1R - 2136

REPORTS

DATE:

Sept. 11, 2009

PLAINS
PIPELINE, L.P.

RECEIVED
2009 SEP 22 AM 11 50

September 21, 2009

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

RE: Plains Pipeline, L.P. DCP Plant to Lea Station 6-inch #2 Site
NMOCD Reference # 1R-2136
Unit Letter F of Section 31, Township 20 South, Range 37 East
Lea County, New Mexico

Dear Mr. Hansen:

Plains Pipeline, L.P. is pleased to submit the attached *Initial Groundwater Status Report*, dated September 11, 2009, for the DCP Plant to Lea Station 6-inch #2 site. This site is located in Section 31 of Township 20 South, and Range 37 East of Lea County, New Mexico. This document details the groundwater remediation activities conducted to date at the site.

Should you have any questions or comments, please contact me at (575) 441-1099.

Sincerely,

Jason Henry

Jason Henry
Remediation Coordinator
Plains All American

CC: Larry Johnson, NMOCD, Hobbs Office

Enclosure

Basin Environmental Consulting, LLC
2800 Plains Highway P. O. Box 381 Lovington, New Mexico 88260
Phone: 575-396-2378 Fax: 575-396-1429

Effective Solutions

September 11, 2009

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

Re: Plains Pipeline, L.P. – DCP Plant to Lea Station 6-Inch #2
Initial Groundwater Status Report
NMOCD Reference # 1RP-2136
Plains SRS #2009-039
ULT "F" (SE/NW), Section 31, Township 20 South, Range 37 East
Latitude 32.5316667° N, Longitude 103.2911111° W
Lea County, New Mexico
Landowner: State of New Mexico

Dear Mr. Hansen,

Basin Environmental Consulting, LLC (Basin), on behalf of Plains Pipeline, LP (Plains), is pleased to submit the following Initial Groundwater Status Report for the release site known as DCP Plant to Lea Station 6-Inch #2 .

Groundwater Remediation Activities

On April 15, 2009, soil boring SB-1 was advanced, adjacent to the release point to investigate the vertical extent of soil impact. Temporary casing was installed in the soil boring to obtain a preliminary groundwater sample. On April 16, 2009, during purging activities conducted prior to the collection of a preliminary groundwater sample, phase-separated hydrocarbon (PSH) was observed in the bailer. On observation of the PSH, the two (2) inch diameter soil boring (SB-1) was converted to a four (4) inch diameter monitor well (MW-1). Currently, PSH is recovered on a twice weekly schedule from monitor well MW-1. As of September 3, 2009, approximately 263 gallons (6.3 barrels) of PSH has been recovered from monitor well MW-1. Currently, all recovered fluids are being disposed of at a NMOCD approved disposal. A site location and site map are provided as Figure 1 and Figure 2, respectively. A summary of 2009 Cumulative PSH Recovery Data is provided as Table 1.

On June 29, 2009, Plains installed and developed three (3) additional monitor wells (MW-2 through MW-4) at the release site, as approved by the New Mexico Oil Conservation Division (NMOCD). The monitor wells have not been surveyed as of the date of this letter. Plains will have the monitor wells surveyed and an inferred groundwater gradient map will be provided to the NMOCD in the next status update. Monitor well boring logs for monitor

wells MW-2, MW-3, and MW-4 are provided as Figure 3 through Figure 5, respectively. On July 1 and 2, 2009, monitor well groundwater samples were collected and analyzed for concentrations of RCRA metals (Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Mercury, and Silver), NMWQCC metals (Copper, Iron, Manganese, Zinc, Aluminum, Boron, Cobalt, Molybdenum and Nickel) using EPA Method SW 6020A. In additional to the requested metals analysis, the NMOCD requested the analysis of Volatile Organic Compounds (VOC) and Semi-Volatile Organic Compounds (SVOC) by EPA Methods 8260 and 8270, respectively. The NMOCD further required the analysis of Anions and Cations (Calcium, Magnesium, Potassium, Sodium, Chloride, Sulfate, Bicarbonate, Carbonate, Nitrate, Phosphate and Fluoride) using EPA methods SM2320B and EPA 300.

Second Quarter 2009 Sampling Event

Monitor well MW-1 was not sampled during the second quarter 2009 sampling event due to the presence of PSH in the monitor well.

The analytical results of the July 1 and 2, 2009 sampling event indicated RCRA metal concentrations were less than the NMWQCC drinking water standards in all three (3) sampled monitor wells, with the exception of the barium concentration in monitor well MW-2. The barium concentration in monitor well MW-2 was 1.55 mg/L, exceeding the NMWQCC standard of 1.0 mg/L.

The results further indicated concentrations of NMWQCC metals were less than the NMWQCC drinking water standards in all three (3) sampled monitor wells, with the exception of the aluminum, iron and manganese concentrations in monitor wells MW-2 and MW-3. The aluminum concentration was 35.4 mg/L and 28.3 mg/L in monitor wells MW-2 and MW-3, respectively. The iron concentration was 39.4 mg/L and 26 mg/L in monitor wells MW-2 and MW-3, respectively. The manganese concentration was 0.798 mg/L and 1.01 mg/L in monitor wells MW-2 and MW-3, respectively. Table 2 summarizes the concentrations of RCRA and NMWQCC Metals in Groundwater. Laboratory analytical reports are provided with this report.

The analytical results indicated concentrations of volatile organic compounds and semi-volatile compounds were less than the NMWQCC standard for each constituent in all three (3) sampled monitor wells. Table 3 summarizes the Concentrations of Volatile Organic Compounds in Groundwater. Table 4 summarizes the Concentrations of Semi-Volatile Organic Compounds in Groundwater.

The results further indicated concentrations of anion and cations were less than the NMWQCC drinking water standards in all three (3) sampled monitor wells, with the exception of chloride concentrations. The chloride concentrations were 495 mg/L, 663 mg/L and 510 mg/L in monitor wells MW-2, MW-3, and MW-4, respectively. Table 5 summarizes the Concentrations of Anions and Cations in Groundwater.

Based on the analytical results of the second quarter sampling event, the release site appears to be delineated and additional monitor wells are not required at this time.

If you have any questions or require further information, please contact me at (575) 441-2244 or Mr. Jason Henry (Plains) at (575) 441-1099.

