Toluene-D8	48.45	50.00	97	88-110	

Lab Batch #: 764664

Sample: 337000-003 / SMP

Batch: 1 Matrix: Water

Units: ug/L

Date Analyzed: 07/06/09 15:16

SURROGATE RECOVERY STUDY

VOAs by SW-846 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	48.17	50.00	96	86-115	
Dibromofluoromethane	46.41	50.00	93	86-118	
1,2-Dichloroethane-D4	48.51	50.00	97	80-120	
Toluene-D8	49.11	50.00	98	88-110	

* 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 6-Inch # 2

Work Order #: 337000

Project ID:

2009-039

Lab Batch #: 764869

Sample: 764869-1-BKS

Matrix: Water

Date Analyzed: 07/08/2009

Date Prepared: 07/08/2009

Analyst: WRU

Reporting Units: mg/L

Batch #: 1

BLANK /BLANK SPIKE RECOVERY STUDY

Alkalinity by SM2320B	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Analytes						
Alkalinity, Bicarbonate (as CaCO ₃)	ND	200	176	88	80-120	
Alkalinity, Total (as CaCO ₃)	ND	200	176	88	80-120	

Lab Batch #: 764709

Sample: 533171-1-BKS

Matrix: Water

Date Analyzed: 07/07/2009

Date Prepared: 07/07/2009

Analyst: HAT

Reporting Units: mg/L

Batch #: 1

BLANK /BLANK SPIKE RECOVERY STUDY

ICP-MS Metals by SW 6020A	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Analytes						
Aluminum	ND	0.200	0.191	96	75-125	
Arsenic	ND	0.050	0.047	94	75-125	
Barium	ND	0.050	0.047	94	75-125	
Boron	ND	0.020	0.015	75	75-125	
Cadmium	ND	0.020	0.019	95	75-125	
Chromium	ND	0.050	0.046	92	75-125	
Cobalt	ND	0.050	0.046	92	75-125	
Copper	ND	0.050	0.047	94	75-125	
Iron	ND	0.200	0.190	95	75-125	
Lead	ND	0.050	0.048	96	75-125	
Manganese	ND	0.050	0.047	94	75-125	
Molybdenum	ND	0.050	0.046	92	75-125	
Nickel	ND	0.050	0.046	92	75-125	
Selenium	ND	0.050	0.049	98	75-125	
Silver	ND	0.020	0.015	75	75-125	
Zinc	ND	0.050	0.046	92	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 6-Inch # 2

Work Order #: 337000

Project ID:

2009-039

Lab Batch #: 764628

Sample: 764628-1-BKS

Matrix: Water

Date Analyzed: 07/06/2009

Date Prepared: 07/06/2009

Analyst: LATCOR

Reporting Units: mg/L

Batch #: 1

BLANK /BLANK SPIKE RECOVERY STUDY

Anions by EPA 300 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	ND	10.0	9.22	92	90-110	
Fluoride	ND	2.00	2.11	106	90-110	
Nitrate as N	ND	0.407	0.406	100	90-110	
Ortho-Phosphate	ND	2.00	1.93	97	80-120	
Sulfate	ND	9.00	8.88	99	90-110	

Lab Batch #: 764363

Sample: 533015-1-BKS

Matrix: Water

Date Analyzed: 07/02/2009

Date Prepared: 07/02/2009

Analyst: LATCOR

Reporting Units: mg/L

Batch #: 1

BLANK /BLANK SPIKE RECOVERY STUDY

Mercury by EPA 7470A Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Mercury	ND	0.0010	0.0009	90	75-125	

Blank Spike Recovery [D] = $100 \times [C] / [B]$

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 6-Inch # 2

Work Order #: 337000

Project ID:

