District 1 1625 N. French Dr., Hobbs, NM 88240 District fl 1301 W Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road. Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

Type of Release

Crude Oil

State of New Mexico Energy Minerals and Natural Resources

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

Form C-141 RECEIVEDRevised October 10, 2003 JUL 2 9 2009 with Rule 116 on back side of form HOBRSOCD

Volume Recovered 0 bbls

1RP-1971

( A

F

### **Release Notification and Corrective Action**

			OPERAT	OR	Initial Report	🌔 🖾 🛛 linal Re	por
Name of Company	Plains Pipeline, LP		Contact	Daniel Bryant			
Address	3705 E. Hwy 158: Midla	nd. TX 79706	Telephone No	). (432) 557-5865			
Facility Name	DCP Plant to Lea Station	6``	Facility Type	Pipeline			
- -		1					
Surface Owner NM	SLO	Mineral Owner	-		Lease No.		

#### LOCATION OF RELEASE

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

Latitude N 32.542461° Longitude W 103.288617°

#### NATURE OF RELEASE Volume of Release 10 bbls

Source of Release 6" steel pipeline	Date and Hour of Occurrence	Date and Hour of Discovery			
	10/8/2008	10/8/2008 15:00			
Was Immediate Notice Given?	If YES. To Whom?				
Yes I No I Not Required	Larry Johnson				
By Whom? Daniel Bryant	Date and Hour 10/9/2008 08:20	)			
Was a Watercourse Reached?	If YES, Volume Impacting the Wa	tercourse.			
🔲 Yes 🖾 No					
If a Watercourse was Impacted, Describe Fully.*					
· ·					
Describe Cause of Problem and Remedial Action Taken.*					
Internal corrosion of a 6" pipeline caused a release of crude oil. Clamp w	as installed on the pipeline to mitigate	the release. Throughput on the line is 660			
bils per day. Operating pressure of the pipeline is 45 psi. Depth of the pi	petine at the release location is appro-	xunately 3 bgs. H2S content of the crude			
is less than 10 ppm. The gravity of the crude is 65.					
Describe Area Afford and Cleanup Action Taken *					
The series Area Area and Creately Action Faker					
Please refer to the Remediation Summary and Site Closure Request for clo	osure data				
•					
I hereby certify that the information given above is true and complete to the	te best of my knowledge and understa	and that pursuant to NMOCD rules and			
regulations all operators are required to report and/or file certain release n	otifications and perform corrective ac	tions for releases which may endanger			
public health or the environment. The acceptance of a C-141 report by the	2 NMOCD marked as "Final Report" (	does not relieve the operator of liability			
should their operations have failed to adequately investigate and remediate	e contamination that pose a threat to g	round water, surface water, human health			
or the environment. In addition, NMOCD acceptance of a C-141 report d	oes not relieve the operator of respon-	sibility for compliance with any other			
federal, state, or local laws and or regulations.					
	<u>OIL CONSER</u>	<u>ATION DIVISION</u>			
Cim N 1R1		Johnson			
Signature: 1 Stort		- Cometer			
Print of Nomer Duniel Prove	Approved by District Superismining	ENTAL ENGINEER			
Timed Nane, Danei bryan		LNIAL LINGINLIN			
Title: Environmental R C Specialist	Annewal Data: 730.09 Exploration Data:				
FREE EISTOURIERRATIS C SPECIALIST		Expiration Date.			
E-mail Address_dmbryant/((naaln.com	Conditions of Anorrowsh				
Le mon riski ver anter anter pantpicom	constitutes of explorent	Attached 🔲			
Date: 7/29/55 Phone: (432) 557-5865					

\* Attach Additional Sheets If Necessary

### Basin Environmental Consulting, LLC

2800 Plains Highway P. O. Box 381 Lovington, New Mexico 88260 cjbryant@basin-consulting.com Office: (575) 396-2378 Fax: (575) 396-1429

Effective Solutions

### **REMEDIATION SUMMARY**

### AND

RECEIVED JUL 2 9 2009

HOBBSOCD

### SITE CLOSURE REQUEST

PLAINS PIPELINE, L.P. (231735) DCP Plant to Lea Station 6-Inch Lea County, New Mexico Plains SRS # 2008-275

UNIT J (NW/SE), Section 30, Township 20 South, Range 37 East Latitude 32 ° 32' 32.4" North, Longitude 103 ° 17' 17.2" West NMOCD Reference # 1RP-1971

Prepared For:

Plains Pipeline, L.P. 333 Clay Street Suite 1600 Houston, Texas 77002

Prepared By: Basin Environmental Consulting, LLC

**July 2009** 

Camille J **Project Manager** 

Curt D. Stanlev

Project Manager

### **TABLE OF CONTENTS**

1.0	INTRODUCTION	.1
2.0	NMOCD SITE CLASSIFICATION	.1
3.0	SUMMARY OF FIELD ACTIVITIES	2
4.0	QA/QC PROCEDURES4.1Soil Sampling4.2Decontamination of Equipment4.3Laboratory Protocol	4 4 4
5.0	SITE CLOSURE REQUEST	4
6.0	LIMITATIONS	4
7.0	DISTRIBUTION	6

### FIGURES

Figure 1 – Site Location Map Figure 2 – Site and Sample Location Map

### **TABLES**

Table 1 – Concentrations of BTEX and TPH in Soil

Table 2 - Concentrations of Benzene and BTEX in Groundwater

### **APPENDICES**

- Appendix A Laboratory Analytical Reports
- Appendix B Soil Boring Logs
- Appendix C Photographs
- Appendix D Release Notification and Corrective Action (Form C-141)

### **1.0 INTRODUCTION**

Basin Environmental Consulting, LLC (Basin), on behalf of Plains Pipeline, L.P. (Plains), has prepared this Remediation Summary and Site Closure Request for the release site known as DCP Plant to Lea Station 6-Inch (SRS# 2008-275). The site is located in Unit Letter J (NW ¼ SE ¼), Section 30, Township 20 South, Range 37 East, in Lea County, New Mexico. The property is owned by the State of New Mexico and administered by the New Mexico State Land Office (NMSLO). A request for a Right-of-Entry permit was submitted and subsequently approved by the NMSLO, Santa Fe Office, to perform remediation activities at the release site (SLO ROE-1760). The site latitude is 32° 32' 32.4" North, and the longitude is 103 ° 17' 17.2" West. The Site Location and Site and Sample Location Maps are provided as Figure 1 and Figure 2, respectively. The Release Notification and Corrective Action (NMOCD Form C-141) indicated approximately ten (10) barrels of crude oil were released from the Plains pipeline and zero (0) barrels were recovered during the initial response activities. The Release Notification and Corrective Action is provided as Appendix D.

On October 9, 2008, Basin on behalf of Plains, responded to a pipeline release located on the DCP Plant to Lea Station 6-Inch pipeline. Plains operations personnel mitigated the crude oil release by installing a temporary 6-inch pipeline clamp on the pipeline. The impacted soil excavated during initial response activities was stockpiled on a 6-mil poly liner adjacent to the excavation. The initial visually stained area covered an area measuring approximately 95 feet in length by 30 feet in width.

### 2.0 NMOCD SITE CLASSIFICATION

A search of the New Mexico Office of the State Engineer (NMOSE) database did not identify the average depth to groundwater information for Section 30, Township 20 South, Range 37 East. A reference map utilized by the New Mexico Oil Conservation Division (NMOCD) indicated depth to groundwater at the release site is approximately 100 feet below ground surface (bgs). The depth to groundwater at the DCP Plant to Lea Station 6-Inch release site results in a score of ten (10) points being assigned to the site, based on the NMOCD depth to groundwater criteria.

The water well database, maintained by the NMOSE, indicated there are no water wells within 1,000 feet from the release, resulting in zero (0) points being assigned to this site as a result of this criteria.

There are no surface water bodies located within 1,000 feet of the site. Based on the NMOCD ranking system zero (0) points will be assigned to the site as a result of the criteria.

Based on the above ranking criteria, the NMOCD guidelines indicate the DCP Plant to Lea Station 6-Inch release site has an initial ranking score of ten (10) points.

On February 25, 2009, during a meeting between NMOCD and Plains representatives, the NMOCD Hobbs District Office approved the following modified remediation goals:

- Benzene 10 mg/Kg (ppm)
- BTEX 50 mg/Kg (ppm)
- TPH ~ 5,000 mg/Kg (ppm)

### 3.0 SUMMARY OF FIELD ACTIVITIES

During October and November 2008, hydrocarbon impacted soil was excavated at the release site. Approximately 2,300 cubic yards (cy) of impacted soil was stockpiled adjacent to the excavation pending final disposition. The final dimensions of the excavation were approximately 100 feet in length and 52 feet in width and approximately 15 feet in depth.

On October 24, 2008, a soil boring (SB-1) was advanced to the west of the release point to determine the vertical extent of the crude oil impacted soil. The soil boring was advanced to a total depth of approximately 72 feet bgs and terminated in red clay (red bed). No groundwater was encountered during the advancement of this soil boring. Soil samples were collected at five (5) foot drilling intervals and were field screened using a Photo-Ionization Detector (PID). Selected soil samples were submitted to the laboratory and analyzed for concentrations of benzene, toluene, ethyl-benzene, and xylene (BTEX) using method EPA 8021b and total petroleum hydrocarbons (TPH) using method SW8015M. A summary of the analytical results are included in Table 1, Concentrations of BTEX and TPH in Soil. Laboratory analytical reports are included in Appendix A. Soil boring logs are provided as Appendix B. Photographs are provided as Appendix C.

Laboratory analytical results indicated benzene concentrations ranged from less than the method detection limit (MDL) for soil samples SB-1 20', SB-1 30' and SB-1 72' to 0.5007 mg/Kg for soil sample SB-1 50'. The analytical results indicated BTEX concentrations ranged from less than the laboratory MDL for soil samples SB-1 20' and SB-1 30' to 38.1627 mg/Kg for soil sample SB-1 50'. The laboratory analytical results indicated the TPH concentrations ranged from less than the laboratory MDL for soil samples SB-1 30' and SB-1 72' to 7,082 mg/Kg for soil sample SB-1 50'.

On January 9, 2009, a soil boring (SB-2) was advanced to the north of the excavation to evaluate the presence of groundwater at the site. The soil boring was advanced to a total depth of approximately 66 feet bgs and terminated in red clay (red bed). Temporary casing was installed in the bore hole as requested by the NMOCD Hobbs District Office. Field measurements indicated a trace amount of water in the bore hole. Soil samples were collected at five (5) foot drilling intervals. Each sample was field screened using a PID and selected soil samples were submitted for laboratory analysis for concentration of BTEX and TPH. Laboratory analytical results indicated benzene, BTEX and TPH concentrations were less than the laboratory MDL for all the soil samples submitted.

A groundwater sample was collected from the temporary casing and submitted to the laboratory for analysis of BTEX concentrations using EPA Method SW846-8021b. A summary of the analytical results are included in Table 2, Concentrations of Benzene and BTEX in Groundwater. The laboratory analytical results indicated benzene and BTEX concentrations were below the laboratory MDL for the groundwater sample submitted.

On January 21, 2009, six (6) soil samples (ESW @ 14.5', NESW @ 14.5', NWSW @ 14.5', SESW @ 14.5', SWSW @ 14.5' and WSW @ 14.5') were collected from the sidewalls of the excavation at approximately 14.5 feet bgs. Three (3) soil samples (E Floor @ 15', W Floor @ 15' and C Floor @ 15') were collected from the floor of the excavation at approximately 15 feet bgs. The soil samples were submitted to the laboratory and analyzed for concentrations of BTEX

and TPH. Laboratory analytical results indicated benzene concentrations ranged from less than the laboratory MDL for soil samples SWSW @ 14.5', WSW @ 14.5' and E Floor @ 15' to 0.4157 mg/Kg for soil sample C Floor @ 15'. The analytical results indicated BTEX concentrations ranged from 0.0304 mg/Kg for soil sample WSW @ 14.5' to 55.7617 mg/Kg for soil sample C Floor @ 15'. The laboratory analytical results indicated the TPH concentrations ranged from less than the laboratory MDL for soil samples NESW @ 14.5' and WSW @ 14.5' to 3,261 mg/Kg for soil sample SESW @ 14.5'.