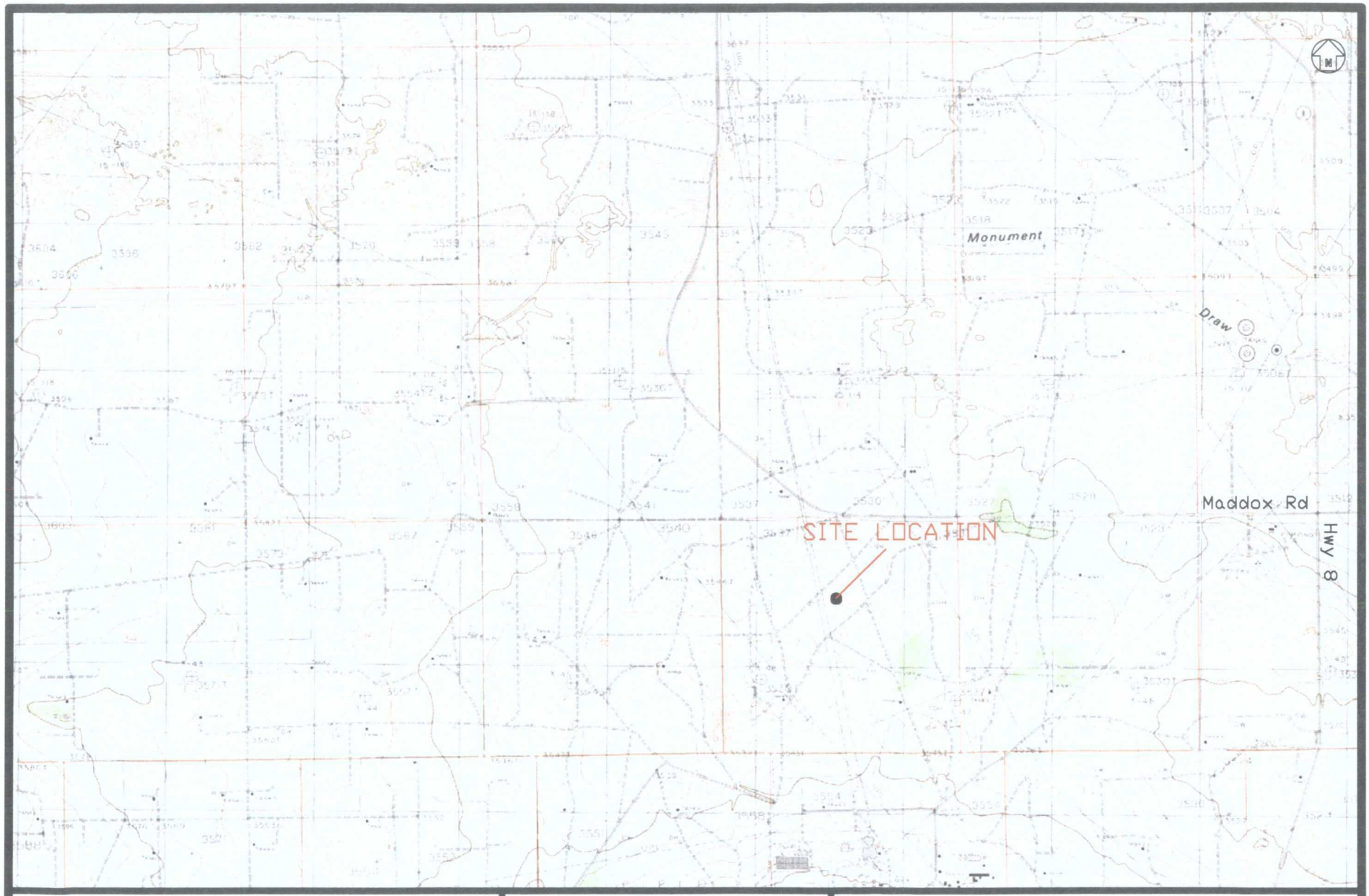
Respectfully,

Curt Stanley
Project Manager
Basin Environmental Consulting, LLC

Enclosures

Figure 1 – Site Location Map
Figure 2 – Site Map
Figure 3 – Monitor Well MW-2 Boring Log
Figure 4 - Monitor Well MW-3 Boring Log
Figure 5 - Monitor Well MW-4 Boring Log
Table 1 - 2009 Cumulative PSH Recovery Data
Table 2 - Concentrations of RCRA and NMWQCC Metals in Groundwater
Table 3 - Concentrations of Volatile Organic Compounds in Groundwater
Table 4 - Concentrations of Semi-Volatile Organic Compounds in Groundwater
Table 5 - Concentrations of Anions and Cations in Groundwater
Laboratory Analytical Reports

cc: Jason Henry – Plains, Denver City, Texas
Jeff Dann – Plains, Houston, Texas
Larry Johnson – NMOCD, Hobbs District Office
Thaddeus Kostrubala – NMSLO, Santa Fe
file