2009-039

Lab Batch #: 764664

Sample: 533201-1-BKS

Matrix: Water

Date Analyzed: 07/06/2009

Date Prepared: 07/06/2009

Analyst: JUJ

Reporting Units: ug/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
Acetone	ND	500	440	88	60-140	
Acrylonitrile	ND	500	579	116	50-150	
Benzene	ND	50.0	48.8	98	66-142	
Bromobenzene	ND	50.0	57.1	114	60-130	
Bromochloromethane	ND	50.0	61.1	122	73-125	
Bromodichloromethane	ND	50.0	61.7	123	75-125	
Bromoform	ND	50.0	53.7	107	75-125	
Bromomethane	ND	50.0	53.3	107	70-130	
2-Butanone	ND	500	466	93	60-140	
MTBE	ND	50.0	64.6	129	75-125	H
n-Butylbenzene	ND	50.0	51.8	104	75-125	
Sec-Butylbenzene	ND	50.0	52.2	104	75-125	
tert-Butylbenzene	ND	50.0	53.7	107	75-125	
Carbon Disulfide	ND	500	567	113	60-140	
Carbon Tetrachloride	ND	50.0	58.4	117	62-125	
Chlorobenzene	ND	50.0	53.7	107	60-133	
Chloroethane	ND	50.0	50.4	101	70-130	
2-Chloroethyl Vinyl Ether	ND	50.0	57.3	115	50-150	
Chloroform	ND	50.0	56.5	113	74-125	
Chloromethane	ND	50.0	48.9	98	70-130	
2-Chlorotoluene	ND	50.0	52.8	106	73-125	
4-Chlorotoluene	ND	50.0	55.0	110	74-125	
p-Cymene (p-Isopropyltoluene)	ND	50.0	55.0	110	75-125	
Dibromochloromethane	ND	50.0	58.6	117	60-130	
1,2-Dibromo-3-Chloropropane	ND	50.0	51.9	104	59-125	
1,2-Dibromoethane	ND	50.0	57.9	116	73-125	
Dibromomethane	ND	50.0	56.9	114	69-127	
1,2-Dichlorobenzene	ND	50.0	52.8	106	75-125	
1,3-Dichlorobenzene	ND	50.0	58.4	117	75-125	
1,4-Dichlorobenzene	ND	50.0	50.3	101	75-125	
Dichlorodifluoromethane	ND	50.0	36.3	73	70-130	
1,1-Dichloroethane	ND	50.0	56.1	112	60-130	
1,2-Dichloroethane	ND	50.0	58.3	117	68-127	

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 6-Inch # 2

Work Order #: 337000

Project ID:

2009-039

Lab Batch #: 764664

Sample: 533201-1-BKS

Matrix: Water

Date Analyzed: 07/06/2009

Date Prepared: 07/06/2009

Analyst: JUJ

Reporting Units: ug/L

Batch #: 1

BLANK /BLANK SPIKE RECOVERY STUDY

VOAs by SW-846 8260B Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
1,1-Dichloroethene	ND	50.0	59.6	119	59-172	
cis-1,2-Dichloroethene	ND	50.0	57.5	115	60-130	
trans-1,2-dichloroethene	ND	50.0	52.5	105	60-130	
1,2-Dichloropropane	ND	50.0	56.1	112	74-125	
1,3-Dichloropropane	ND	50.0	58.9	118	75-125	
2,2-Dichloropropane	ND	50.0	56.3	113	60-140	
1,1-Dichloropropene	ND	50.0	53.0	106	75-125	
cis-1,3-Dichloropropene	ND	50.0	57.6	115	60-140	
trans-1,3-dichloropropene	ND	50.0	57.7	115	66-125	
Ethylbenzene	ND	50.0	54.0	108	75-125	
Hexachlorobutadiene	ND	50.0	47.3	95	75-125	
2-Hexanone	ND	500	516	103	60-140	
isopropylbenzene	ND	50.0	53.1	106	75-125	
Methylene Chloride	ND	50.0	53.5	107	75-125	
4-Methyl-2-Pentanone	ND	500	565	113	60-140	
Naphthalene	ND	50.0	52.6	105	65-135	
n-Propylbenzene	ND	50.0	53.1	106	75-125	
Styrene	ND	50.0	53.9	108	60-130	
1,1,1,2-Tetrachloroethane	ND	50.0	56.6	113	75-125	
1,1,2,2-Tetrachloroethane	ND	50.0	54.1	108	50-130	
Tetrachloroethylene	ND	50.0	57.7	115	60-130	
Toluene	ND	50.0	48.5	97	59-139	
1,2,3-Trichlorobenzene	ND	50.0	51.6	103	75-137	
1,2,4-Trichlorobenzene	ND	50.0	50.7	101	75-135	
1,1,1-Trichloroethane	ND	50.0	58.3	117	75-125	
1,1,2-Trichloroethane	ND	50.0	57.8	116	75-127	
Trichloroethene	ND	50.0	55.0	110	62-137	
Trichlorofluoromethane	ND	50.0	52.1	104	67-125	
1,2,3-Trichloropropane	ND	50.0	60.7	121	75-125	
1,2,4-Trimethylbenzene	ND	50.0	53.6	107	75-125	
1,3,5-Trimethylbenzene	ND	50.0	54.4	109	70-125	
o-Xylene	ND	50.0	49.1	98	75-125	
m,p-Xylenes	ND	100	108	108	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 6-Inch # 2