On February 12, 2009, five (5) soil samples (Stockpile #1, Stockpile #2, Stockpile #3, Stockpile #4 and Stockpile #5) were collected from the blended material stockpiled on-site. The soil samples were submitted to the laboratory and analyzed for concentrations of BTEX and TPH. The analytical results indicated benzene concentration ranged from less than the laboratory MDL for soil samples Stockpile #1, Stockpile #4 and Stockpile #5 to 3.013 mg/Kg for soil sample Stockpile #3. The analytical results indicated BTEX concentrations ranged from 6.8964 mg/Kg for soil sample Stockpile #5 to 108.313 mg/Kg for soil sample Stockpile #3. The laboratory analytical results indicated TPH concentrations ranged from 681 mg/Kg for soil sample Stockpile #5 to 3,296 mg/Kg for soil sample Stockpile #3.

On February 25, 2009, during a meeting between NMOCD and Plains representatives, the NMOCD Hobbs District Office approved remediation goals of 5,000 mg/Kg (TPH), 10 mg/Kg (benzene) and 50 mg/Kg (BTEX) for the site.

On April 29, 2009, the DCP Plant to Lea Station 6-Inch *Remediation Summary and Site Closure Proposal* was presented to the NMOCD – Hobbs District Office. In discussions between Plains, Basin and the NMOCD representative, the NMOCD representative approved the proposed site closure strategy, with the exception of the proposed installation of a polyurethane liner. The NMOCD representative indicated the installation of a twenty millimeter polyurethane liner would not be required for NMOCD approved site closure.

In May 2009, Stockpile #3 was reblended as approved by the NMOCD. Stockpiles #1, #2, #4 and #5 were placed in the excavation in twelve (12) inch lifts and compacted as the backfilling activities progressed.

On June 1, 2009, a soil sample (Stockpile #3A) was collected from the 500 cy of reblended soil contained in Stockpile #3 and submitted to the laboratory for analysis. The analytical results indicated the benzene concentration was less than the laboratory MDL of 0.0526 mg/Kg, the BTEX concentration was 1.9409 mg/Kg and the TPH concentration was 1,464 mg/Kg. Based on the analytical results of the soil sample, blended soil contained in Stockpile #3 was deemed suitable for use a backfill material and the backfilling of the excavation was completed. Following the backfilling activities, areas disturbed by the remediation activities were contoured to fit the surrounding topography and will be reseeded with vegetation acceptable to the landowner.

### 4.0 QA/QC PROCEDURES

### 4.1 Soil Sampling

Soil samples were delivered to Xenco Laboratories in Odessa, Texas for BTEX and/or TPH analyses using the methods described below. Soil samples were analyzed for BTEX and/or TPH within fourteen days following the collection date.

The soil samples were analyzed as follows:

- BTEX concentrations in accordance with EPA Method 8021B, 5030
- TPH-GRO/DRO concentrations in accordance with modified EPA Method 8015M GRO/DRO

### 4.2 Decontamination of Equipment

Cleaning of the sampling equipment was the responsibility of the environmental technician. Prior to use, and between each sample, the sampling equipment was cleaned with Liqui-Nox<sup>®</sup> detergent and rinsed with distilled water.

### 4.3 Laboratory Protocol

The laboratory was responsible for proper QA/QC procedures after signing the chain-of-custody form. These procedures were either transmitted with the laboratory reports or are on file at the laboratory.

### 5.0 SITE CLOSURE REQUEST

Based on the analytical results of confirmation soil samples, Basin recommends Plains provide the NMOCD-Hobbs District Office and the NMSLO, a copy of this Remediation Summary and Site Closure Request and request the NMOCD and NMSLO grant site closure to the DCP Plant to Lea Station 6-Inch release site.

### 6.0 LIMITATIONS

Basin Environmental Consulting, LLC has prepared this Remediation Summary and Site Closure Request to the best of its ability. No other warranty, expressed or implied, is made or intended.

Basin Environmental Consulting, LLC has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. Basin Environmental Consulting, LLC has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. Basin Environmental Consulting, LLC has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin Environmental Consulting, LLC also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report. This report has been prepared for the benefit of Plains Pipeline, L.P. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of Basin Environmental Consulting, LLC and/or Plains Pipeline, L.P

### 7.0 **DISTRIBUTION:**

Copy 1: Larry Johnson New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division (District 1) 1625 French Drive Hobbs, New Mexico 88240 <u>larry.johnson@state.nm.us</u>

,

- Copy 2: Thaddeus Kostrubala New Mexico State Land Office 310 Old Santa Fe Trail P. O. Box 1148 Santa Fe, New Mexico 87404-1148 <u>tkostrubala@slo.state.nm.us</u>
- Copy 3: Jeff Dann Plains Pipeline, L.P. 333 Clay Street, Suite 1600 Houston, Texas 77002 <u>ipdann@paalp.com</u>
- Copy 4: Daniel Bryant Plains Pipeline, L.P. 3705 East Hwy 158 Midland, Texas 79706 dmbryant@paalp.com
- Copy 5: Camille Bryant Basin Environmental Consulting P.O. Box 381 Lovington, New Mexico 88260 cjbryant@basin-consulting.com

Figures

,





Tables

`

. .

`

#### TABLE 1

#### CONCENTRATIONS OF BTEX AND TPH IN SOIL

#### PLAINS PIPELINE, L.P. DCP PLANT TO LEA STATION 6-INCH LEA COUNTY, NEW MEXICO SRS: 2008-275 NMOCD REFERENCE NO: 1RP-1971

						MET	HOD: EPA SW	846-8021B, 5030			METHOD: 8015M			
SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	DATE ANALYZED	SOIL STATUS	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL- BENZENE (mg/Kg)	M.P XYLENES (mg/Kg)	O- XYLENE (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C <sub>6</sub> -C <sub>12</sub> (mg/Kg)	DRO C <sub>12</sub> -C <sub>28</sub> (mg/Kg)	ORO C <sub>28</sub> -C <sub>35</sub> (mg/Kg)	TOTAL TPH C6-C35 (mg/Kg)
SB-1 @ 10'	10 feet	10/24/08	10/30/08	In-Situ	0.1062	4 270	3.128	10 98	3.701	22 1852	327	342	125	794
SB-1 @ 20'	20 feet	10/24/08	10/30/08	In-Situ	<0.0010	<0 0021	< 0.0010	<0 0021	<0 0010	<0 0021	<15.5	54.0	21.8	75.8
SB-1 @ 30'	30 feet	10/24/08	10/30/08	In-Situ	<0.0010	<0 0020	< 0.0010	<0 0020	<0 0010	<0 0020	<153	<153	<153	<15.3
SB-1 @ 40'	40 feet	10/24/08	10/30/08	In-Sıtu	0.0011	0 0081	0.0083	0 0325	0.0178	0.0678	20 8	68.1	<15.4	88.9
SB-1 @ 50'	50 feet	10/24/08	10/30/08	In-Situ	0.5007	10.93	5.345	14.10	7.287	38.1627	5,370	1,570	142	7,082
SB-1 @ 60'	60 feet	10/24/08	10/30/08	In-Situ	0.0163	0.1799	0.2564	0.8361	0.3198	1.6085	196	286	70.8	552.8
SB-1 @ 70'	70 feet	10/24/08	10/30/08	In-Situ	0.0114	0.0388	0.0136	0.0457	0.0202	0.1297	241	104	30.2	158 3
SB-1 @ 72'	72 feet	10/24/08	10/30/08	In-Situ	<0 0012	< 0.0023	0.0012	0.0045	0.0017	0.0074	<176	<176	<176	<176
		a the second second	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1. 5.2. 4	N. 19 8 6	- 20 - 122		1. S.	the .		1	8	1. N	parts of \$
Stockpile (Trace)	N/A	10/31/08	10/31/08	N/A	1.77	42 20	33.60	83.	9	161 47	568	4,1	130	4,698
Stockpile (Xenco)	N/A	10/31/08	11/10/08	N/A	1 64	77.57	49.90	182 2	62.07	373.38	5,050	469	<86 0	5,519
	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1				i stati	a star star		Sec. Sec.	*			X4 * 1 * 1 * 1 * 1	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	A Log to same
SB-2 @ 10'	10 feet	01/09/09	01/13/09	In-Situ	<0.0011	< 0.0022	< 0.0011	< 0.0022	< 0.0011	<0 0022	<16.3	<163	<163	<16.3
SB-2 @ 20'	20 feet	01/09/09	01/13/09	In-Situ	<0 0010	< 0.0021	< 0.0010	< 0.0021	< 0.0010	< 0.0021	<15.7	<157	<15 7	<15.7
SB-2 @ 30'	30 feet	01/09/09	01/13/09	In-Situ	<0 0010	< 0.0020	<0.0010	< 0.0020	< 0.0010	< 0.0020	<15.3	<15.3	<15.3	<15.3
SB-2 @ 40'	40 feet	01/09/09	01/13/09	In-Situ	<0 0010	<0 0020	< 0.0010	< 0.0020	< 0.0010	< 0.0020	<15.2	<15.2	<15.2	<15.2
SB-2@ 50'	50 feet	01/09/09	01/13/09	In-Situ	<0.0010	< 0.0021	<0.0010	< 0.0021	< 0.0010	< 0.0021	<15.5	<15.5	<15.5	<15.5
SB-2 @ 60'	60 feet	01/09/09	01/13/09	In-Situ	<0.0011	< 0.0021	< 0.0011	< 0.0021	<0 0011	< 0.0021	<16.0	<16.0	<16 0	<16.0
	1. 6. 1. 31.	ど 新代 小学		1. Sec. 1. Sec. 1.		S. C. A. S.	13. M. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	Straty State by	\$		を記憶し、	star ' ;	and filler	en al de la
ESW @ 14.5'	14.5 feet	01/21/09	01/23/09	In-Situ	0.0127	0.1879	0.0664	0 1976	0.0375	0.5021	18.6	<15.2	<152	19
NESW @ 14 5'	14.5 feet	01/21/09	01/23/09	In-Situ	0 0102	0.0758	0.0175	0.0444	0.0099	0.1578	<15.3	<15.3	<153	<15.3
NWSW @ 14.5'	14.5 feet	01/21/09	01/23/09	In-Situ	0.0146	0.1483	0.0437	0.1075	0.0233	0.3374	17.0	<15.1	<151	17
SESW @ 14.5'	14.5 feet	01/21/09	01/23/09	In-Situ	0.0186	0.1126	0.012	0.0223	0 007	0.1725	38.8	2,990	232	3,261
SWSW @ 14.5'	14.5 feet	01/21/09	01/23/09	In-Situ	<0.0508	0.3422	0.7845	2.674	1.024	4.8247	2150	207	30	452
WSW @ 14.5'	14.5 feet	01/21/09	01/23/09	In-Situ	<0.0010	0 0099	0.0053	0.0124	0.0028	0 0304	<154	<15.4	<15.4	<15.4
E Floor @ 15'	15 feet	01/21/09	01/23/09	In-Situ	<0 0010	0.0126	0.0069	0.0218	0 0049	0 0462	<15.1	38	<15.1	37.9
W Floor @ 15'	15 feet	01/21/09	01/23/09	In-Situ	0 0836	4.161	4 509	11 5	4 017	24.2706	913.0	328	25	1,266
C Floor @ 15'	15 feet	01/21/09	01/23/09	In-Situ	0.4157	11.01	8.918	25 42	9.998	55.7617	404.0	550	102	1,056
这些在正常是那些好	And Andrews	wa Special Str	14 1 18 18 18 18	$1 \leq 1 \leq 1$	a har an and a set	<b>学习时</b> 在141	A		F. State The get	1. 2 6. 20	1.23.59	), F. B. S. F.	the water of the	网络古马马
Stockpile #1	N/A	02/12/09	02/18/09	N/A	< 0.0535	< 0.1070	0.9546	4.183	3.278	8.4156	1,380	645	<161	2,025
Stockpile #2	N/A	02/12/09	02/18/09	N/A	0.3828	1.867	2.779	10.72	7.116	22.8648	1,310	593	<80.3	1,903
Stockpile #3	N/A	02/12/09	02/18/09	N/A	3.013	18.01	10.27	64 14	12.88	108.313	2,720	576	<85.1	3,296
Stockpile #4	N/A	02/12/09	02/18/09	N/A	<0.0534	0 1841	1.255	6 117	3.042	10.5981	1,060	518	<80.1	1,578
Stockpile #5	N/A	02/12/09	02/18/09	N/A	< 0.0538	0 291	0 9154	3.56	2 13	6 8964	436	245.0	<80.7	681
SCHUNG THE THE SECTION	2. M	2.682.200)	· · · · · ·	24:22	第1111		T REAL	the state of the s	W 740 (P)	State of the	·	S 348.2	AL STREET	1. 18 8
Stockpile #3A	N/A	06/01/09	06/03/09	N/A	<0.0526	0.1604	0.2298	1.108	0.4427	1 9409	290	917	257	1,464
MANIA REAS	「京和なた	LAND CONTRACT	关 建合金属的	Maria de	<b>学们的感觉</b> 。	the stranger a	1	St ART WA	2. 2. 13 4	Rev Car	的。我们还能	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	A LOUX	
NMOCD REGULATORY S	TANDARD				10					50				5,000