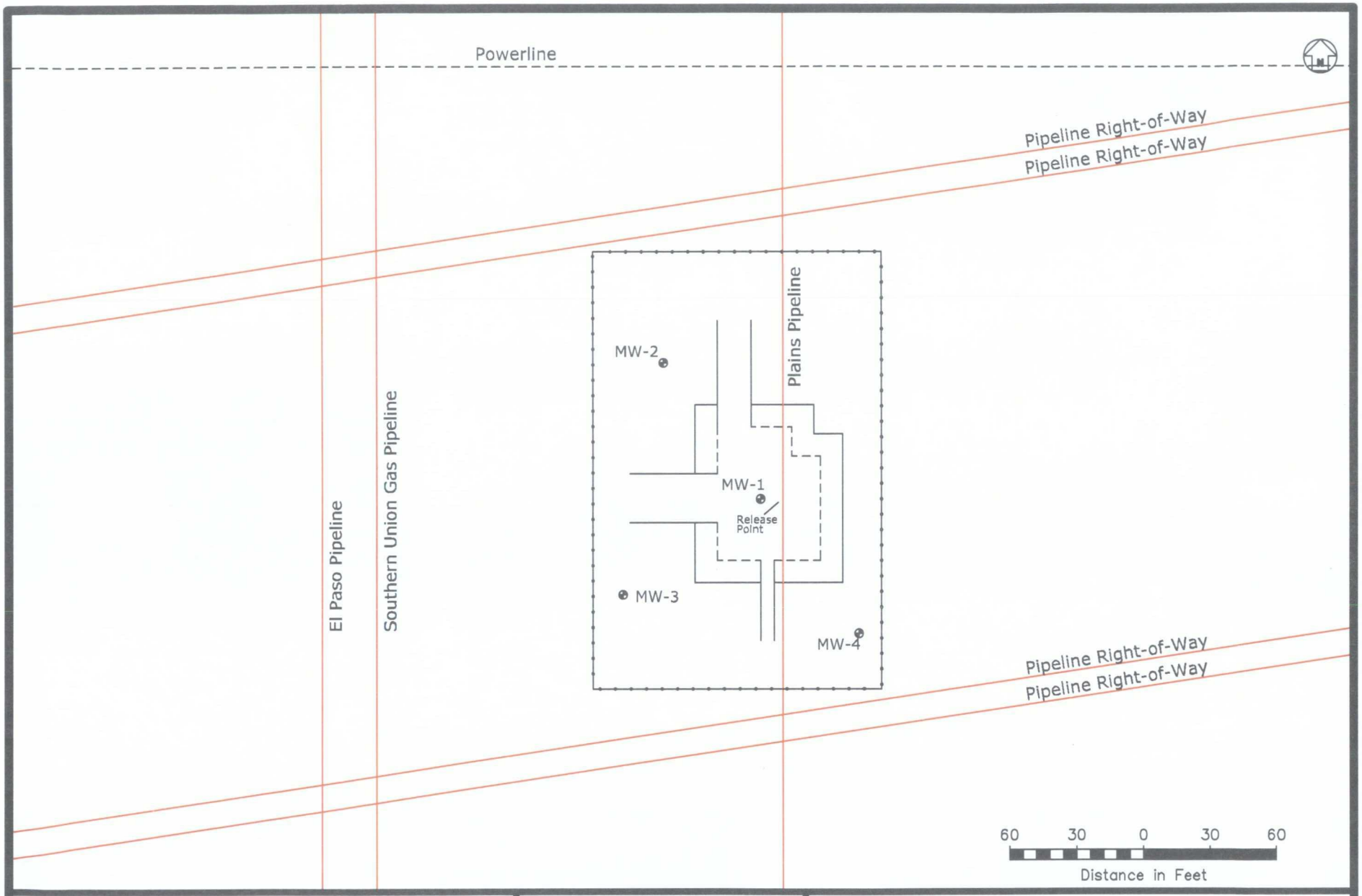
3000 1500 0 1500 3000

Distance in Feet

Figure 1
Site Location Map
Plains Pipeline, 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	Checked By: CDS
March 16, 2009	Scale 1"=3000'



Legend:

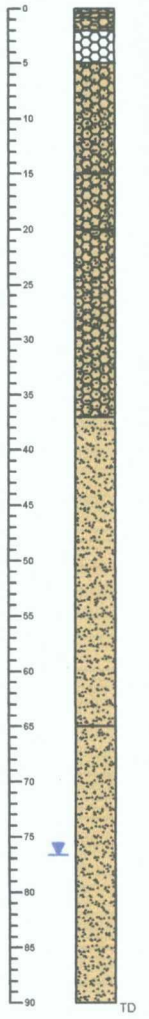
- Excavation Extents
- Pipeline
- MW-1 Monitor Well
- Powerline
- Fence

Figure X
Site Map
Plains Pipeline, L.P.
DCP to Lea Station 6-Inch #2
Lea County, New Mexico
SRS # 2009-039
NMOCD Ref # 1RP-2136

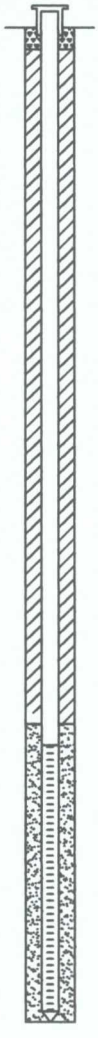
Basin Environmental Consulting

Prep By: CDS	Checked By: CJB
July 14, 2009	Scale 1"=60'

Monitor Well MW-2



Drilling Depth	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
		None	None	0 - 2' bgs - Sand, brown, clayey with caliche nodules
	51.3			2 - 5' bgs - Caliche, white, soft
		None	None	
	(41.1)			5 - 15' bgs - Sand, brown, very fine grained with some caliche nodules
		None	None	
	34.3			
		None	None	15 - 20' bgs - Sand, brown, very fine grained with some caliche nodules and gravel, rounded
	(27.3)			
		None	None	
	14.8			
		None	None	20 - 37' bgs - Caliche, soft and Sand, brown, very fine grained, dry
	(20.7)			
		None	None	
	26.6			
		None	None	
	(51.1)			
		None	None	
	29.5			
		None	None	
	(27.7)			
		None	None	37 - 65' bgs - Sand, brown, very fine grained, dry, hard 51 -53'
	22.7			
		None	None	
	(12.4)			
		None	None	
	7.8			
		None	None	
	(28.7)			
		None	None	
	(17.8)			
		None	None	65 - 90' bgs - Sand, brown, very fine grained, damp, moist to wet 77 - 78' bgs
		None	None	
		None	None	
		None	None	



Monitor Well MW-2

Date Drilled June 29, 2009
Thickness of Bentonite Seal 61 Ft
Depth of Exploratory Boring 90 Ft bgs
Depth to Groundwater 77 Ft bgs
Ground Water Elevation

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

Grout Surface Seal
Bentonite Pellet Seal
Sand Pack
Screen

Completion Notes

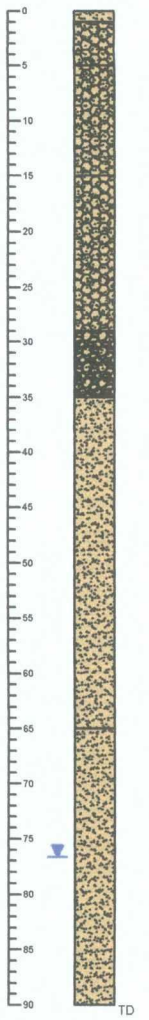
1.) The monitor well was advanced on date using air rotary drilling techniques.
2.) The well was constructed with 2" ID, 0.020 inch factory slotted, threaded joint, schedule 40 PVC pipe.
3.) The well is protected with a locked stick up steel cover and compression cap.
4.) The lines between material types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