Work Order #: 337000

Project ID:

2009-039

Lab Batch #: 764664

Sample: 533201-1-BKS

Matrix: Water

Date Analyzed: 07/06/2009

Date Prepared: 07/06/2009

Analyst: JUJ

Reporting Units: ug/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
Vinyl Acetate	ND	500	466	93	60-140	
Vinyl Chloride	ND	50.0	46.0	92	75-125	

Blank Spike Recovery [D] = $100 * [C] / [B]$

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

BRL - Below Reporting Limit



Form 3 - MS Recoveries



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

Work Order #: 337000

Lab Batch #: 764628

Date Analyzed: 07/06/2009

Date Prepared: 07/06/2009

Project ID: 2009-039

Analyst: LATCOR

QC- Sample ID: 337000-001 S

Batch #: 1

Matrix: Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	495	250	739	98	80-120	
Fluoride	ND	50.0	43.9	88	80-120	
Nitrate as N	ND	11.3	11.4	101	80-120	
Ortho-Phosphate	ND	45.0	38.4	85	80-120	
Sulfate	88.0	225	329	107	80-120	

Lab Batch #: 764363

Date Analyzed: 07/02/2009

Date Prepared: 07/02/2009

Analyst: LATCOR

QC- Sample ID: 336964-001 S

Batch #: 1

Matrix: Water

Reporting Units: mg/L

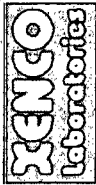
MATRIX / MATRIX SPIKE RECOVERY STUDY						
Mercury by SW-846 7470A	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Mercury	ND	0.0010	0.0010	100	75-125	

Matrix Spike Percent Recovery [D] = $100 \cdot (C-A)/B$

Relative Percent Difference [E] = $200 \cdot (C-A)/(C+B)$

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 #: 337000

Lab Batch ID: 764709

Date Analyzed: 07/07/2009

Reporting Units: mg/L

Project ID: 2009-039

QC- Sample ID: 336964-001 S

Batch #: 1 Matrix: Water

Date Prepared: 07/07/2009

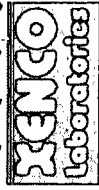
Analyst: HAT

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY												
ICP-MS Metals by SW 6020A		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
Analytes												
Aluminum		2.58	0.200	3.53	475	0.200	3.56	490	1	75-125	20	X
Arsenic		0.005	0.050	0.045	80	0.050	0.043	76	5	75-125	20	
Barium		0.163	0.050	0.207	88	0.050	0.202	78	2	75-125	20	
Boron		0.018	0.020	0.033	75	0.020	0.034	80	3	75-125	20	
Cadmium		0.004	0.020	0.020	80	0.020	0.020	80	0	75-125	20	
Chromium		0.024	0.050	0.068	88	0.050	0.066	84	3	75-125	20	
Cobalt		ND	0.050	0.045	90	0.050	0.043	86	5	75-125	20	
Copper		0.049	0.050	0.092	86	0.050	0.088	78	4	75-125	20	
Iron		2.50	0.200	3.01	255	0.200	2.99	245	1	75-125	20	X
Lead		0.011	0.050	0.055	88	0.050	0.054	86	2	75-125	20	
Manganese		0.083	0.050	0.133	100	0.050	0.130	94	2	75-125	20	
Molybdenum		ND	0.050	0.045	90	0.050	0.043	86	5	75-125	20	
Nickel		0.009	0.050	0.052	86	0.050	0.050	82	4	75-125	20	
Selenium		ND	0.050	0.036	72	0.050	0.033	66	9	75-125	20	X
Silver		ND	0.020	0.014	70	0.020	0.014	70	0	75-125	20	X
Zinc		0.158	0.050	0.203	90	0.050	0.201	86	1	75-125	20	