Page 1 of 1

#### TABLE 2

#### CONCENTRATIONS OF BENZENE & BTEX IN GROUNDWATER

### PLAINS PIPELINE, L.P. DCP PLANT TO LEA STATION 6-INCH LEA COUNTY, NEW MEXICO PLAINS SRS NO. 2008-275 NMOCD REF # 1RP-1971

			METHODS: EPA SW 846-8021B, 5030									
SAMPLE LOCATION	SAMPLE DATE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL- BENZENE (mg/L)	M,P- Xylene (mg/L)	O-XYLENES (mg/L)	TOTAL BTEX (mg/L)					
Prelim GW	01/09/09	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020					
						a la ser de						
NMOCD REGULATORY	STANDARD	0.01	0.75	0.75	0	.62						

# Appendices

.

-

# Appendix A Laboratory Reports

### Analytical Report 315763

for

### PLAINS ALL AMERICAN EH&S

**Project Manager: Daniel Bryant** 

DCP Plant to Lea Station 6 Inch SRS 2008-275

30-OCT-08





E84880

12600 West I-20 East Odessa, Texas 79765

Texas certification numbers: Houston, TX T104704215 - Odessa/Midland, TX T104704215-08-TX

Florida certification numbers: Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675 Norcross(Atlanta), GA E87429

> South Carolina certification numbers: Norcross(Atlanta), GA 98015

> North Carolina certification numbers: Norcross(Atlanta), GA 483

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

Page 1 of 16



30-OCT-08



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

Reference: XENCO Report No: 315763 DCP Plant to Lea Station 6 Inch Project Address: Lea County, NM

#### **Daniel Bryant**:

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 315763. 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. 315763 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron, II Odessa Laboratory Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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



#### 1.75 COLOR TO TAMONT 1.75. Inthe work in The Shirts

### Sample Cross Reference 315763



### PLAINS ALL AMERICAN EH&S, Midland, TX

DCP Plant to Lea Station 6 Inch

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SB-1 @10'	S	Oct-24-08 09:50		315763-001
SB-1 @20'	S	Oct-24-08 10:00		315763-002
SB-1 @30'	S	Oct-24-08 10:05		315763-003
SB-1 @40'	S	Oct-24-08 10:10		315763-004
SB-1 @50'	S	Oct-24-08 10:15		315763-005
SB-1 @60'	S	Oct-24-08 10:20		315763-006
SB-1 @70'	S	Oct-24-08 10:30		315763-007
SB-1 @72'	S	Oct-24-08 10:50		315763-008



Project Id: SRS 2008-275

Project Location: Lea County, NM

Contact: Daniel Bryant

### Certificate of Analysis Summary 315763 PLAINS ALL AMERICAN EH&S, Midland, TX



Project Name: DCP Plant to Lea Station 6 Inch

Date Received in Lab: Fri Oct-24-08 05:27 pm

Report Date: 30-OCT-08

								Project Ma	nager:	Brent Barron,	П		
	Lab Id:	315763-0	001	315763-0	002	315763-0	003	315763-0	)04	315763-0	005	315763-	006
Analysis Paguastad	Field Id:	SB-1 @1	10'	SB-1 @2	20'	SB-1 @3	30'	SB-1 @40'		SB-1 @50'		SB-1 @60'	
Anulysis Requested	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	,
	Sampled:	Oct-24-08 (	09 50	Oct-24-08	10 00	Oct-24-08	10 05	Oct-24-08	10 10	Oct-24-08	1015	Oct-24-08	10 20
BTEX by EPA 8021B		Oct-29-08	Oct-29-08 16 50		16 50	Oct-29-08	16 50	Oct-29-08	16 50	Oct-29-08 16 50		Oct-29-08 16 50	
	Analyzed:	Oct-30-08	12 42	Oct-30-08 (	06 37	Oct-30-08 (	06 59	Oct-30-08	07 20	Oct-30-08	12 20	Oct-30-08	07 42
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		0 1062	0 0515	ND	0 0010	ND	0 0010	0 0011	0 0010	0 5007	0 0537	0 0163	0 0011
Toluene		4 270	0 1031	ND	0 0021	ND	0 0020	0 0081	0 0020	10 93	0 1073	0 1 <b>7</b> 99	0 0022
Ethylbenzene		3 1 2 8	0 0515	ND	0 0010	ND	0 0010	0 0083	0 0010	5 345	0 0537	0 2564	0 0011
m,p-Xylenes		10 98	0 1031	ND	0 0021	ND	0 0020	0 0325	0 0020	14 10	0 1073	0 8361	0 0022
o-Xylene		3 701	0 0515	ND	0 0010	ND	0 0010	0 0178	0 0010	7 287	0 0537	0 3198	0 0011
Total Xylenes		14 681		ND		ND		0 0503		21 387		1 1 5 5 9	
Total BTEX		22 1852		ND		ND		0 0678		38 1627		1 6085	
Percent Moisture	Extracted:												
	Analyzed:	Oct-27-08	17 00	Oct-27-08	17 00	Oct-27-08 17 00		Oct-27-08	1700	Oct-27-08	17 00	Oct-27-08	1700
	Units/RL·	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		2 99	1 00	3 35	1 00	2 12	1 00	2 38	1 00	6 83	1 00	8 29	1 00
TPH By SW8015 Mod	Extracted:	Oct-27-08	14 30	Oct-27-08	14 30	Oct-27-08	14 30	Oct-27-08	14 30	Oct-27-08	14 30	Oct-27-08	14 30
	Analyzed:	Oct-28-08	10 43	Oct-28-08	11 08	Oct-28-08	11 59	Oct-28-08	12 25	Oct-28-08	12 50	Oct-28-08	13 14
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		327	15 5	ND	15 5	ND	15 3	20 8	15 4	5370	16 1	196	164
C12-C28 Diesel Range Hydrocarbons		342	15 5	54 0	15 5	ND	15 3	68 1	15 4	1570	16 1	286	164
C28-C35 Oil Range Hydrocarbons		125	15 5	21 8	15 5	ND	15 3	ND	154	142	16 1	70 8	164
Total TPH		794		75 8		ND		88 9		7082		552 8	

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

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

Odessa Laboratory Director



Project Id: SRS 2008-275

Certificate of Analysis Summary 315763 PLAINS ALL AMERICAN EH&S, Midland, TX



Project Name: DCP Plant to Lea Station 6 Inch

Date Received in Lab: Fri Oct-24-08 05:27 pm

Report Date: 30-OCT-08 Project Manager: Brent Barron, II

Contact:	Daniel Bryant	
<b>Project Location:</b>	Lea County, NM	
		· · · · · · · · · · · · · · · · · · ·

	Lab Id:	315763-0	07	315763-0	08		
Analysis Requested	Field Id:	SB-1 @7	70'	SB-1 @7	'2'		
Analysis Requested	Depth:						
	Matrix:	SOIL		SOIL			
	Sampled:	Oct-24-08 1	0 30	Oct-24-08 1	0 50		
BTEX by EPA 8021B	Extracted:	Oct-29-08	16 50	Oct-29-08 1	6 50		
	Analyzed:	Oct-30-08 (	08 03	Oct-30-08 (	8 24		
	Units/RL:	mg/kg	RL	mg/kg	RL		
Benzene		0 0114	0 0011	ND	0 0012		
Toluene		0 0388	0 0023	ND	0 0023		
Ethylbenzene		0 0136	0 0011	0 0012	0 0012		
m,p-Xylenes		0 0457	0 0023	0 0045	0 0023		
o-Xylene		0 0202	0 0011	0 0017	0 0012		
Total Xylenes		0 0659		0 0062			
Total BTEX		0 1297		0 0074			
Percent Moisture	Extracted:						
	Analyzed:	Oct-27-08	17 00	Oct-27-08 1	7 00		
	Units/RL:	%	RL	%	RL		
Percent Moisture		11 97	1 00	14 56	1 00		
TPH By SW8015 Mod	Extracted:	Oct-27-08	14 30	Oct-27-08 1	4 30		
	Analyzed:	Oct-28-08	13 39	Oct-28-08 1	4.03		
	Units/RL:	mg/kg	RL	mg/kg	RL		
C6-C12 Gasoline Range Hydrocarbons		24 1	170	ND	176		
C12-C28 Diesel Range Hydrocarbons		104	170	ND	176		
C28-C35 Oil Range Hydrocarbons		30 2	170	ND	176		
Total TPH		158 3		ND			

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

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

Brent Barron Odessa Laboratory Director



- 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(PQL) and above the SQL(MDL).
- 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.
- \* Outside XENCO'S scope of NELAC Accreditation

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latın America

	Phone	Fax
11381 Meadowglen Lane Suite L Houston, Tx 77082-2647	(281) 589-0692	(281) 589-0695
9701 Harry Hines Blvd, Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, Suite 104, San Antonio, TX 78238	(210) 509-3334	(210) 509-3335
2505 N. Falkenburg Rd., Tampa, FL 33619	(813) 620-2000	(813) 620-2033
5757 NW 158th St, Miami Lakes, FL 33014	(305) 823-8500	(305) 823-8555
6017 Financial Dr., Norcross, GA 30071	(770) 449-8800	(770) 449-5477



## Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station 6 Inch

Work Orders: 315763,			Project II	): SRS 2008-	-275				
Lab Batch #: 738649	Sample: 315763-001 / SMP	' Bat	tch: 1 Matri	x: Soil					
Units: mg/kg	[	SUI	<b>RROGATE RF</b>	COVERY	STUDY				
BTEX by El	PA 8021B	Amount Found [A]	True Amount [B]	Recovery %R {D}	Control Limits %R	Flags			
1 A D-fluorohanzene		0.0200	0.0200	120	PO 120	**			
4-Bromofluombenzene		0.0390	0.0300	273	80-120	**			
+ Diomonactoce	216762 002 / SMD	0.0010	0.0500		00-120	L			
Lab Batch #: 738649	Sample: 315763-0027 SMP	MP Batch: 1 Matrix: Soil							
Units: mg/kg			RROGATE RE	COVERY :	STUDY				
BTEX by El Analy	PA 8021B ytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
1,4-Difluorobenzene		0.0361	0.0300	120	80-120				
4-Bromofluorobenzene		0.0325	0.0300	108	80-120				
Lab Batch #: 738649	Sample: 315763-003 / SMP	, Bat	tch: 1 Matri	x: Soil					
Units: mg/kg	Ē	SU	<b>RROGATE RI</b>	COVERY	STUDY				
BTEX by E	PA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags			
Апату	/tes			נען	<u>                                     </u>	<b> </b>			
I,4-Difluorobenzene		0.0348	0.0300	116	80-120				
4-Bromofluorobenzene		0.0277	0.0300	92	80-120	<u> </u>			
Lab Batch #: 738649	Sample: 315763-004 / SMP	IP Batch: 1 Matrix: Soil							
Units: mg/kg		SUI	RROGATE RF	COVERY S	STUDY				
BTEX by El Analy	PA 8021B vtes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
1,4-Difluorobenzene		0.0408	0.0300	136	80-120	**			
4-Bromofluorobenzene		0.0681	0.0300	227	80-120	**			
Lab Batch #: 738649	Sample: 315763-005 / SMP	, Bat	tch: <sup>1</sup> Matri	x: Soil	<u></u>				
Units: mg/kg	Г	SU!	RROGATE RF	COVERY {	STUDY				
BTEX by El	PA 8021B /tes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
1,4-Dıfluorobenzene		0.2280	0 0300	760	80-120	**			
4-Bromofluorobenzene		0.0455	0.0300	152	80-120	**			

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

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / BAll results are based on MDL and validated for QC purposes.