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

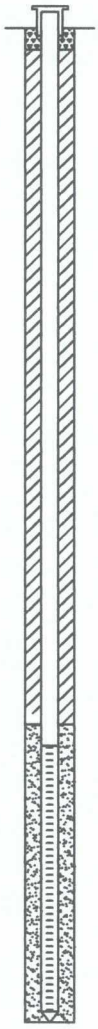
Basin Environmental Consulting

Prep By: CDS	Checked By: CDS
September 15, 2009	

Monitor Well MW-3



Drilling Depth	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
		None	None	0 - 1' bgs - Sand, brown, clayey
	25.1	None	None	1 - 5' bgs - Caliche, brown, sandy
	(11.2)	None	None	5 - 15' bgs - Sand, brown, very fine grained with some caliche nodules
	10.6	None	None	
	(6.3)	None	None	15 - 29' bgs - Caliche, white, soft, Sand, brown, very fine grained
	6.7	None	None	
	(7.7)	None	None	29 - 35' bgs - Gravel, sandy, brown
	6.7	None	None	
	(6.6)	None	None	
	2.7	None	None	
	(6.2)	None	None	35 - 65' bgs - Sand, brown, very fine grained, dry
	6.6	None	None	
	(7.5)	None	None	
	6.4	None	None	
	(9.5)	None	None	
	(10.2)	None	None	65 - 90' bgs - Sand, brown, very fine grained, damp, moist to wet
	8.9	None	None	
		None	None	
		None	None	



Monitor Well MW-2

Date Drilled June 29, 2009
Thickness of Bentonite Seal 61 Ft
Depth of Exploratory Boring 90 Ft bgs
Depth to Groundwater 77 Ft bgs
Ground Water Elevation

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

Grout Surface Seal
Bentonite Pellet Seal
Sand Pack
Screen

Completion Notes

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

Monitor Well MW-3
DCP Plant to Lea Station 6-Inch #2
Lea County, New Mexico
Plains Pipeline, L.P.

Basin Environmental Consulting

Prep By: CDS	Checked By: CDS
September 15, 2009	

Monitor Well MW-4

Drilling Depth	PID Reading	Petroleum Odor	Petroleum Stain
0		None	None
5	13.0	None	None
10	(31.5)	None	None
15	35.5	None	None
20	(38.2)	None	None
25	38.4	None	None
30	(36.7)	None	None
35	37.5	None	None
40	(23.5)	None	None
45	29.4	None	None
50	(21.0)	None	None
55	19.4	None	None
60	(14.6)	None	None
65	10.8	None	None
70	(10.5)	None	None
75	(5.8)	None	None
80	8.4	None	None
85		None	None
88 TD		None	None

Soil Description

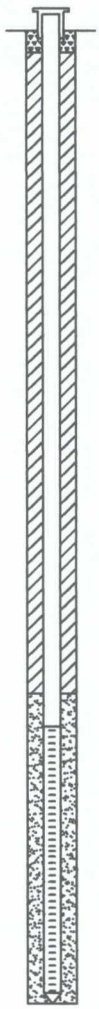
0 - 1' bgs - Sand, brown, clayey with some caliche nodules

1 - 4' bgs - Caliche, white, soft

4 - 18' bgs - Sand, brown, very fine grained with some caliche nodules

18 - 24' bgs - Caliche, white, soft, sandy

24 - 88' bgs - Sand, brown, very fine grained with some caliche nodules, hard 34 - 35'



Monitor Well MW-4

Date Drilled June 29, 2009
Thickness of Bentonite Seal 58 Ft
Depth of Exploratory Boring 88 Ft bgs
Depth to Groundwater 77 Ft bgs
Ground Water Elevation

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

Grout Surface Seal

Bentonite Pellet Seal

Sand Pack

Screen

Completion Notes

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

Monitor Well MW-4
DCP Plant to Lea Station 6-Inch #2
Lea County, New Mexico
Plains Pipeline, L.P.

Basin Environmental Consulting

Prep By: CDS	Checked By: CDS
September 15, 2009	

TABLE 1
2009 CUMULATIVE PSH RECOVERY DATA
PLAINS PIPELINE, L.P.
DCP PLANT TO LEA STATION 6-INCH #2
LEA COUNTY, NEW MEXICO
SRS# 2009-039
1RP-2136

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS (Feet)	CORRECTED GROUNDWATER ELEVATION	OIL RECOVERED (Gallons)
MW -1	04/28/09		64.59	67.40	2.81		7
MW -1	04/30/09		64.65	67.24	2.59		7
MW-1	05/05/09		64.09	68.74	4.65		9
MW-1	05/07/09		64.23	68.39	4.16		8
MW-1	05/13/09		63.84	69.52	5.68		9
MW-1	05/15/09		63.84	69.40	5.56		9
MW-1	05/19/09		63.83	69.51	5.68		9
MW-1	05/21/09		63.86	69.44	5.58		9
MW-1	05/26/09		63.82	69.51	5.69		9
MW-1	05/28/09		63.85	69.41	5.56		9
MW-1	06/01/09		63.83	69.47	5.64		9
MW-1	06/03/09		63.89	69.40	5.51		9
MW-1	06/02/09		63.85	69.42	5.57		9
MW-1	06/08/09		63.87	69.50	5.63		9
MW-1	06/10/09		63.87	69.44	5.57		7
MW-1	06/19/09		63.85	69.51	5.66		9
MW-1	06/22/09		63.87	69.47	5.60		9
MW-1	06/25/09		63.90	69.44	5.54		9
MW-1	06/29/09		63.88	69.45	5.57		9
MW-1	07/08/09		63.92	69.37	5.45		9
MW-1	07/14/09		63.88	69.43	5.55		9
MW-1	07/27/09		63.91	69.46	5.55		9
MW-1	07/28/09		63.95	69.25	5.30		9
MW-1	08/03/09		63.95	69.40	5.45		9
MW-1	08/05/09		63.95	69.31	5.36		9
MW-1	08/11/09		63.97	69.36	5.39		9
MW-1	08/18/09		63.97	69.47	5.50		9
MW-1	08/28/09		63.98	69.38	5.40		9
MW-1	09/01/09		73.96	79.34	5.38		9
MW-1	09/03/09		79.03	84.27	5.24		9
						Total (gallons)	263

TABLE 2

CONCENTRATIONS OF RCRA AND NMWQCC METALS IN GROUNDWATER

PLAINS PIPELINE, L.P.