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

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

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



Form 3 - MS / MSD Recoveries

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



Work Order #: 337000

Lab Batch ID: 764664

Date Analyzed: 07/06/2009

Reporting Units: ug/L

Project ID: 2009-039

QC- Sample ID: 336893-001 S

Date Prepared: 07/06/2009

Batch #: 1 Matrix: Water

Analyst: JUJ

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
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
Acetone	ND	500	174	35	500	193	39	10	60-140	21	X
Acrylonitrile	ND	500	390	78	500	425	85	9	50-150	25	
Benzene	ND	50.0	48.1	96	50.0	46.5	93	3	66-142	21	
Bromobenzene	ND	50.0	54.3	109	50.0	50.5	101	7	60-130	20	
Bromochloromethane	ND	50.0	52.7	105	50.0	53.7	107	2	73-125	20	
Bromodichloromethane	ND	50.0	58.1	116	50.0	55.1	110	5	75-125	20	
Bromoform	ND	50.0	42.7	85	50.0	43.4	87	2	75-125	20	
Bromomethane	ND	50.0	49.6	99	50.0	52.1	104	5	70-130	20	
2-Butanone	ND	500	264	53	500	295	59	11	60-140	20	X
MTBE	ND	50.0	50.2	100	50.0	52.1	104	4	75-125	20	
n-Butylbenzene	ND	50.0	55.4	111	50.0	53.2	106	4	75-125	20	
Sec-Butylbenzene	ND	50.0	55.8	112	50.0	52.5	105	6	75-125	20	
tert-Butylbenzene	ND	50.0	56.8	114	50.0	53.3	107	6	75-125	20	
Carbon Disulfide	ND	500	548	110	500	538	108	2	60-140	20	
Carbon Tetrachloride	ND	50.0	60.2	120	50.0	58.8	118	2	62-125	20	
Chlorobenzene	ND	50.0	52.5	105	50.0	50.0	100	5	60-133	21	
Chloroethane	ND	50.0	45.7	91	50.0	46.9	94	3	70-130	20	
2-Chloroethyl Vinyl Ether	ND	50.0	1.03	2	50.0	ND	0	NC	50-150	20	X
Chloroform	ND	50.0	51.7	103	50.0	49.6	99	4	74-125	20	
Chloromethane	ND	50.0	43.2	86	50.0	45.4	91	5	70-130	20	
2-Chlorotoluene	ND	50.0	53.2	106	50.0	51.5	103	3	73-125	20	
4-Chlorotoluene	ND	50.0	55.5	111	50.0	52.3	105	6	74-125	20	
p-Cymene (p-Isopropyltoluene)	ND	50.0	57.1	114	50.0	54.3	109	5	75-125	20	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A)/B$
Relative Percent Difference $RPD = 200 \times (C-F)/(C+E)$