,

### Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station 6 Inch

Vork Orders : 315763,			Project IF	): SRS 2008-	-275							
Lab Batch #: 738649 San	nple: 315763-006 / SMP	Batch	1: 1 Matriz	x: Soil								
Units: mg/kg		SURJ	ROGATE RE	COVERY S	STUDY							
BTEX by EPA 802	1B Amo Fou [/	unt nd	True Amount [B]	Recovery %R	Control Limits %R	Flags						
Analytes					<u>[</u> !	I						
1,4-Difluorobenzene	0 04'	או	0.0300	164	80-120	**						
4-Bromofluorobenzene	0.23	57	0.0300	786	80-120	**						
Lab Batch #: 738649 Sar	mple: 315763-007 / SMP	Batch	n: 1 Matri	x: Soil								
Units: mg/kg		SURROGATE RECOVERY STUDY										
BTEX by EPA 802 Analytes	1B Amo Fou [/	ant nd J	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags						
1,4-Difluorobenzene	0.02	48	0.0300	83	80-120	(						
4-Bromofluorobenzene	0.06	76	0.0300	225	80-120	**						
Lab Batch #: 738649 Sar	mnle: 315763-008 / SMP	Batcł	h· 1 Matri	w: Soil	<u>.</u>	<u></u>						
Units: mg/kg		SUR	ROGATE RF	COVERY f	STUDY							
BTEX by EPA 802	1B Amo Fou	ant nd	True Amount  B]	Recovery %R	Control Limits %R	Flags						
Analytes				D  		L						
1,4-Dıfluorobenzene	0.03/	6	0.0300	122	80-120	**						
4-Bromofluorobenzene	0.03	9	0.0300	123	80-120	**						
Lab Batch #: 738649 Sar	nple: 518324-1-BKS / BKS	Batch	1: 1 Matrix	x: Solid								
Units: mg/kg		SURI	ROGATE RE	COVERY S	STUDY							
BTEX by EPA 8021 Analytes	IB Amo Fou [A	int ad	True Amount  B]	Recovery %R [D]	Control Limits %R	Flags						
1,4-Difluorobenzene	0.02	34	0.0300	95	80-120	i						
4-Bromofluorobenzene	0.03	34	0.0300	111	80-120	1						
Lab Batch #: 738649 Sar	mnle: 518324-1-BLK / BLK	Batch	n 1 Matri	v: Solid	<u></u>							
Units: mg/kg		SURJ	Rogate re	COVERY S	STUDY							
BTEX by EPA 8021 Analytes	IB Amo Fou IA	Int 1d }	True Amount  B]	Recovery %R [D]	Control Limits %R	Flags						
1,4-Dıfluorobenzene	0.03	29	0.0300	110	80-120							
4-Bromofluorobenzene	0.02'	21	0.0300	74	80-120	. **						

\*\* 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.



٦

### Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station 6 Inch

<b>ork Orders :</b> 315763, Lab Batch #: 738649	Sample: 518324-1-BSD /	BSD Ba	Project II	D:SRS 2008- ix: Solid	-275								
Units: mg/kg	Sample. Stose 1 Boo /	SU Ba	RROGATE RI	ECOVERY	STUDY								
BTEX by I	EPA 8021B Ivtes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags							
1,4-Difluorobenzene		0.0273	0.0300	91	80-120								
4-Bromofluorobenzene	·····	0.0297	0.0300	99	80-120								
Lab Batch #: 738479	Sample: 315760-001 S / N	1S Ba	tch: <sup>1</sup> Matri	ix: Soil									
Units: mg/kg		SURROGATE RECOVERY STUDY											
TPH By SV	W8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags							
I-Chlorooctane		120	100	120	70-135								
o-Terphenyl		59.5	50.0	119	70-135								
Lab Batch #: 738479	Sample: 315760-001 SD /	MSD Ba	tch: 1 Matri	ix: Soil	1								
Units: mg/kg	~~~~	SU	RROGATE RI	ECOVERYS	STUDY								
TPH By SV	W8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags							
Ana		100	100	122	70.125								
o-Terphenyl		60.9	50.0	122	70-135								
Lab Batab # 738479		P Pa	toh: 1 Motri	ive Soil									
Units: mg/kg	Sample: 515705-0017 SM		RROGATE RI	ECOVERY S	STUDY								
TPH By SV	W8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags							
1-Chlorooctane		112	100	112	70-135								
o-Terphenyl		54.8	50.0	110	70-135								
Lab Batch #: 738479	Sample: 315763-002 / SM	P Ba	tch: <sup>1</sup> Matri	ix: Soil									
Units: mg/kg	,	SU	RROGATE RI	ECOVERY	STUDY								
TPH By SV	W8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags							
1-Chlorooctane		108	100	108	70-135								
o-Terphenyl	<del>.</del>	54.4	50.0	109	70-135								

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

\*\*\* Poor recoveries due to dilution

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

1

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



### Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station 6 Inch

Vork Orders : 315763, Lab Batch #: 738479 Units: mg/kg	Sample: 315763-003 / SMP	) Ba SU	Project II tch: <sup>1</sup> Matri /RROGATE RI	): SRS 2008- x: Soil ECOVERY	-275 STUDY							
TPH By SV Ana	W8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags						
1-Chlorooctane		105	100	105	70-135							
o-Terphenyl		52.3	50.0	105	70-135							
Lab Batch #: 738479 Units: mg/kg	Sample: 315763-004 / SMP	MP Batch: 1 Matrix: Soil SURROGATE RECOVERY STUDY										
TPH By SV	W8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags						
1-Chlorooctane		110	100	110	70-135							
o-Terphenyl		54.5	50.0	109	70-135							
Lab Batch #: 738479	Sample: 315763-005 / SMF	, Ba	tch: 1 Matri	ix: Soil	<u> </u>							
Units: mg/kg	, [	SU	RROGATE RF	<b>ECOVERY</b>	STUDY							
TPH By SV	W8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags						
1-Chlorooctane		176	100	176	70-135	**						
o-Terphenyl		68 2	50.0	136	70-135	**						
Lab Batch #: 738479	Sample: 315763-006 / SMF	, Ba	tch: <sup>1</sup> Matri	ix: Soil	<u> </u>	<u></u>						
Units: mg/kg	[	SURROGATE RECOVERY STUDY										
TPH By SV Ana	W8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags						
1-Chlorooctane		111	100	111	70-135							
o-Terphenyl		56.7	50.0	113	70-135							
Lab Batch #: 738479	Sample: 315763-007 / SMP	, Ba	tch: 1 Matri	x: Soil								
Units: mg/kg		SU	RROGATE RF	COVERY S	STUDY							
TPH By SV Ana	W8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags						
1-Chlorooctane		110	100	110	70-135							
o-Terphenyl		56.8	50.0	114	70-135							

\*\* 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

Vork Orders: 315763,			Project II	): SRS 2008-	-275	
Lab Batch #: 738479	Sample: 315763-008 / SMP	Ba	atch: 1 Matri	x: Soil		
Units: mg/kg	Γ	SU	RROGATE RF	COVERY S	STUDY	
TPH By SV	V8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane			100	<sup> </sup>	70-135	
o-Terphenyl		56.6	50.0	113	70-135	i
Lah Ratch #: 738479	Sample: 518217-1-BKS / B'	KS Ba	L utob: 1 Matri	ix: Solid	<u> </u>	
Units: mg/kg			RROGATE RI	COVERY !	STUDY	
TPH By SV Anal	V8015 Mod lytes	Amount Found [A]	True Amount  B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		124	100	124	70-135	1
o-Terphenyl		59 2	50.0	118	70-135	1
Lab Batch #: 738479	Sample: 518217-1-BLK / B	LK Ba	itch: 1 Matri	ix: Solid		
Units: mg/kg	Г	SU	RROGATE RF	COVERY	STUDY	·
TPH By SW	V8015 Mod lytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		116	100	116	70-135	i <u> </u>
o-Terphenyl		58.8	50.0	118	70-135	 
Lab Batch #: 738479	Sample: 518217-1-BSD / B	SD Ba	tch: <sup>1</sup> Matri	x: Solid	<u></u>	
Units: mg/kg	Г	SU	RROGATE RF	COVERY S	STUDY	
TPH By SV	V8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		122	100	122	70-135	i
o-Terphenyl		65.0	50.0	130	70-135	1

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

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B All results are based on MDL and validated for QC purposes.





### **BS / BSD Recoveries**

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

Work Order #: 315763	D	D		0			Pro Data A	ject ID: S	SRS 2008-2	75				
Analyst: ASA           Lab Batch ID: 738649         Sample: 518324-1-3	1-BKS Batch #: 1 Matri							Matrix: S	Solid					
Units: mg/kg	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY													
BTEX by EPA 8021B	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate Result (F)	Błk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPĐ	Flag			
Benzene		0.1000	0.0880	[20]		0.0012	101	4	70.120	25				
Toluene	ND	0 1000	0.0951	95	0.1	0.0913	91	4	70-130	35				
Ethylbenzene	ND	0.1000	0.0970	97	0.1	0.0925	93	5	71-129	35				
m,p-Xylenes	ND	0.2000	0.2233	112	0.2	0.2074	104	7	70-135	35	· · · ·			
o-Xylene	ND	0.1000	0.1049	105	0.1	0.0970	97	8	71-133	35				
Analyst: ASA	D	ate Prepar	ed: 10/27/200	8			Date A	nalyzed: ]	0/28/2008					
Lab Batch ID: 738479 Sample: 518217-1-1	BKS	Bate	h#: 1					Matrix: S	Solid					
Units: mg/kg		BLAN	K/BLANK S	SPIKE / E	BLANK S	SPIKE DUP	LICATE	RECOVE	ERY STUD	Ŷ				
TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag			
C6-C12 Gasoline Range Hydrocarbons	ND	1000	849	85	1000	839	84	1	70-135	35				
C12-C28 Diesel Range Hydrocarbons	ND	1000	897	90	1000	881	88	2	70-135	35				

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



Work Order #: 315763



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

#### Project ID: SRS 2008-275

Lab Batch ID: 738479 Date Analyzed: 10/28/2008 Reporting Units: mg/kg	QC- Sample ID: Date Prepared:	315760 10/27/2 N	-001 S 008 IATRIX SPIK	Ba An E / MAT	itch #: alyst: RIX SPI	l Matrix ASA KE DUPLICA	a: Soil TE REC	OVERY :	STUDY		
TPH By SW8015 Mod	Parent Sample	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spikeđ Dup.	RPD	Control Limits	Control Limits	Flag
Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
C6-C12 Gasoline Range Hydrocarbons	ND	1020	813	80	1020	809	79	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1020	889	87	1020	885	87	0	70-135	35	

.