DCP PLANT TO LEA STATION 6-INCH #2

LEA COUNTY, NEW MEXICO

NMOCD REFERENCE NUMBER 1RP-2136

All water concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW846-6020A, EPA 7470A															
		Aluminum	Arsenic	Barium	Boron	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Molybdenum	Nickel	Selenium	Silver	Zinc	Mercury
MW-2	07/01/09	**35.4**	0.024	**1.55**	0.115	<0.001	0.047	0.017	0.034	**39.4**	0.022	**0.798**	0.007	0.045	0.004	<0.002	0.159	<0.0001
MW-3	07/01/09	**28.3**	0.031	0.787	0.214	<0.001	0.027	0.015	0.027	**26**	0.018	**1.01**	0.004	0.034	0.01	<0.002	0.071	<0.0001
MW-4	07/01/09	0.107	0.016	0.071	0.214	<0.001	0.006	<0.005	<0.003	0.950	<0.002	0.014	0.007	<0.005	0.004	<0.002	<0.003	<0.0001
Maximum Contaminant Levels from NM WQCC Drinking water standards Sections 1-101.UU and 3-103.A.		**5.0 mg/L**	**0.1 mg/L**	**1.0 mg/L**	**0.75 mg/L**	**0.01 mg/L**	**0.05 mg/L**	**0.05 mg/L**	**1.0 mg/L**	**1.0 mg/L**	**0.05 mg/L**	**0.2 mg/L**	**1.0 mg/L**	**0.2 mg/L**	**0.05 mg/L**	**0.05 mg/L**	**10 mg/L**	**0.002 mg/L**

Table 3

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS IN WATER
PLAINS PIPELINE, LP
DCP PLANT TO LEA STATION 6-INCH #2
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NUMBER 1R9-2136
All water concentrations are in mg/L

Date Sampled	Sample Location	Acetone	Acrylonitrile	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	2-Butanone	MTBE	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane
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 3

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS IN WATER
PLAINS PIPELINE, 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-Dibromoethane (EDB)	Dibromomethane (methylene bromide)	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Dichlorodifluormethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene
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	0.1mg/L

Table 3

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS IN WATER
PLAINS PIPELINE, 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 3

CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER
PLAINS PIPELINE, 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	1,1,2,2-Tetrachloroethane	Tetrachloroethene (PCE)	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene (TCE)	Trichlorofluoromethane	1,2,3-Trichloropropane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	o-Xylene	m,p-Xylene	Vinyl Acetate	Vinyl Chloride
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	<0.01	<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	<0.01	<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	<0.01	<0.05	<0.002
Maximum Contaminant Levels from NMWQCC Drinking water standards Sections 1-101.UU and 3-103.A.		**0.02 mg/L**	**-**	**0.75 mg/L**	**-**	**-**	**0.06 mg/L**	**-**	**0.01 mg/ L**	**-**	**-**	**-**	**-**	**Total Xylene 0.62 mg/L**		**-**	**0.001 mg/L**

TABLE 4

CONCENTRATIONS OF SEMI-VOLATILE COMPOUNDS IN GROUNDWATER

PLAINS PIPELINE, L.P.

DCP PLANT TO LEA STATION 6-INCH #2

LEA COUNTY, NEW MEXICO

NMOCD REFERENCE NUMBER 1RP-2136

All water concentrations are reported in mg/L

SAMPLE LOCATION	SAMPLE DATE	EPA SW846-8270C, 3510															
		Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	Naphthalene	Phenanthrene	Pyrene
MW-2	07/02/09	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-3	07/02/09	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-4	07/02/09	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

TABLE 5
CONCENTRATIONS OF ANIONS/CATIONS IN GROUNDWATER
PLAINS PIPELINE, L.P.
DCP PLANT TO LEA STATION 6-INCH #2
LEA COUNTY, NEW MEXICO
NMOCD 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	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**

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

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 *Report Date:* 09-JUL-09
Work Order Number: 337170 *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 Name: DCP Plant to Lea Stat 6" # 2

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, 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		
Acenaphthene		ND	0.005	ND	0.005	ND	0.005		
Acenaphthylene		ND	0.005	ND	0.005	ND	0.005		
Aniline (Phenylamine, Aminobenzene)		ND	0.020	ND	0.020	ND	0.020		
Anthracene		ND	0.005	ND	0.005	ND	0.005		
Benzo(a)anthracene		ND	0.005	ND	0.005	ND	0.005		
Benzo(a)pyrene		ND	0.005	ND	0.005	ND	0.005		
Benzo(b)fluoranthene		ND	0.005	ND	0.005	ND	0.005		
Benzo(k)fluoranthene		ND	0.005	ND	0.005	ND	0.005		
Benzo(g,h,i)perylene		ND	0.005	ND	0.005	ND	0.005		
Benzoic Acid		ND	0.030	ND	0.030	ND	0.030		
Benzyl Butyl Phthalate		ND	0.005	ND	0.005	ND	0.005		
bis(2-chloroethoxy) methane		ND	0.010	ND	0.010	ND	0.010		
bis(2-chloroethyl) ether		ND	0.010	ND	0.010	ND	0.010		
bis(2-chloroisopropyl) ether		ND	0.010	ND	0.010	ND	0.010		
bis(2-ethylhexyl) phthalate		ND	0.005	ND	0.005	ND	0.005		
4-Bromophenyl-phenylether		ND	0.010	ND	0.010	ND	0.010		
4-chloro-3-methylphenol		ND	0.010	ND	0.010	ND	0.010		
4-Chloroaniline		ND	0.020	ND	0.020	ND	0.020		
2-Chloronaphthalene		ND	0.010	ND	0.010	ND	0.010		
2-Chlorophenol		ND	0.010	ND	0.010	ND	0.010		
4-Chlorophenyl Phenyl Ether		ND	0.010	ND	0.010	ND	0.010		
Chrysene		ND	0.005	ND	0.005	ND	0.005		
Dibenz(a,h)Anthracene		ND	0.005	ND	0.005	ND	0.005		
Dibenzofuran		ND	0.010	ND	0.010	ND	0.010		
di-n-Butyl Phthalate		ND	0.005	ND	0.005	ND	0.005		