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

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



Form 3 - MS / MSD Recoveries

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



Work Order #: 337000

Lab Batch ID: 764664

Date Analyzed: 07/06/2009

Reporting Units: ug/L

Project ID: 2009-039

QC- Sample ID: 336893-001 S

Batch #: 1 Matrix: Water

Date Prepared: 07/06/2009

Analyst: JUJ

VOAs by SW-846 8260B		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
Analytes												
Dibromochloromethane		ND	50.0	48.2	96	50.0	47.6	95	1	60-130	20	
1,2-Dibromo-3-Chloropropane		ND	50.0	37.5	75	50.0	43.9	88	16	59-125	28	
1,2-Dibromomethane		ND	50.0	46.7	93	50.0	48.8	98	4	73-125	20	
Dibromomethane		ND	50.0	47.7	95	50.0	49.1	98	3	69-127	23	
1,2-Dichlorobenzene		ND	50.0	51.5	103	50.0	48.4	97	6	75-125	20	
1,3-Dichlorobenzene		ND	50.0	58.2	116	50.0	54.1	108	7	75-125	20	
1,4-Dichlorobenzene		ND	50.0	49.0	98	50.0	47.1	94	4	75-125	20	
Dichlorodifluoromethane		ND	50.0	35.0	70	50.0	35.7	71	2	70-130	23	
1,1-Dichloroethane		ND	50.0	53.5	107	50.0	51.6	103	4	60-130	20	
1,2-Dichloroethane		ND	50.0	47.5	95	50.0	47.4	95	0	68-127	20	
1,1-Dichloroethene		ND	50.0	57.7	115	50.0	56.2	112	3	59-172	22	
cis-1,2-Dichloroethene		ND	50.0	55.0	110	50.0	53.0	106	4	60-130	20	
trans-1,2-dichloroethene		ND	50.0	50.9	102	50.0	49.2	98	3	60-130	20	
1,2-Dichloropropane		ND	50.0	51.5	103	50.0	51.4	103	0	74-125	20	
1,3-Dichloropropane		ND	50.0	51.3	103	50.0	49.0	98	5	75-125	20	
2,2-Dichloropropane		ND	50.0	58.1	116	50.0	57.2	114	2	60-140	20	
1,1-Dichloropropene		ND	50.0	52.5	105	50.0	50.8	102	3	75-125	20	
cis-1,3-Dichloropropene		ND	50.0	49.2	98	50.0	46.8	94	5	60-140	20	
trans-1,3-dichloropropene		ND	50.0	49.8	100	50.0	46.7	93	6	66-125	20	
Ethylbenzene		ND	50.0	54.9	110	50.0	51.9	104	6	75-125	20	
Hexachlorobutadiene		ND	50.0	51.8	104	50.0	48.0	96	8	75-125	20	
2-Hexanone		ND	500	323	65	500	355	71	9	60-140	21	
isopropylbenzene		ND	50.0	54.4	109	50.0	52.1	104	4	75-125	20	

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

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

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQ1 = Estimated Quantitation Limit



Form 3 - MS / MSD Recoveries



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

Work Order # : 337000

Lab Batch ID: 764664

Date Analyzed: 07/06/2009

Reporting Units: ug/L

Project ID: 2009-039

QC- Sample ID: 336893-001 S

Date Prepared: 07/06/2009

Batch #: 1 Matrix: Water

Analyst: JUJ

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			
Methylene Chloride	ND	49.2	98	50.0	47.4	95	4	75-125	35				
4-Methyl-2-Pentanone	ND	393	79	500	433	87	10	60-140	25				
Naphthalene	ND	41.8	84	50.0	43.8	88	5	65-135	20				
n-Propylbenzene	ND	56.6	113	50.0	53.5	107	6	75-125	20				
Styrene	ND	52.4	105	50.0	49.2	98	6	60-130	51				
1,1,1,2-Tetrachloroethane	ND	51.0	102	50.0	50.5	101	1	75-125	20				
1,1,2,2-Tetrachloroethane	ND	42.1	84	50.0	44.1	88	5	50-130	31				
Tetrachloroethylene	ND	59.1	118	50.0	55.0	110	7	60-130	20				
Toluene	ND	48.6	97	50.0	46.3	93	5	59-139	21				
1,2,3-Trichlorobenzene	ND	46.6	93	50.0	47.8	96	3	75-137	20				
1,2,4-Trichlorobenzene	ND	49.0	98	50.0	48.0	96	2	75-135	20				
1,1,1-Trichloroethane	ND	57.8	116	50.0	56.6	113	2	75-125	20				
1,1,2-Trichloroethane	ND	46.3	93	50.0	48.1	96	4	75-127	20				
Trichloroethene	ND	54.0	108	50.0	52.0	104	4	62-137	24				
Trichlorofluoromethane	ND	49.4	99	50.0	50.3	101	2	67-125	20				
1,2,3-Trichloropropane	ND	46.6	93	50.0	49.1	98	5	75-125	20				
1,2,4-Trimethylbenzene	ND	54.2	108	50.0	52.3	105	4	75-125	20				
1,3,5-Trimethylbenzene	ND	55.0	110	50.0	51.8	104	6	70-125	20				
o-Xylene	ND	48.1	96	50.0	48.0	96	0	75-125	20				
m,p-Xylenes	ND	110	110	100	104	104	6	75-125	20				
Vinyl Acetate	ND	391	78	500	400	80	2	60-140	20				
Vinyl Chloride	ND	42.5	85	50.0	42.6	85	0	75-125	20				