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

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

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





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

Work Order #: 315763

Lab Batch #: 738311			Project I	<b>D:</b> SRS 200	8-275
Date Analyzed: 10/27/2008 Date I	Prepared: 10/2	7/2008	Analy	st: BEV	
QC- Sample ID: 738311-1 D	Batch #: 1		Matr	ix: Soil	
Reporting Units: %	SAMPLE /	SAMPLE	DUPLIC	ATE REC	OVERY
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result	RPD	Control Limits %RPD	Flag
Analyte		<b>[B]</b>			
Percent Moisture	7.28	7.28	NC	20	

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

En	vironment	al Lab of T	exa	IS					12 04	:600 dess	We: a, T	C/ stl- iexa	4A/. 201	N O East 976	0F C t 5	cus	TOE	IY R	EC	ORL	A	VD A	ANA P	ILY. hon Fax	S/S e <sup>.</sup> 4 4	RE0 -32-5 -32-5	QUI 163- 163-	EST 1800 1713	)				
	Project Manager	Camille J Bryant			PAGE 01 OF	01												Pr	ojec	t Nai	ne .	DC	PΡ	lant	to	Lea	Sta	itior	161	nch			
	Company Name	Basin Environmental Se	ervice T	echno	logies, LLC														Pr	ojec	t#	SR	5 2(	JO8-	275	;							
	Company Address	P 0 Box 301																	roje	eet L	оc	Lea	Cau	inty,	ΝМ								
	City/State/Zip	Lovington, NM 88250														_				Pr	- **			9 m la	Be	rant							
	Telephone No	(575) 805-7210				Ear No		(8)	161 2	06.1	420								Ees			xi.	Dine	dod		Г Г	1			п.			-
	Samalar Supplier	B	<u>+-</u>					701	- (D		<u></u>							epor	1 - 01	1714(			518/1	Dario		L	110	SPV-		Ľ,	1-01	-9	
	Sample: Signature	<u>_accenter</u>	<u> </u>			e-mai	•	<u>9</u>	DIY	an	a	292		CUI	ist		i <u>q.o</u>	Sin		_				Ana	lyze	For	<u> </u>				<b>_</b>	٦	
(labuse	onty) ~~~~	7.2																		,		TC TOT/	AL	Ŧ	Ŧ	Ŧx	ď				٦	72 Pr#	
	Fiel Fiel SB- SB- SB- SB- SB- SB- SB- SB- SB- SB-	LD CODE 1 @ 10' 1 @ 20' 1 @ 30' 1 @ 40' 1 @ 50' 1 @ 60' 1 @ 70' 1 @ 72'	Beginning Depth	Ending Depth	10/24/2008 10/24/2008 10/24/2008 10/24/2008 10/24/2008 10/24/2008 10/24/2008 10/24/2008	950 1000 1005 1010 1015 1020 1030 1050	Feld Filtered	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		ESCI HNO,	모 모 모 모 모 모 모 모 모 모 모 모 모 모 모 모 모 모 모	H_50.	Part of		Nene	Other (Specify)			X X X X X X X X 10H 418 1 6015M 8015H	TPH TX 1005 TX 1006	Catoris (Ca Mig Na K)	Aniors (CI SO4 Alkalini'y)	SARIFSPICIC	Meteas As Ag tha Lid Le rung Se		X X X X X X X X BIFK 82189030 01 BIEX 8460		NORM				NV311 1/1 1/16 2014 due 1 40	
			-				┢	-			-	_	_	-		-				-	-+-	┿	╈	╉	╋	+	+	┢┥	┝─┤	+	╉	╉	-
Special I Relinquist	Instructions	I J ZAL Cate I J ZAL Cate I J Z √/c Date	<b>6</b> / <b>2</b> 1 <b>2</b> 1 <b>7</b> 1 <b>1</b>	me 24 27 me	Received by Received by Received by	HJ Z	\$	23		l.	1				101	Dat Dat Dat	10x 10x	· /, .	Tame		Labo Sam VOC Labe Cust Sam t Tem	ple ( is Fri ody ody ple   pera	Continee conseal seal fancine continee fance continee continee ture	ine sine f Hea tain s on <u>Del</u> 2 (2 (2) (4) Upo	in R in R in R in R	bs. tact? iace? iace? iace? iace? iace? iace? ed Rep. ' PS aceip	/ ; r(s) ) 2D+ x	- <b>J</b>	Fed	- ANDEROD IN 4			,

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

Client	Plains   Basin Enu.
Date/ Time	10.24.08 1727
Lab ID #	
Initials	al

#### Sample Receipt Checklist

	outlips to opp			
				Client Init
#1	Temperature of container/ cooler?	(es)	No	4 °C
#2	Shipping container in good condition?	(res)	No	
#3	Custody Seals intact on shipping container/ cooler?	(Yes	No	Not Present
#4	Custody Seals intact on sample bottles/ container?	(es)	_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?	Ves	No	
#8	Chain of Custody agrees with sample label(s)?	(res)	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?	res	No	See Below
#13	Samples properly preserved?	(Yes)	No	See Below
#14	Sample bottles intact?	res	No	
#15	Preservations documented on Chain of Custody?	Ves	No	
#16	Containers documented on Chain of Custody?	(Xes)	No	
#17	Sufficient sample amount for indicated test(s)?	Yes	No	See Below
#18	All samples received within sufficient hold time?	(es)	No	See Below
#19	Subcontract of sample(s)?	Yes	No	Not Applicable
#20	VOC samples have zero headspace?	(Yes)	No	Not Applicable

Variance Documentation

Date/ Time

\_

Contact<sup>.</sup> Regarding

.

\_\_\_\_\_

Corrective Action Taken.

\_

Check all that Apply.

#### See attached e-mail/ fax

Contacted by:

Client understands and would like to proceed with analysis Cooling process had begun shortly after sampling event

### Analytical Report 316338

for

### PLAINS ALL AMERICAN EH&S

**Project Manager: Daniel Bryant** 

DCP Plant to Lea Station 6"

2008-275

12-NOV-08





E84880

12600 West I-20 East Odessa, Texas 79765

Texas certification numbers: Houston, TX T104704215 - Odessa/Midland, TX T104704215-08-TX

Florida certification numbers: Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675 Norcross(Atlanta), GA E87429

> South Carolina certification numbers: Norcross(Atlanta), GA 98015

> North Carolina certification numbers: Norcross(Atlanta), GA 483

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

Page 1 of 13



12-NOV-08



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

Reference: XENCO Report No: 316338 DCP Plant to Lea Station 6" Project Address: South of Monument

#### **Daniel Bryant**:

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 316338. 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. 316338 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron, II Odessa Laboratory Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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



Sample Cross Reference 316338



PLAINS ALL AMERICAN EH&S, Midland, TX

DCP Plant to Lea Station 6"

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Stockpile	S	Oct-31-08 10:52		316338-001


Project Id: 2008-275

Contact: Daniel Bryant

Project Location: South of Monument

Certificate of Analysis Summary 316338 PLAINS ALL AMERICAN EH&S, Midland, TX



Project Name: DCP Plant to Lea Station 6"

Date Received in Lab: Fri Oct-31-08 04:05 pm Report Date: 12-NOV-08

Project Manager: Brent Barron, II

Lab Id: 316338-001 Field Id. Stockpile Analysis Requested Depth: Matrix: SOIL Sampled: Oct-31-08 10 52 Nov-10-08 10 00 Extracted BTEX by EPA 8021B Analyzed: Nov-10-08 16 06 Units/RL: mg/kg RL Benzene 1 640 1 147 Toluene 77 57 2 293 Ethylbenzene 49 90 1 147 m,p-Xylenes 1822 2 293 o-Xvlene 62 07 1 147 Total Xylenes 244 27 Total BTEX 373 38 Extracted: **Percent Moisture** Oct-31-08 17 00 Analyzed: Units/RL. % RL Percent Moisture 128 1 00 Oct-31-08 17 00 Extracted: TPH by SW8015 Mod Analyzed: Nov-02-08 00 16 Units/RL: RL mg/kg C6-C12 Gasoline Range Hydrocarbons 5050 860 C12-C28 Diesel Range Hydrocarbons 469 86 0 C28-C35 Oil Range Hydrocarbons ND 86 0 Total TPH 5519

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

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

Brent Barron Odessa Laboratory Director



- 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(PQL) and above the SQL(MDL).
- 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.
- \* Outside XENCO'S scope of NELAC Accreditation

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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

Phone	Fax
11381 Meadowglen Lane Suite L Houston, Tx 77082-2647         (281) 589-0692         (281)	589-0695
9701 Harry Hines Blvd , Dallas, TX 75220 (214) 902 0300 (214)	351-9139
5332 Blackberry Drive, Suite 104, San Antonio, TX 78238 (210) 509-3334 (210)	509-3335
2505 N. Falkenburg Rd., Tampa, FL 33619 (813) 620-2000 (813)	620-2033
5757 NW 158th St, Miami Lakes, FL 33014 (305) 823-8500 (305)	823-8555
6017 Financial Dr., Norcross, GA 30071 (770) 449-8800 (770)	449-5477



Project Name: DCP Plant to Lea Station 6"

Work Orders : 316338,			Project II	<b>D:</b> 2008-275		
Lab Batch #: 739751	Sample: 316338-001 / 5	SMP Bat	tch: 1 Matri	ix: Soil		
Units: mg/kg		SU	<b>RROGATE RI</b>	ECOVERY	STUDY	
BTEX by H	SPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1.4 Diquarahenzena	<u>ytcs</u>	0.0361	0.0300	120	00 120	<b> </b>
4-Bromofluorobenzene		0.0501	0.0300	207	80-120	**
			0.0500		00-120	ــــــا
Lab Batch #: 739751	Sample: 316870-002 S	/MS Bat	tch: 1 Matri	ix: Soil		
Units: mg/kg		SU	RROGATE KP	COVERY N	STUDY	ا <del></del>
BTEX by F	EPA 8021B lytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0310	0.0300	103	80-120	,
4-Bromofluorobenzene		0.0298	0.0300	99	80-120	1
Lab Batch #: 739751	Sample: 316870-002 S!	D/MSD Ba	tch: 1 Matri	ix: Soil	<u>ــــــــــــــــــــــــــــــــــــ</u>	
Units: mg/kg	<u>-</u> -	SU	RROGATE RI	ECOVERY	STUDY	
BTEX by F	EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Aliai	ytes		l'	ועו	<u> </u>	L
1,4-Difluorobenzene		0.0286	0.0300	95	80-120	L
4-Bromofluorobenzene		0.0198	0.0300	66	80-120	**
Lab Batch #: 739751	Sample: 518991-1-BKS	S/BKS Bat	tch: 1 Matri	ix: Solid		
Units: mg/kg		SU	<b>RROGATE</b> RF	<b>ECOVERY</b>	STUDY	
BTEX by E Anal	EPA 8021B lytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0271	0.0300	90	80-120	
4-Bromofluorobenzene	+	0.0362	0.0300	121	80-120	**
Lab Batch #: 739751	Sample: 518991-1-BLk	K/BLK Ba	tch: 1 Matri	ix: Solid		
Units: mg/kg	••••• •	SU	RROGATE RJ	ECOVERY	STUDY	
BTEX by E Anal	EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0318	0.0300	106	80-120	
4-Bromofluorobenzene		0.0358	0.0300	119	80-120	1

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

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B All results are based on MDL and validated for QC purposes



Project Name: DCP Plant to Lea Station 6"

Work Orders : 316338,			Project II	<b>D:</b> 2008-275		
Lab Batch #: 739751	Sample: 518991-1-BSC	) / BSD Ba	tch: 1 Matri	ix: Solid		
Units: mg/kg		SU	<b>RROGATE RI</b>	ECOVERY	STUDY -	
BTEX by I Ana	EPA 8021B lvtes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	<u> </u>	0.0276	0.0300	92	80-120	<u> </u>
4-Bromofluorobenzene		0.0353	0.0300	118	80-120	<u>├</u> ──┤
Lab Batch #: 739074	Sample: 316212-008 S	/ MS Ba	tch: 1 Matr	ix: Soil		L
Units: mg/kg	•	SU	<b>RROGATE RI</b>	ECOVERY	STUDY	
TPH by SV	V8015 Mod lytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		129	100	129	70-135	
o-Terphenyl		61.4	50.0	123	70-135	
Lab Batch #: 739074	Sample: 316212-008 SI	D/MSD Ba	tch: 1 Matri	ix: Soil		
Units: mg/kg	-	SU	<b>RROGATE RJ</b>	ECOVERY (	STUDY	
TPH by SV	V8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	lytes				l	<b> </b>
		62.8	50.0	124	70-135	<b> </b> '
		02.0	50.0	120	/0-135	<u> </u>
Lab Batch #: 739074	Sample: 316338-001 / 5	MP Bat	tch: 1 Matri	ix: Soil		
Units: mg/kg		50	RROGATE RE	ECOVERY :	STUDY	
TPH by SV	V8015 Mod lytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		131	100	131	70-135	
o-Terphenyl		69.6	50.0	139	70-135	**
Lab Batch #: 739074	Sample: 518572-1-BKS	; / BKS Ba	tch: <sup>1</sup> Matri	ix: Solid		
Units: mg/kg		SU	RROGATE RI	ECOVERY	STUDY	
TPH by SV Anal	V8015 Mod lytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		125	100	125	70-135	
o-Terphenyl		62.8	50.0	126	70-135	

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

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / BAll results are based on MDL and validated for QC purposes.