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 337170

PLAINS ALL AMERICAN EH&S, Midland, TX

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

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, 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				
1,2-Dichlorobenzene		ND	0.010	ND	0.010	ND	0.010				
1,3-Dichlorobenzene		ND	0.010	ND	0.010	ND	0.010				
1,4-Dichlorobenzene		ND	0.010	ND	0.010	ND	0.010				
3,3-Dichlorobenzidine		ND	0.010	ND	0.010	ND	0.010				
2,4-Dichlorophenol		ND	0.010	ND	0.010	ND	0.010				
Diethyl Phthalate		ND	0.005	ND	0.005	ND	0.005				
Dimethyl Phthalate		ND	0.005	ND	0.005	ND	0.005				
2,4-Dimethylphenol		ND	0.010	ND	0.010	ND	0.010				
4,6-dinitro-2-methyl phenol		ND	0.010	ND	0.010	ND	0.010				
2,4-Dinitrophenol		ND	0.010	ND	0.010	ND	0.010				
2,4-Dinitrotoluene		ND	0.010	ND	0.010	ND	0.010				
2,6-Dinitrotoluene		ND	0.010	ND	0.010	ND	0.010				
di-n-Octyl Phthalate		ND	0.005	ND	0.005	ND	0.005				
Fluoranthene		ND	0.005	ND	0.005	ND	0.005				
Fluorene		ND	0.005	ND	0.005	ND	0.005				
Hexachlorobenzene		ND	0.010	ND	0.010	ND	0.010				
Hexachlorobutadiene		ND	0.010	ND	0.010	ND	0.010				
Hexachlorocyclopentadiene		ND	0.010	ND	0.010	ND	0.010				
Hexachloroethane		ND	0.010	ND	0.010	ND	0.010				
Indeno(1,2,3-c,d)Pyrene		ND	0.005	ND	0.005	ND	0.005				
Isophorone		ND	0.010	ND	0.010	ND	0.010				
2-Methylnaphthalene		ND	0.005	ND	0.005	ND	0.005				
2-methylphenol		ND	0.010	ND	0.010	ND	0.010				
3&4-Methylphenol		ND	0.010	ND	0.010	ND	0.010				
Naphthalene		ND	0.005	ND	0.005	ND	0.005				

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 337170

PLAINS ALL AMERICAN EH&S, Midland, TX

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

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, 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			
2-Nitroaniline		ND	0.010	ND	0.010	ND	0.010			
3-Nitroaniline		ND	0.010	ND	0.010	ND	0.010			
4-Nitroaniline		ND	0.020	ND	0.020	ND	0.020			
Nitrobenzene		ND	0.010	ND	0.010	ND	0.010			
2-Nitrophenol		ND	0.010	ND	0.010	ND	0.010			
4-Nitrophenol		ND	0.010	ND	0.010	ND	0.010			
N-Nitrosodi-n-Propylamine		ND	0.010	ND	0.010	ND	0.010			
N-Nitrosodiphenylamine		ND	0.010	ND	0.010	ND	0.010			
Pentachlorophenol		ND	0.010	ND	0.010	ND	0.010			
Phenanthrene		ND	0.005	ND	0.005	ND	0.005			
Phenol		ND	0.010	ND	0.010	ND	0.010			
Pyrene		ND	0.005	ND	0.005	ND	0.005			
Pyridine		ND	0.010	ND	0.010	ND	0.010			
1,2,4-Trichlorobenzene		ND	0.010	ND	0.010	ND	0.010			
2,4,5-Trichlorophenol		ND	0.010	ND	0.010	ND	0.010			
2,4,6-Trichlorophenol		ND	0.010	ND	0.010	ND	0.010			

Brent Barron
Odessa Laboratory Director

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

BRL Below Reporting Limit.

RL Reporting Limit

* Outside XENCO's scope of NELAC Accreditation.

Form 2 - Surrogate Recoveries

Project Name: 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

SVOAs by EPA 8270C Analytes	SURROGATE RECOVERY STUDY 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

SVOAs by EPA 8270C Analytes	SURROGATE RECOVERY STUDY 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

SVOAs by EPA 8270C Analytes	SURROGATE RECOVERY STUDY 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

SVOAs by EPA 8270C Analytes	SURROGATE RECOVERY STUDY 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

SVOAs by EPA 8270C Analytes	SURROGATE RECOVERY STUDY 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

SVOAs by EPA 8270C Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
2-Fluorobiphenyl	0.047	0.050	94	43-116	
2-Fluorophenol	0.025	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

SVOAs by EPA 8270C Analytes	SURROGATE RECOVERY STUDY 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.

BS / BSD Recoveries

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

Work Order #: 337170 **Project ID:** 2009-039

Analyst: KAN **Date Prepared:** 07/07/2009 **Date Analyzed:** 07/08/2009

Lab Batch ID: 764829 **Sample:** 533210-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

SVOAs by EPA 8270C Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Acenaphthene	ND	0.050	0.049	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

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

Date Prepared: 07/07/2009
Batch #: 1

Project ID: 2009-039
Date Analyzed: 07/08/2009
Matrix: Water

SVOAs by EPA 8270C Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
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

BS / BSD Recoveries

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

Work Order #: 337170 **Project ID:** 2009-039

Analyst: KAN **Date Prepared:** 07/07/2009 **Date Analyzed:** 07/08/2009

Lab Batch ID: 764829 **Sample:** 533210-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

SVOAs by EPA 8270C Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Hexachlorobenzene	ND	0.050	0.050	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

Date Prepared: 07/07/2009
Batch #: 1

Project ID: 2009-039
Date Analyzed: 07/08/2009
Matrix: Water

SVOAs by EPA 8270C Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Phenol	ND	0.050	0.028	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
Project ID: 2009-039
Date Analyzed: 07/08/2009
Date Prepared: 07/07/2009
Analyst: KAN
QC- Sample ID: 336954-001 S
Batch #: 1
Matrix: Soil
Reporting Units: mg/L

SVOAs by SW-846 8270C Analytes	MATRIX / MATRIX SPIKE RECOVERY STUDY Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Acenaphthene	0.801	0.250	1.03	92	54-114	
Acenaphthylene	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-chloroethoxy) 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*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Form 3 - MS Recoveries

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

Work Order #: 337170
Lab Batch #: 764829
Project ID: 2009-039
Date Analyzed: 07/08/2009
Date Prepared: 07/07/2009
Analyst: KAN
QC- Sample ID: 336954-001 S
Batch #: 1
Matrix: Soil
Reporting Units: mg/L

SVOAs by SW-846 8270C Analytes	MATRIX / MATRIX SPIKE RECOVERY STUDY					
		Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
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*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

#2

Project Manager: Curt Stanley
Company Name: Basin Environmental
Company Address: 2000 Plains Hwy
City/State/Zip: Lovington, NM 88260
Telephone No: 575-441-2244 Fax No: 575-396-1429
Sampler Signature: C Stanley e-mail:

Project Name: DCP Plant To Lea State 6"
Project #: 2009-039
Project Loc: Lea Co, NM
PO #: PAA - S. Henry
Report Format: ☐ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 337170