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

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

Matrix Spikes Duplicate Percent Recovery $[G] = 100 \times (F-A)/E$



Sample Duplicate Recovery



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

Work Order #: 337000

Lab Batch #: 764869

Project ID: 2009-039

Date Analyzed: 07/08/2009

Date Prepared: 07/08/2009

Analyst: WRU

QC- Sample ID: 337000-001 D

Batch #: 1

Matrix: Water

Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Alkalinity by SM2320B	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Alkalinity, Carbonate (as CaCO ₃)	ND	ND	NC	20	
Alkalinity, Bicarbonate (as CaCO ₃)	192	196	2	20	
Alkalinity, Total (as CaCO ₃)	192	196	2	20	

Lab Batch #: 764628

Date Prepared: 07/06/2009

Analyst: LATCOR

Date Analyzed: 07/06/2009

QC- Sample ID: 337000-001 D

Batch #: 1

Matrix: Water

Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Anions by EPA 300	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Chloride	495	487	2	20	
Fluoride	ND	ND	NC	20	
Nitrate-N	3.65	2.98	20	20	
Ortho-Phosphate	ND	ND	NC	20	
Sulfate	88.0	84.6	4	20	

Spike Relative Difference RPD $200 * |(B-A)/(B+A)|$

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

BRL - Below Reporting Limit



Sample Duplicate Recovery



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

Work Order #: 337000

Lab Batch #: 764709

Project ID: 2009-039

Date Analyzed: 07/07/2009

Date Prepared: 07/07/2009

Analyst: HAT

QC- Sample ID: 336964-001 D

Batch #: 1

Matrix: Water

Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY					
ICP-MS Metals by SW 6020A	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Aluminum	2.58	2.67	3	20	
Arsenic	0.005	0.006	18	20	
Barium	0.163	0.165	1	20	
Boron	0.018	0.019	5	20	
Cadmium	0.004	0.004	0	20	
Chromium	0.024	0.025	4	20	
Cobalt	ND	ND	NC	20	
Copper	0.049	0.047	4	20	
Iron	2.50	3.19	24	20	F
Lead	0.011	0.011	0	20	
Manganese	0.083	0.089	7	20	
Molybdenum	ND	ND	NC	20	
Nickel	0.009	0.010	11	20	
Selenium	ND	ND	NC	20	
Silver	ND	ND	NC	20	
Zinc	0.158	0.168	6	20	

Lab Batch #: 764364

Date Analyzed: 07/02/2009

Date Prepared: 07/02/2009

Analyst: LATCOR

QC- Sample ID: 337000-001 D

Batch #: 1

Matrix: Water

Reporting Units: mg/L

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Metals per ICP by SW846 6010B	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Calcium	77.5	70.5	9	25	
Magnesium	23.5	20.5	14	25	
Potassium	39.4	37.2	6	25	
Sodium	335	326	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

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

337000

RCRA Metals

Arsenic
Barium
Cadmium
Chromium
Lead
Mercury
Selenium
Silver

Additional WQCC Metals

Copper
Iron
Manganese
Zinc
Aluminum
Boron
Cobalt
Molybdenum
Nickel

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

Environmental Lab of Texas
Variance/ Corrective Action Report- Sample Log-In

Client: Basin Env. / Plains
Date/ Time: 7-7-09 9:25
Lab ID #: 337000
Initials: al

Sample Receipt Checklist

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

Variance Documentation

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

Regarding: _____

Corrective Action Taken: _____

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

Analytical Report 355577

for

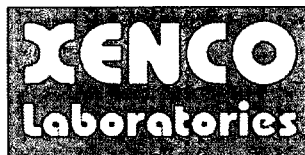
PLAINS ALL AMERICAN EH&S

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 (AAL11), 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

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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

Work Order Number: 355577

Report Date: 22-DEC-09

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 35577

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

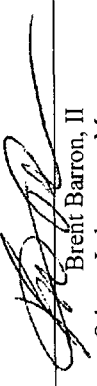
Report Date: 22-DEC-09

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	

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Since 1990 Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America - Atlanta - Corpus Christi


Brent Barron, II
Odessa Laboratory Manager



Certificate of Analysis Summary 355577

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Id: 2009-039

Contact: Jason Henry

Project Location: Lea County, NM

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

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 SUB: T104704215-08B-TX	Extracted:				Dec-17-09 11:58	
	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	

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Brett Barron, II
Odessa Laboratory Manager