# Project Name: DCP Plant to Lea Station 6"

Work Orders : 316338, Lab Batch #: 739074 Sample: 518572-1-BLK /	BLK Ba	Project II tch: <sup>1</sup> Matri	D: 2008-275		
Units: mg/kg	SU	RROGATE RI	ECOVERY	STUDY	
TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chiorooctane	121	100	121	70-135	
o-Terphenyl	61.8	50.0	124	70-135	
Lab Batch #: 739074 Sample: 518572-1-BSD /	BSD Bat	tch: <sup>1</sup> Matri	ix: Solid		
Units: mg/kg	SU	RROGATE RI	ECOVERY	STUDY	
TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
I-Chlorooctane	124	100	124	70-135	
o-Terphenyl	62.1	50.0	124	70-135	

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

\*\*\* Poor recoveries due to dilution

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



9457 v 9457 v 7366 - 3864 V



## **Project Name: DCP Plant to Lea Station 6"**

Work Order #: 316338			11/10/200	NO.			Pro	ject ID: 2	2008-275		
Analyst: ASA Lab Batch ID: 739751 Sample: 518991-1-	Date Prepared: 11/10/2008				Date Analyzed: 11/10/2008 Matrix: Solid						
Units: mg/kg		BLAN	K/BLANK S	SPIKE / I	BLANK S	SPIKE DUPI	LICATE	RECOVE	ERY STUD	Y	
BTEX by EPA 8021B	Blank Sample Result [A]	Spike Added [B]	Biank Spike Result fCl	Blank Spike %R (D)	Spike Added (E.)	Blank Spike Duplicate Result (F)	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.5000	0 5045	101	0.5	0 5103	102	1	70-130	35	<u> </u>
Toluene	ND	0.5000	0.5373	107	0.5	0.5332	102	1	70-130	35	<u> </u>
Ethylbenzene	ND	0.5000	0 5337	107	0.5	0.5139	103	4	71-129	35	
m,p-Xylenes	ND	1.000	1.188	119	1	1.143	114	4	70-135	35	
o-Xylene	ND	0.5000	0.5671	113	0.5	0.5421	108	5	71-133	35	
Analyst: ASA	D	ate Prepai	red: 10/31/200	)8	Date Analyzed: 11/02/2008						
Lab Batch ID: 739074 Sample: 518572-1-	BKS	Batc	h #: 1					Matrix: S	Solid		
Units: <sup>mg/kg</sup>		BLAN	K/BLANK S	SPIKE / I	BLANK S	SPIKE DUP	LICATE	RECOVI	ERY STUE	νY	
TPH by SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	1000	879	88	1000	866	87	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	934	93	1000	912	91	2	70-135	35	

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



## Project Name: DCP Plant to Lea Station 6"



Work Order #: 316338						Project II	<b>):</b> 2008-2	75			
Lab Batch ID:         739751         Q           Date Analyzed:         11/10/2008         I           Reporting Units:         mg/kg         I	C- Sample ID: Date Prepared:	316870- 11/10/20	-002 S 008  ATRIX SPIK	Ba An Ē / MAT	tch #: alyst: RIX SPI	l Matrix ASA KE DUPLICA	k: Soil TE RECO	OVERYS	STUDY		1
BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.5116	0.2317	45	0.5116	0.2437	48	6	70-130	35	X
Toluene	0.0163	0 5116	0.2894	53	0.5116	0.2656	49	8	70-130	35	X
Ethylbenzene	0.0063	0.5116	0 1434	27	0.5116	0.1111	20	30	71-129	35	Х
m,p-Xylenes	0.0270	1.023	0 7032	66	1.023	0.4388	40	49	70-135	35	XF
o-Xylene	0.0123	0.5116	0.2534	47	0.5116	0.1596	29	47	71-133	35	XF
Lab Batch ID:         739074         Q           Date Analyzed:         11/03/2008         1	C- Sample ID: Date Prepared:	316212- 10/31/2	-008 S 008	Ba An	tch #: alyst:	l <b>Matri</b> ASA	k: Soil				
Reporting Units: mg/kg		M	ATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY S	STUDY		
TPH by SW8015 Mod 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
C6-C12 Gasoline Range Hydrocarbons	ND	1070	878	82	1070	901	84	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1070	937	88	1070	961	90	2	70-135	35	

Matrix Spike Percent Recovery [D] = 100\*(C-A)/BRelative 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"

Work Order #: 316338

Lab Batch #: 738813	<b>Project ID:</b> 2008-275
Date Analyzed: 10/31/2008	Date Prepared: 10/31/2008 Analyst: ASA
QC- Sample ID: 316265-001 D	Batch #: 1 Matrix: Soil
Reporting Units: %	SAMPLE / SAMPLE DUPLICATE RECOVERY
Percent Moisture	Parent SampleSampleControlResultDuplicateRPDLimits[A]Result%RPD
Analyte	(B)
Percent Moisture	10.7 9.86 8 20

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

Environmental Lab of A Xenco Laboratorios Company	Texas	1260B Wes Odessa Te	CHAIN OF CUSTODY RE 1-20 East xas 79765	CORD AND ANALYSIS REQUEST Phone 432-563-1800 Fax: 432-563-1713	
Project Manager <u>CAMI</u>	LE BIZIAN	<u>.</u>	Proj	ect Name DPPCuntfcl.	"Station 6"
Company Address	SNUREAM	ENTAL_	Pr	oject Loc: SCITH CF 1	LA L'AVENT
City/State/Zip <u>LC-UN-</u>	Tan N.M_	Eax No:		PO : FAA - DM	DAPDES
Sampler Signature.	1 de CB	e-mail C. (bry	inta la sin	- CLANS ILLIAS CENT	
(lab use onth)			A of Containers   Matrix		1
FIELD CODE	Bending Depth	Advertision of the state of the	Мали Мари Мари Мари Мари Мари Мари Мари Мар	Пол.         Пол.         Пол.         Пол.         Дол.         Дол. <t< td=""><td>RUSH IAT Pre-invited 14.4</td></t<>	RUSH IAT Pre-invited 14.4
Special Instructions:				Laboratory Comments.	
Reinquisinda by Para Reinquisinda by U.S. (U.S.) Reinquisined by Date Reinquisined by Date	Time Received by Time Received by Time Received by ELO		Date Tim Date Tim Date Tim	VOCs Free of Headpace?     VOCs Free of Headpace?     UCs for an onitaine(1)     Vocariar?     Vocariar?     UPS of UPS of UPS of UPS of UPS     U 2 f UPs	N N N N N N N N N N N N N N N N N
1	and	ea Fam	103108 10.	5	.0 ~ (

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



#### Sample Receipt Checklist

				Client Initia
#1	Temperature of container/ cooler?	C'és	No	50°C
#2	Shipping container in good condition?	(ES)	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?	(es)	No	
#8	Chain of Custody agrees with sample label(s)?	Vea	No	ID written on Cont./ Lid
#9	Container labei(s) legible and intact?	(es	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?	X48	No	See Below
#13	Samples properly preserved?	Ves	No	See Below
#14	Sample bottles intact?	(es	No	
#15	Preservations documented on Chain of Custody?	Ves/	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?	108	No	See Below
#19	Subcontract of sample(s)?	Yes	No	NotApplicable
#20	VOC samples have zero headspace?	(Ves)	No	Not Applicable

#### Variance Documentation

Date/ Time:

Contact

Regarding

Corrective Action Taken

Check all that Apply:

See attached e-mail/ fax

Contacted by.

Client understands and would like to proceed with analysis Cooling process had begun shortly after sampling event



**WBENC:** 237019

HUB:1752439743100-86536NCTRCAWFWB38444Y0909

DBE: VN 20657

## **NELAP** Certifications

Lubbock: T104704219-08-TX LELAP-02003 Kansas E-10317 El Paso: T104704221-08-TX LELAP-02002 Midland: T104704392-08-TX

# Analytical and Quality Control Report

Camille Bryant Basin Environmental Service Tech LLC 2800 Plains Hwy. P.O. Box 301 Lovington, NM, 88260

Report Date: November 4, 2005

Work Order: 8103141

Project Location:South of Monument, NMProject Name:DCP Plant to Lea Station 6 in.Project Number:DCP Plant to Lea Station 6 in.SRS#:2008-275

Enclosed are the Analytical Report and Quality Control	Report for the following s	sample(s) submitted to	TraceAnalysis, Inc.
	Date	Time	Date

Sample	Description	Matrix	Taken	Taken	Received
177899	Stockpile	soil	2008-10-31	10:52	2008-10-31

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 10 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Blain formich

Dr. Blair Leftwich, Director

## Standard Flags

 ${\bf B}$  - The sample contains less than ten times the concentration found in the method blank.

# **Case Narrative**

Samples for project DCP Plant to Lea Station 6 in. were received by TraceAnalysis, Inc. on 2008-10-31 and assigned to work order 8103141. Samples for work order 8103141 were received intact without headspace and at a temperature of 3.2 deg. C.

Samples were analyzed for the following tests using their respective methods.

Test	Method
BTEX	S 8021B
TPH DRO	Mod. 8015B
TPH GRO	S 8015B

٠

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 8103141 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# **Analytical Report**

#### Sample: 177899 - Stockpile

Laboratory:	Midland									
Analysis:	BTEX			Analytical	Method:	S 8021B		Prep Me	thod:	S 5035
QC Batch:	53836			Date Analy	zed:	2008-11-01		Analyzed	l By:	AG
Prep Batch:	46075			Sample Pre	eparation:	2008-10-31		Prepared	l By:	AG
				$\mathbf{RL}$						
Parameter		Flag		Result		Units	]	Dilution		RL
Benzene	<u> </u>			1.77		mg/Kg		20		0.0100
Toluene				42.2		mg/Kg		20		0.0100
Ethylbenzene				33.6		mg/Kg		20		0.0100
Xylene				83.9		mg/Kg	The second s	20		0.0100
							Spike	Percent	Re	ecovery
Surrogate			Flag	Result	Units	Dilution	Amount	Recovery	Ι	limits
Trifluorotoluer	ne (TFT)		1	14.1	mg/Kg	20	20.0	70	70.9	) - 125.1
4-Bromofluoro	benzene (4-F	SFB)		19.8	mg/Kg	20	20.0	99	48.9	9 - 160.4

#### Sample: 177899 - Stockpile

n-Triacontane	e 2	333	mg/Kg	5	100	333	10 - 250.4
Surrogate	$\mathbf{Flag}$	$\mathbf{Result}$	$\mathbf{Units}$	Dilution	Amount	Recovery	Limits
					Spike	Percent	Recovery
DRO			568	mg/H	ζg	5	50.0
Parameter	Fla	g	$\operatorname{RL}$ Result	Uni	its	Dilution	$\mathbf{RL}$
Prep Batch:	46048		Sample Prepa	ration: 2008-10	0-31	Prepar	ed By: LD
QC Batch:	53798		Date Analyze	d: 2008-10	0-31	Analyz	ed By: LD
Laboratory: Analysis:	Midland TPH DRO		Analytical Me	ethod: Mod. 8	3015B	Prep M	fethod: N/A

#### Sample: 177899 - Stockpile

Prep Batch:	46075	Sample Preparation:	2008-10-31	Prepared By:	$\mathbf{AG}$
QC Batch:	53838	Date Analyzed:	2008-11-01	Analyzed By:	AG
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
Laboratory:	Midland				

continued ...