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: Groundwater	Wastewater	Soil/Solid	Specify Other	Analyze For: TPH 418.1	TPH 8015M	TX 1005	TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs.	Standard TAT
01	MW-2			7/2/09	1322		1	X								GW												X					X
02	MW-3			↓	1334		1	X								GW												X					X
03	MW-4				1345		1	X								GW												X					X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
C Stanley	7/2/09	1634			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Andrea Sam	7/2/09	16:34

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

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Basin Env. / Plains

Date/ Time: 7.2.09 16:34

Lab ID # : 337170

Initials: ak

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 (AALI1), 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)

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

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

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

XENCO Laboratories

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

Project ID: 2009-039 *Report Date:* 13-JUL-09
Work Order Number: 337000 *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 comparible 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 *Report Date:* 13-JUL-09
Work Order Number: 337000 *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 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:	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			
Alkalinity by SM2320B	*Extracted:*								
	Analyzed:	Jul-08-09 12:20		Jul-08-09 12:20		Jul-08-09 12:20			
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL		
Alkalinity, Total (as CaCO3)		192	4.00	260	4.00	180	4.00		
Alkalinity, Carbonate (as CaCO3)		ND	4.00	ND	4.00	ND	4.00		
Alkalinity, Bicarbonate (as CaCO3)		192	4.00	260	4.00	180	4.00		
Anions by EPA 300	*Extracted:*								
	Analyzed:	Jul-06-09 14:02		Jul-06-09 14:02		Jul-06-09 14:02			
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL		
Chloride		495	12.5	663	25.0	510	10.0		
Fluoride		ND	12.5	ND	25.0	ND	10.0		
Nitrate-N		3.65	2.50	ND	10.0	2.98	2.00		
Ortho-Phosphate		ND	12.5	ND	25.0	ND	10.0		
Sulfate		88.0	12.5	338	25.0	87.4	10.0		

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:	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			
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			
Mercury by EPA 7470A	*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			

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:	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			
Metals per ICP by SW846 6010B	*Extracted:*								
	Analyzed:	Jul-02-09 13:44		Jul-02-09 13:44		Jul-02-09 13:44			
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL		
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		

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:	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	
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	
2-Chlorotoluene		ND	5.00	ND	5.00	ND	5.00	
4-Chlorotoluene		ND	5.00	ND	5.00	ND	5.00	
p-Cymene (p-Isopropyltoluene)		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	

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:	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			
1,2-Dibromoethane		ND	5.00	ND	5.00	ND	5.00			
Dibromomethane		ND	5.00	ND	5.00	ND	5.00			
1,2-Dichlorobenzene		ND	5.00	ND	5.00	ND	5.00			
1,3-Dichlorobenzene		ND	5.00	ND	5.00	ND	5.00			
1,4-Dichlorobenzene		ND	5.00	ND	5.00	ND	5.00			
Dichlorodifluoromethane		ND	5.00	ND	5.00	ND	5.00			
1,1-Dichloroethane		ND	5.00	ND	5.00	ND	5.00			
1,2-Dichloroethane		ND	5.00	ND	5.00	ND	5.00			
1,1-Dichloroethene		ND	5.00	ND	5.00	ND	5.00			
cis-1,2-Dichloroethene		ND	5.00	ND	5.00	ND	5.00			
trans-1,2-dichloroethene		ND	5.00	ND	5.00	ND	5.00			
1,2-Dichloropropane		ND	5.00	ND	5.00	ND	5.00			
1,3-Dichloropropane		ND	5.00	ND	5.00	ND	5.00			
2,2-Dichloropropane		ND	5.00	ND	5.00	ND	5.00			
1,1-Dichloropropene		ND	5.00	ND	5.00	ND	5.00			
cis-1,3-Dichloropropene		ND	5.00	ND	5.00	ND	5.00			
trans-1,3-dichloropropene		ND	5.00	ND	5.00	ND	5.00			
Ethylbenzene		ND	5.00	ND	5.00	ND	5.00			
Hexachlorobutadiene		ND	5.00	ND	5.00	ND	5.00			
2-Hexanone		ND	50.0	ND	50.0	ND	50.0			
isopropylbenzene		ND	5.00	ND	5.00	ND	5.00			
Methylene Chloride		ND	5.00	ND	5.00	ND	5.00			
4-Methyl-2-Pentanone		ND	50.0	ND	50.0	ND	50.0			
Naphthalene		ND	10.0	ND	10.0	ND	10.0			
n-Propylbenzene		ND	5.00	ND	5.00	ND	5.00			

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:	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			
Styrene		ND	5.00	ND	5.00	ND	5.00			
1,1,1,2-Tetrachloroethane		ND	5.00	ND	5.00	ND	5.00			
1,1,2,2-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			

Brent Barron
Odessa Laboratory Director

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

BRL Below Reporting Limit.

RL Reporting Limit

* Outside XENCO's scope of NELAC Accreditation.

Form 2 - Surrogate Recoveries

Project Name: 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

VOAs by SW-846 8260B Analytes	SURROGATE RECOVERY STUDY 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

VOAs by SW-846 8260B Analytes	SURROGATE RECOVERY STUDY 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

VOAs by SW-846 8260B Analytes	SURROGATE RECOVERY STUDY 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

VOAs by SW-846 8260B Analytes	SURROGATE RECOVERY STUDY 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

VOAs by SW-846 8260B Analytes	SURROGATE RECOVERY STUDY 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

VOAs by SW-846 8260B Analytes	SURROGATE RECOVERY STUDY 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

VOAs by SW-846 8260B Analytes	SURROGATE RECOVERY STUDY 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

Alkalinity by SM2320B Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
		BLANK /BLANK SPIKE RECOVERY STUDY				
Alkalinity, Bicarbonate (as CaCO3)	ND	200	176	88	80-120	
Alkalinity, Total (as CaCO3)	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

ICP-MS Metals by SW 6020A Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
		BLANK /BLANK SPIKE RECOVERY STUDY				
Aluminum	ND	0.200	0.191	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

Anions by EPA 300 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
		BLANK /BLANK SPIKE RECOVERY STUDY				
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

Mercury by EPA 7470A Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
		BLANK /BLANK SPIKE RECOVERY STUDY				
Mercury	ND	0.0010	0.0009	90	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

VOAs by SW-846 8260B Analytes	BLANK /BLANK SPIKE RECOVERY STUDY					
	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
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

VOAs by SW-846 8260B Analytes	BLANK /BLANK SPIKE RECOVERY STUDY					
	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
1,1-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 **Project ID:** 2009-039

Date Analyzed: 07/06/2009 **Date Prepared:** 07/06/2009 **Analyst:** LATCOR

QC- Sample ID: 337000-001 S **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
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