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

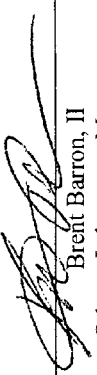
Report Date: 22-DEC-09

Project Manager: Brent Barron, II

<i>Analysis Requested</i>	<i>Lab Id:</i>	355577-001	355577-002	355577-003	355577-004	
	<i>Field Id:</i>	MW-2	MW-3	MW-4	MW-I	
	<i>Depth:</i>					
	<i>Matrix:</i>	WATER	WATER	WATER	WATER	
	<i>Sampled:</i>	Dec-10-09 12:45	Dec-10-09 13:30	Dec-10-09 14:15	Dec-10-09 15:00	
TPH by SW8015 Mod	<i>Extracted:</i>				Dec-21-09 10:00	
	<i>Analyzed:</i>				Dec-22-09 08:26	
	<i>Units/RL:</i>				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	

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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.

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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

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
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

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
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

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
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

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
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

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
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

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
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

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
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

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
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

SURROGATE RECOVERY STUDY

BTEX by EPA 8021	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
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

SURROGATE RECOVERY STUDY

SVOA PAHs List Analytes	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

SURROGATE RECOVERY STUDY

SVOA PAHs List Analytes	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

SURROGATE RECOVERY STUDY

SVOA PAHs List Analytes	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

SURROGATE RECOVERY STUDY

SVOA PAHs List Analytes	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

SURROGATE RECOVERY STUDY

SVOA PAHs List 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	0.033	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

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	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

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	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

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
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

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
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

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
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

Analyst: BRB

Lab Batch ID: 786220

Sample: 545803-1-BKS

Date Prepared: 12/17/2009

Batch #: 1

Project ID: 2009-039

Date Analyzed: 12/17/2009

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY												
Units: mg/L												
Analytes	BTEX by EPA 8021	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

Analyst: KAN

Lab Batch ID: 786316

Sample: 545778-1-BKS

Date Prepared: 12/17/2009

Batch #: 1

Project ID: 2009-039

Date Analyzed: 12/18/2009

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY												
Units: mg/L	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
		ND	0.050	0.046	92	0.05	0.045	90	2	27-132	31	
		ND	0.050	0.046	92	0.05	0.045	90	2	46-108	25	
		ND	0.050	0.047	94	0.05	0.046	92	2	47-145	25	
		ND	0.050	0.048	96	0.05	0.047	94	2	33-143	25	
		ND	0.050	0.048	96	0.05	0.047	94	2	65-135	25	
		ND	0.050	0.051	102	0.05	0.049	98	4	24-159	25	
		ND	0.050	0.047	94	0.05	0.048	96	2	25-125	25	
		ND	0.050	0.047	94	0.05	0.045	90	4	65-135	25	
		ND	0.050	0.045	90	0.05	0.044	88	2	65-135	25	
		ND	0.050	0.049	98	0.05	0.048	96	2	50-125	25	
		ND	0.050	0.048	96	0.05	0.048	96	0	47-125	25	
		ND	0.050	0.048	96	0.05	0.047	94	2	48-139	25	
		ND	0.050	0.049	98	0.05	0.048	96	2	27-160	25	
		ND	0.050	0.044	88	0.05	0.044	88	0	26-175	25	
ND	0.050	0.046	92	0.05	0.046	92	0	65-135	25			
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

Analyst: BEV

Lab Batch ID: 786690

Sample: 546087-1-BKS

Date Prepared: 12/21/2009

Batch #: 1

Project ID: 2009-039

Date Analyzed: 12/22/2009

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
Units: mg/L											
Analytes	TPH by SW8015 Mod										
	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

Date Analyzed: 12/18/2009

Date Prepared: 12/17/2009

Project ID: 2009-039

Analyst: KAN

QC- Sample ID: 355933-001 S

Batch #: 1

Matrix: Water

Reporting Units: mg/L

MATRIX / MATRIX SPIKE RECOVERY STUDY

SVOA PAHs List by SW-846 8270C	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
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

MATRIX / MATRIX SPIKE RECOVERY STUDY

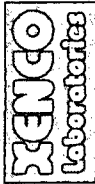
TPH by SW8015 Mod	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
C6-C12 Gasoline Range Hydrocarbons	7.53	100	108	100	70-135	
C12-C28 Diesel Range Hydrocarbons	5.84	100	72.0	66	70-135	X