<sup>1</sup>Surrogate out due to peak interference. <sup>2</sup>High surrogate recovery due to peak interference.

#### sample 177899 continued ...

		$\operatorname{RL}$					
Parameter Flag		Result		Units	D	ilution	RL
		$\mathbf{RL}$					
Parameter Flag		Result		Units	D	ilution	$\mathbf{RL}$
GRO	· · · · · · · · · · · · · · · · · · ·	4130		mg/Kg		20	1.00
					Spike	Percent	Recovery
Surrogate	$\mathbf{Flag}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)	<del>_</del>	18.7	mg/Kg	20	20.0	94	75 - 117.2
4-Bromofluorobenzene (4-BFB)	3	31.7	mg/Kg	20	20.0	158	66 - 142.8

#### Method Blank (1) QC Batch: 53798

QC Batch:	53798		Date Analyzed:	2008-10-31	L		Analyzed By:	LD
Prep Batch:	46048		QC Preparation:	2008-10-31	L		Prepared By:	LD
			М	DL				
Parameter		Flag	Res	sult		Units		$\operatorname{RL}$
DRO			<1	5.8		mg/Kg		50
					Spike	Percent	Reco	very
Surrogate	$\mathbf{Flag}$	Result	Units I	Dilution	Amount	Recovery	z Lim	its
n-Triacontane	e	93.6	mg/Kg	1	100	94	30.9 -	146.4

#### Method Blank (1) QC Batch: 53836

QC Batch: 53836		Date An	alyzed:	2008-11-01		An	alyzed By:	$\mathbf{AG}$
Prep Batch: 46075		QC Prep	paration:	2008-10-31		$\Pr$	epared By:	AG
			N	1DL				
Parameter	Flag		Re	sult	Un	uts		$\mathbf{RL}$
Benzene			< 0.00	0800	mg	/Kg		0.01
Toluene			< 0.00	)800	mg,	$/\mathrm{Kg}$		0.01
Ethylbenzene			< 0.00	)820	mg	/Kg		0.01
Xylene			<0.00	0960	mg	/Kg		0.01
					Spike	Percent	Reco	overy
Surrogate	$\operatorname{Flag}$	$\mathbf{Result}$	Units	Dilution	$\operatorname{Amount}$	Recovery	7 Lin	nits
Trifluorotoluene (TFT)		0.751	mg/Kg	1	1.00	75	72.3 -	121.6
4-Bromofluorobenzene (4-BFB)		0.728	mg/Kg	1	1.00	73	72 -	123

<sup>3</sup>High surrogate recovery due to peak interference.

Report Date: November 4, 2005 DCP Plant to Lea Station 6 in.			W DCP I	Page Number: 6 of 10 South of Monument, NM						
Method Blank (1)	QC Batcl	h: 53838								
OC Batch: 53838			Date Ana	lvzed	2008-11	-01		Anal	vzed Bv	· AG
Prep Batch: 46075			QC Prepa	aration:	2008-11	)-31		Prep	ared By	AG
•			v i							
Doministra	DI			M	DL		TT	L		DT
CRO	FI	ag		Res	sult	·····	Uni mg/l	ts Za		$\frac{RL}{1}$
				0.	017	<u> </u>	IIIg/ I	.rg	<u>,</u>	L
							Spike	Percent	R	ecovery
Surrogate		Flag	Result	Uni	ts D	Dilution	Amount	Recovery		Limits
Trifluorotoluene (TFT)			0.860	mg/l	Kg	1	1.00	86	70	0 - 130
4-Bromofluorobenzene (	<u>4-BFB)</u>		0.875	mg/	Kg	1	1.00	88		0 - 130
Laboratory Control : QC Batch: 53798	Spike (LC	S-1)	Date Ana	alyzed:	2008-10	)-31		Anal	yzed By	: LD
Prep Batch: 46048			QC Prepa	aration:	2008-10	)-31		Prep	ared By	: LD
Param		LCS Resul	it Ui	nits	Dil.	Spike Amount	Matri Resul	x t Rec.	I L	Rec. imit
DRO	<u>.</u>	232	mg	g/Kg	1	250	<15.8	3 93	27.8	- 152.1
Percent recovery is base	ed on the sp	ike result.	RPD is ba	ased on	the spike	and spike d	luplicate r	esult.		
·		T COD			01.	Мал (та	•	Dan		חחח
Duram		Rosult	Unite	Dil	Amount	Result	Rog	nec. Limit	RDD	Limit
DRO		254	mg/Kg	1	250	<15.8	$\frac{102}{102}$	27.8 - 152.1	9	20
Percent recovery is base	ed on the sp	ike result	RPD is b	ased on	the spike	and spike d	lunlicate r	esult.		
rereent recovery is base	a on the op	ine result.		abou on	une opine		apireate r			
<b>a</b>	LCS	LCSD		• .	D	Spike	LCS	LCSD		Rec.
Surrogate	Result	Result	Un	nts /IZ.a	<u>1</u>	Amount		<u>Rec.</u>		$\frac{120.4}{120.4}$
n- macontane	95.3	93.3	ing,	/Kg		100	90	94		- 130.4
Laboratory Control	Spike (LC	S-1)								
QC Batch: 53836 Prep Batch: 46075			Date Ana QC Prepa	alyzed: aration:	2008-12 2008-10	1-01 )-31		Anal Prep	yzed By ared By	: AG : AG
		t ng				Spiles	Matri	r.	т	200
Param		LUS Resul	t Un	nits	Dil	Amount	Resul	x t Rec	I T	imit
Benzene		0.884	me	/Kg	1	1.00	< 0.008	00 88		- 129.8
Toluene		0.900	8/ mg/	/Kg	1	1.00	< 0.008	00 90	71.6	- 129.6
Ethylbenzene		0.902	mg/	/Kg	1	1.00	< 0.008	20 90	70.8	- 129.7
Xylene		9 56		177	-	9.00	<0.000	60 PF	70.0	100.4

Report Date: November 4, 2005	Work Order: 8103141	Page Number: 7 of 10
DCP Plant to Lea Station 6 in.	DCP Plant to Lea Station 6 in.	South of Monument, NM

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	$\mathbf{Limit}$	RPD	$\operatorname{Limit}$
Benzene	0.887	mg/Kg	1	1.00	< 0.00800	89	72.7 - 129.8	0	20
Toluene	0.894	mg/Kg	1	1.00	< 0.00800	89	71.6 - 129.6	1	20
Ethylbenzene	0.898	mg/Kg	1	1.00	< 0.00820	90	70.8 - 129.7	0	20
Xylene	2.55	mg/Kg	1	3.00	< 0.00960	85	70.9 - 129.4	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	$\operatorname{Result}$	Result	Units	Dil.	$\operatorname{Amount}$	Rec.	Rec.	$\operatorname{Limit}$
Trifluorotoluene (TFT)	0.726	0.747	mg/Kg	1	1.00	73	75	72.9 - 122.8
4-Bromofluorobenzene (4-BFB)	0.748	0.740	mg/Kg	1	1.00	75	74	73.8 - 122.4

#### Laboratory Control Spike (LCS-1)

QC Batch:	53838	Date Analyzed:	2008-11-01	Analyzed By:	$\mathbf{AG}$
Prep Batch:	46075	QC Preparation:	2008-10-31	Prepared By:	AG

	$\mathbf{LCS}$			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	$\mathbf{Result}$	Rec.	$\mathbf{Limit}$
GRO	8.21	mg/Kg	1	10.0	< 0.171	82	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			Spike	Matrix		Rec.		RPD
Param	$\operatorname{Result}$	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$	RPD	Limit
GRO	8.85	mg/Kg	1	10.0	< 0.171	88	70 - 130	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	$\operatorname{Result}$	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	0.882	0.896	mg/Kg	1	1.00	88	90	70 - 130
4-Bromofluorobenzene (4-BFB)	0.903	0.905	mg/Kg	1	1.00	90	90	70 - 130

#### Matrix Spike (MS-1) Spiked Sample: 177580

QC Batch:	53798	Date	e Analyzed:	2008-10	)-31		Analyz	ed By: LD
Prep Batch:	46048	$\mathbf{QC}$	2008-10	)-31	Prepar	Prepared By: LD		
								_
		MS			Spike	$\operatorname{Matrix}$		Rec.
Param		Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
DRO		215	mg/Kg	1	250	75.1	56	18 - 179.5

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Report Date: November DCP Plant to Lea Statio	Work Order: 8103141 DCP Plant to Lea Station 6 in.						Page Number: 8 of 10 South of Monument, NM				
Param		MSD Result	Units	Dil.	Spike Amount	Matri Resul	ix lt Rec.	] L	Rec. .imit	RPD	RPD Limit
DRO		248	mg/Kg	1	250	75.1	69	18 -	- 179.5	14	20
Percent recovery is based	on the sp	ike result.	. RPD is b	ased o	n the spike	and spik	e duplicat	e resul	t.		
	MS	MSI	)			Spik	e M	MS	MSD		Rec.
Surrogate	Result	Resu	lt U	nits	Dil.	Amou	int B	lec.	Rec.		$\operatorname{Limit}$
n-Triacontane	108	106	ն ող	g/Kg	1	100	1	108	106	34	.1 - 158
<b>Matrix Spike (MS-1)</b> QC Batch: 53836 Prep Batch: 46075	Spiked	Sample: 1	.77751 Date An QC Prep	alyzed: paration	: 2008-11 n: 2008-10	l-01 )- <b>3</b> 1			Anal Prep	yzed By ared By	v: AG v: AG
Param		MS Besu	5 ilt. Ur	nits	Dil	Spike Amount	Mat Bes	rix ult	Rec.	] I	Rec. .imit
Benzene		0.89	15 mg	/Kø	1	1 00	< 0.0	0800	90	58.6	- 165.2
Toluene		0.92	1 mg	/Kg	1	1.00	0.02	293	89	64.2	- 153.8
Ethylbenzene		0.94	6 mg	/Kg	1	1.00	< 0.0	0820	95	61.6	- 159.4
Xylene		2.69	) mg	/Kg	1	3.00	< 0.0	0960	90	64.4	- 155.3
Percent recovery is based	on the sp	ike result.	. RPD is b	ased o	n the spike	and spik	e duplicat	e resul	t.		
		MSD			Spike	Matrix		ł	Rec.		RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	L	imit	RPD	Limit
Benzene		0.958	mg/Kg	1	1.00	< 0.0080	0 96	58.6	- 165.2	7	20
Toluene		0.989	mg/Kg	1	1.00	0.0293	96	64.2	- 153.8	7	20
Ethylbenzene		1.02	mg/Kg	1	1.00	< 0.0082	20 102	61.6	- 159.4	8	20
Xylene		2.90	mg/Kg	1	3.00	<0.0096	60 <b>9</b> 7	64.4	- 155.3	8	20
Percent recovery is based	l on the sp	oike result.	. RPD is b	based o	n the spike	and spik	e duplicat	e resul	t.		
		Ν	AS M	SD			Spike	MS	MSD		Rec.
		D -	eult Ro	sult	Units	Dil.	Amount	Rec.	Rec.	Ι	Limit
Surrogate		Re	ծաս ստ	/0 ui 0	011100						
Surrogate Trifluorotoluene (TFT)		$\frac{\text{Re}}{4.5}$ 0.	$\frac{100}{718}$ 0.	730	mg/Kg	1	1	72	73	76.5	- 127.9

## Matrix Spike (MS-1) Spiked Sample: 177751

QC Batch:	53838	Date Analyzed:	2008-11-01	Analyzed By:	AG
Prep Batch:	46075	QC Preparation:	2008-10-31	Prepared By:	AG

continued ...

<sup>&</sup>lt;sup>4</sup>Surrogate out due to peak interference. <sup>5</sup>Surrogate out due to peak interference.