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

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

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

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

Work Order # : 337000 **Project ID:** 2009-039

Lab Batch ID: 764709 **QC- Sample ID:** 336964-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 07/07/2009 **Date Prepared:** 07/07/2009 **Analyst:** HAT

Reporting Units: mg/L

ICP-MS Metals by SW 6020A Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Aluminum	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*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

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

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

Form 3 - MS / MSD Recoveries

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

Work Order # : 337000 **Project ID:** 2009-039

Lab Batch ID: 764664 **QC- Sample ID:** 336893-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 07/06/2009 **Date Prepared:** 07/06/2009 **Analyst:** JUJ

Reporting Units: ug/L

VOAs by SW-846 8260B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
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*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

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

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

Form 3 - MS / MSD Recoveries

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

Work Order # : 337000 **Project ID:** 2009-039

Lab Batch ID: 764664 **QC- Sample ID:** 336893-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 07/06/2009 **Date Prepared:** 07/06/2009 **Analyst:** JUJ

Reporting Units: ug/L

VOAs by SW-846 8260B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
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-Dibromoethane	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*(C-A)/B

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

Relative Percent Difference RPD = 200*|(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

Form 3 - MS / MSD Recoveries

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

Work Order # : 337000 **Project ID:** 2009-039

Lab Batch ID: 764664 **QC- Sample ID:** 336893-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 07/06/2009 **Date Prepared:** 07/06/2009 **Analyst:** JUJ

Reporting Units: ug/L

VOAs by SW-846 8260B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Methylene Chloride	ND	50.0	49.2	98	50.0	47.4	95	4	75-125	35	
4-Methyl-2-Pentanone	ND	500	393	79	500	433	87	10	60-140	25	
Naphthalene	ND	50.0	41.8	84	50.0	43.8	88	5	65-135	20	
n-Propylbenzene	ND	50.0	56.6	113	50.0	53.5	107	6	75-125	20	
Styrene	ND	50.0	52.4	105	50.0	49.2	98	6	60-130	51	
1,1,1,2-Tetrachloroethane	ND	50.0	51.0	102	50.0	50.5	101	1	75-125	20	
1,1,2,2-Tetrachloroethane	ND	50.0	42.1	84	50.0	44.1	88	5	50-130	31	
Tetrachloroethylene	ND	50.0	59.1	118	50.0	55.0	110	7	60-130	20	
Toluene	ND	50.0	48.6	97	50.0	46.3	93	5	59-139	21	
1,2,3-Trichlorobenzene	ND	50.0	46.6	93	50.0	47.8	96	3	75-137	20	
1,2,4-Trichlorobenzene	ND	50.0	49.0	98	50.0	48.0	96	2	75-135	20	
1,1,1-Trichloroethane	ND	50.0	57.8	116	50.0	56.6	113	2	75-125	20	
1,1,2-Trichloroethane	ND	50.0	46.3	93	50.0	48.1	96	4	75-127	20	
Trichloroethene	ND	50.0	54.0	108	50.0	52.0	104	4	62-137	24	
Trichlorofluoromethane	ND	50.0	49.4	99	50.0	50.3	101	2	67-125	20	
1,2,3-Trichloropropane	ND	50.0	46.6	93	50.0	49.1	98	5	75-125	20	
1,2,4-Trimethylbenzene	ND	50.0	54.2	108	50.0	52.3	105	4	75-125	20	
1,3,5-Trimethylbenzene	ND	50.0	55.0	110	50.0	51.8	104	6	70-125	20	
o-Xylene	ND	50.0	48.1	96	50.0	48.0	96	0	75-125	20	
m,p-Xylenes	ND	100	110	110	100	104	104	6	75-125	20	
Vinyl Acetate	ND	500	391	78	500	400	80	2	60-140	20	
Vinyl Chloride	ND	50.0	42.5	85	50.0	42.6	85	0	75-125	20	

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

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

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

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

Alkalinity by SM2320B Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Alkalinity, Carbonate (as CaCO3)	ND	ND	NC	20	
Alkalinity, Bicarbonate (as CaCO3)	192	196	2	20	
Alkalinity, Total (as CaCO3)	192	196	2	20	

Lab Batch #: 764628

Date Analyzed: 07/06/2009 **Date Prepared:** 07/06/2009 **Analyst:** LATCOR

QC- Sample ID: 337000-001 D **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

Anions by EPA 300 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
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

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

Metals per ICP by SW846 6010B Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Calcium	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

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

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

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

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

Company Address: 2800 Plains Hwy Project Loc: Lea County, NM

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

Telephone No: (575) 441-2244 Fax No: (575) 396-1429 Report Format: [X] Standard [ ] TRRP [ ] NPDES

Sampler Signature: C. Stanley e-mail: cstanley@basineny.com

(lab use only) ORDER #: 337000

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl (VOA)	H2SO4	NaOH	Na2S2O3	None (PAH)	Other (Specify)	Matrix: DW=Drinking Water, Sl=Sludge, GW=Groundwater, W=Soil/Solid, NP=Non-Potable, Specify Other	Analyze For: TCLP: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	TOTAL: Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles - 8260	Semivolatiles - 8270 - 625	BTEX 8021B/5030 or BTEX 8260							RUSH TAT (Pre-Scheduled) 24, 48, 72 hrs	Standard TAT
01	MW - 2			7/1/2009	0920		2	X	X	X						GW			X	X		X	X	X								X
02	MW - 3			7/1/2009	1100		2	X	X	X						GW			X	X		X	X	X								X
03	MW - 4			7/1/2009	1330		2	X	X	X						GW			X	X		X	X	X								X

Special Instructions: Samples Unfiltered - Please Filter when appropriate

Relinquished by:	Date	Time	Received by	Date	Time
C. Stanley	7/2/09	0925			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Cindy Sam	7-2-09	9:15

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

Temperature Upon Receipt: 1.6 °C

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

Field Parameters

specific conductance
pH
temperature
depth to water

337000

General Chemistry

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

RCRA Metals

Arsenic
Barium
Cadmium
Chromium
Lead
Mercury
Selenium
Silver

Additional WQCC Metals

Copper
Iron
Manganese
Zinc
Aluminum
Boron
Cobalt
Molybdenum
Nickel

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

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Basin Env. / Plains

Date/ Time: 7.7.09 9:25

Lab ID # : 337000

Initials: AL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	1.6 °C	
#2	Shipping container in good condition?	(Yes)	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	(Not Present)	
#4	Custody Seals intact on sample bottles/ container?	(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