Matrix Spike Percent Recovery [D] = $100 \times (C-A)/B$

Relative Percent Difference [E] = $200 \times (C-A)/(C+B)$

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

Lab Batch ID: 786220

Date Analyzed: 12/18/2009

Reporting Units: mg/L

Project ID: 2009-039

QC- Sample ID: 355467-002 S

Batch #: 1 Matrix: Water

Date Prepared: 12/17/2009

Analyst: BRB

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY												
Reporting Units: mg/L	BTEX by EPA 8021 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike 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 $[D] = 100 \cdot (C-A)/B$

Relative Percent Difference $RPD = 200 \cdot [(C-F)/(C+F)]$

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

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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

**12600 West I-20 East
Odessa, Texas 79785**

Phone: 432-563-1800
Fax: 432-583-1713

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

Project Manager: Curt Stanley PAGE 01 OF 01

Project #: 2009-039

Company Name Basin Environmental Service Technologies, LLC

Project Loc: Lea County, NM

Company Address: P. O. Box 301

PQ #: PAA - J. Henry

City/State/Zip: Lovington, NM 88280

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

Fax No: (505) 396-1429

Fax No:

Sampler Signature: *[Signature]* e-mail: cstanley@basinenv.com

e-mail:

Sampler Signature: *D. De la Hoz* 2. 23/10/2023

ORDER #:		FIELD CODE		Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & / or Containers Matrix										Analysis For:																		
(lab use only)										Ice	HNO ₃	HCl	H ₂ SO ₄	NaOH	Na ₂ O ₂	None	Other (Specify)	DW - Drinking Water SL - Sludge GW - Groundwater S - Soil/Solid	NP - Non-Portable Specify Other	TPH: 418.1 <u>B015M</u> B015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO ₄ , Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8280	RCI	NORM	PAH 8270	TDS (EPA METHOD SM 2540c)	CHLORIDES E 300	RUSH TAT (Pre-Schedule) 2A, 4B, 7Z nm	Standard TAT			
		MW-2				12/10/2009	1245	3	X	X	X	X							GW																			
		MW-3				12/10/2009	1330	3	X	X	X	X							GW																			
		MW-4				12/10/2009	1415	3	X	X	X	X							GW																			
		MW-1				12/10/2009	1500	7	X	X	X	X							GW																			
Special Instructions:																																						
MW-1 - 1 liter amber glass/new 6 quart glasses/HCL																																						
Laboratory Comments:																																						
Sample Contaminated?										VOCs Free of Headspace?																												
Custody seals on container(s)?										Custody seals on container(s)?																												
Custody seals on bottle(s)?										Custody seals on bottle(s)?																												
Sample Hand Delivered by Sampler? Client Rep.										DHL FedEx Lone Star																												
by Courier?										UPS																												
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: JME

Sample Receipt Checklist

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

PAT → Xerco Houston

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
Release Notification and Corrective Action
(Form C-141)

District I
625 N. French Dr., Hobbs, NM 88240
District II
301 W. Grand Avenue, Artesia, NM 88210
District III
000 Rio Brazos Road, Aztec, NM 87410
District IV
220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Plains Pipeline, L.P.	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 #2	Facility Type	Pipeline
Surface Owner	NM SLO	Mineral Owner	
		Lease No.	73-055-012532

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	30	20S	37E					Lea

Latitude N 32.5316667° Longitude W 103.2911111°

NATURE OF RELEASE

Type of Release	Crude Oil	Volume of Release	25 bbls	Volume Recovered	0 bbls
Source of Release	6" Steel Pipeline	Date and Hour of Occurrence	02/12/2009	Date and Hour of Discovery	02/12/2009 12:30
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Larry Johnson (revised release volume on 02/25/2009)			
By Whom?	Jason Henry	Date and Hour 02/25/2009 at 14:00			
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			
If a Watercourse was Impacted, Describe Fully *					

RECEIVED

MAR 23 2009

HOBBSOCD

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 10' x 12'. 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 NMOC 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 NMOC 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, NMOC 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: <i>Jason Henry</i>		OIL CONSERVATION DIVISION	
Printed Name: Jason Henry		Approved by District Supervisor:	
Title: Remediation Coordinator		Approval Date:	Expiration Date:
E-mail Address: jhenry@paalp.com		Conditions of Approval:	
Date: 03/23/2009	Phone: (575) 441-1099	Attached <input type="checkbox"/>	

Attach Additional Sheets If Necessary

LRP-2136