Report Da DCP Plan	te: November t to Lea Statio	4, 2005 n 6 in.	Work Order: 8103141 DCP Plant to Lea Station 6 ir					Page Number: 9 of South of Monument, N			
matrix spik	ces continued.					_					_
Param			MS Besult	Unite	וות	Spike	e Ma nt Ra	atrix sult	Rec	] T	Rec. .imit
			Itcourt			Amou			1		
_			MS			Spike	e Ma	atrix	_	]	Rec.
Param			Result	Units	Dil	Amou	nt Re	esult	Rec.	L	imit
GRO			10.7	mg/Kg	g <u>1</u>	10.0	1	02	97	22.3	- 134.6
Percent rec	overy is based	on the spike	result. RP	D is based	l on the spike	e and spil	ke duplica	te result	•		
		N	ISD		Spike	Matri	x	$\mathbf{R}$	ec.		RPD
Param		R	esult Uı	nits Di	l. Amount	Resul	lt Rec.	$\operatorname{Li}$	mit	RPD	$\operatorname{Limit}$
GRO		1	.0.2 mg	/Kg 1	10.0	1.02	92	22.3 -	134.6	5	20
Percent rec	overy is based	on the spike	result. RP	D is based	on the spike	e and spil	ke duplica	te result			
			МО	Men			Suite	МС	MGD	1	Dan
Surrogate			Result	Result	Units	Dil	Amount	Rec	NSD Rec	I T	nec. .imit
Trifluoroto	uene (TFT)	6	1.14	0.822	mg/Kg	1	1	114	82	68.4	- 113.1
4-Bromoflu	orobenzene (4-	BFB)	0.869	0.908	mg/Kg	1	1	87	91	66.7	- 134.3
<b>Standard</b> QC Batch:	(CCV-1) 53798		Da	te Analyz	ed: 2008-10	-31			Anal	yzed By	r: LD
			CCV	<b>V</b> s	$\mathrm{CCVs}$	CC	Vs	Perc	ent		
			$\operatorname{Tru}$	e	Found	Perc	ent	Reco	very		Date
Param	Flag	Units	Con	с.	Conc.	Recov	very	Lim	its	Ar	alyzed
DRO		mg/Kg	250	)	262	10	5	85 -	115	200	8-10-31
Standard	(CCV-2)										
QC Batch:	53798		Da	te Analyz	ed: 2008-10	-31			Anal	yzed By	7: LD
			CCV	Vs	CCVs	CC	Vs	Perc	ent		
			Tru	ie	Found	Perc	ent	Reco	very		Date
Param	Flag	Units	Con	c.	Conc.	Recov	very	$\operatorname{Lim}$	its	Ar	alyzed
DRO		mg/Kg	250	)	244	98	3	85 -	115	200	8-10-31
Standard QC Batch:	(ICV-1) 53836		Da	te Analyz	ed: 2008-11	-01			Anal	yzed By	r: AG

<sup>6</sup>High surrogate recovery due to peak interference.

Report Date: November 4, 2005 DCP Plant to Lea Station 6 in.			Wor DCP Pla	k Order: 81031 nt to Lea Stati	Page Number: 10 of 10 South of Monument, NM		
Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0895	90	85 - 115	2008-11-01
Toluene		mg/Kg	0.100	0.0905	90	85 - 115	2008-11-01
Ethylbenzene		mg/Kg	0.100	0.0900	90	85 - 115	2008-11-01
Xylene		mg/Kg	0.300	0.255	85	85 - 115	2008-11-01

## Standard (CCV-1)

QC Batch: 53836			Date Analyz	ed: 2008-11-0	Analyzed By: AG		
			CCVs	CCVs	$\mathrm{CCVs}$	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		mg/Kg	0.100	0.0864	86	85 - 115	2008-11-01
Toluene		mg/Kg	0.100	0.0873	87	85 - 115	2008-11-01
Ethylbenzene		mg/Kg	0.100	0.0883	88	85 - 115	2008-11-01
Xylene	7	mg/Kg	0.300	0.250	83	85 - 115	2008-11-01

## Standard (ICV-1)

QC Batch: 53838			Date Ana	alyzed: 2008-1	Analyzed By: AG		
			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	1.02	102	85 - 115	2008-11-01

### Standard (CCV-1)

QC Batch:	53838		Date Ana	alyzed: 2008-1	1-01	Analyzed By: AG		
			CCVs	CCVs	$\operatorname{CCVs}$	Percent		
			True	Found	Percent	Recovery	Date	
Param	$\mathbf{Flag}$	$\mathbf{Units}$	Conc.	Conc.	Recovery	Limits	Analyzed	
GRO		mg/Kg	1.00	1.02	102	85 - 115	2008-11-01	

 $<sup>^{7}</sup>$ Xylene outside of control limits on CCV. CCV component average is 0.0853 which is within acceptable range. This is acceptable by Method 8000.

		LAB Order ID #	8103141		Page of
TraceAnalysis, email: lab@traceanalysis.co	Inc.	6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 Tel (806) 794-1296 Fax (806) 794-1298 1 (800) 378-1296	5002 Basin Street, Suite A1 Midland, Texas 79703 Tel (432) 689-8301 Fax (432) 689-6313	200 East Sunset Rd , Suite E El Paso, Texas 79922 Tel (915) 565-3443 Fax (915) 585-4944 1 (888) 588-3443	8808 Camp Bowie Blvd West, Suite 180 Ft. Worth, Texas 76116 Tel (817) 201-5260 Fax (817) 560-4336
Address: (Street Chy Zo)	Phon	**************************************	244 \$	ANALYSIS RE (Circle or Specify	QUEST Method No.)
Address: (Street, City, ZIp) Confact Person: (AM   LLE RepArt, Invotce to: (If different from above) P2A, NS Roject #: DCP PLANT TOLEA STATIC Project Location (including state): SOUTH OF MONUMENT, N LAB # FIELD CODE LAB # FIELD CODE LAB # FIELD CODE NECK STDCLP1LE	Fax 6 LOUIN TOW VE-ma C JC Samp MATRIX MATRIX HIV Samp MATRIX HIV Samp MATRIX	$\frac{1}{2} \sum_{i=1}^{n} \sum_{i=1}^$	TIME     D       TIME     D       TIME     D       MTBE     8021B / 601 / 624       MTBE     8021B / 601 / 624       TPH 418.11 / TX1005 / 12005 Ext(C35)       PAH 8270C / 620 / D/90 / TVHC	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200 7           TCLP Metals Ag As Ba Cd Cr Pb Se Hg           TCLP Wetals Ag As Ba Cd Cr Pb Se Hg           TCLP Posticites           TCLP Pesticides           RCI           RCI           RC           RC           TCLP Pesticides           RCI           RCI	Method No.)         Pesticides 8081A / 608         BDD, TSS, pH         Moisture Content         Moisture Content
Relinquished by: Company: Date: Time:	Received by:	Company: Date: Tim	e: Temp <sup>°</sup> c:	USE REMARKS:	need blowdou
Rellinguished by: Company: Dâte: Time:	Received by:	Irac & Wi Stilus I Company: Date: Tim	C:25 e: Temp <sup>°</sup> C: Intect C		t Basis Required
Relinquished by: Company: Date: Time:	Received by:	Company: Date: Tim	e: Temp°c: <b>3.2</b> Log n-Rev	Check If S ew	pecial Reporting Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier #

# Analytical Report 322296

for

# PLAINS ALL AMERICAN EH&S

**Project Manager: Daniel Bryant** 

DCP Plant to Lea Station 6" 2008-275

15-JAN-09





12600 West I-20 East Odessa, Texas 79765

Texas certification numbers: Houston, TX T104704215-08B-TX - Odessa/Midland, TX T104704400-08-TX

Florida certification numbers: Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675 Norcross(Atlanta), GA E87429

> 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



15-JAN-09



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

Reference: XENCO Report No: 322296 DCP Plant to Lea Station 6" Project Address: Lea County, NM

#### **Daniel Bryant**:

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 322296. 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. 322296 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron, II Odessa Laboratory Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America



## Sample Cross Reference 322296



## PLAINS ALL AMERICAN EH&S, Midland, TX

DCP Plant to Lea Station 6"

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SB-2 10'	S	Jan-09-09 10:00		322296-001
SB-2 20'	S	Jan-09-09 10:10		322296-002
SB-2 30'	S	Jan-09-09 10:20		322296-003
SB-2 40'	S	Jan-09-09 10:30	1	322296-004
SB-2 50'	S	Jan-09-09 10:45		322296-005
SB-2 60'	S	Jan-09-09 10:55		322296-006



Project Id: 2008-275

Project Location: Lea County, NM

Contact: Daniel Bryant

## Certificate of Analysis Summary 322296 PLAINS ALL AMERICAN EH&S, Midland, TX



Project Name: DCP Plant to Lea Station 6"

Date Received in Lab: Tue Jan-13-09 10:36 am

Report Date: 15-JAN-09

								Project Ma	nager:	Brent Barron,	II		
	Lab Id:	322296-0	01	322296-0	002	322296-	003	322296-0	04	322296-0	005	322296-	-006
Analysis Pagnastad	Field Id.	SB-2 10	)'	SB-2 20	<b>y</b>	SB-2 3	i0'	SB-2 4	C'	SB-2 5	0'	SB-2 6	50'
Anuiysis Requesieu	Depth ·												
	Matrix <sup>.</sup>	SOIL		SOIL		SOII		SOIL		SOIL		son	
	Sampled:	Jan-09-09 1	0 00	Jan-09-09 1	0 10	Jan-09-09	10 20	Jan-09-09 1	10 30	Jan-09-09	10 45	Jan-09-09	10 55
BTEX by EPA 8021B	Extracted:	Jan-13-09 1	3 00	Jan-13-09 1	3 00	Jan-13-09	13 00	Jan-13-09 1	3 00	Jan-13-09	13 00	Jan-13-09	13 00
	Analyzed:	Jan-13-09 I	8 57	Jan-13-09 1	9 18	Jan-13-09	19 39	Jan-13-092	20 01	Jan-13-09	20 22	Jan-13-09	20 43
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0 0011	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0011
Toluene		ND	0 0022	ND	0 0021	ND	0 0020	ND	0 0020	ND	0 0021	ND	0 0021
Ethylbenzene		ND	0 0011	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0011
m,p-Xylenes		ND	0 0022	ND	0 0021	ND	0 0020	ND	0 0020	ND	0 0021	ND	0 0021
o-Xylene		ND	0 0011	ND	0.0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0011
Total Xylenes		ND	0 0022	ND	0 0021	ND	0 0020	ND	0 0020	ND	0 0021	ND	0 0021
Total BTEX		ND	0 0011	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0010	ND	0 0011
Percent Moisture	Extracted:												
	Analyzed:	Jan-13-09 1	7 00	Jan-13-09 17 00		Jan-13-09 17 00		Jan-13-09 17 00		Jan-13-09	<b>17</b> 00	Jan-13-09	17 00
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		8 07	1 00	4 54	1 00	2 08	1 00	1 03	1 00	3 11	1 00	6 1 9	1 00
TPH By SW8015 Mod	Extracted:	Jan-13-09 1	3 30	Jan-13-09 I	3 30	Jan-13-09	13 30	Jan-13-09 1	3 30	Jan-13-09	13 30	Jan-13-09	13 30
	Analyzed:	Jan-13-09 1	8 54	Jan-13-09 1	9 1 9	Jan-13-09	19 44	Jan-13-09 2	20 34	Jan-13-09 2	20 59	Jan-13-09	21 25
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	16 3	ND	157	ND	15 3	ND	152	ND	15 5	ND	160
C12-C28 Diesel Range Hydrocarbons		ND	16 3	ND	157	ND	15 3	ND	152	ND	15 5	ND	160
C28-C35 Oil Range Hydrocarbons		ND	16 3	ND	157	ND	15 3	ND	15 2	ND	15 5	ND	160
Total TPH		ND	163	ND	157	ND	15 3	ND	15 2	ND	15 5	ND	160

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

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

Brent Barron

Odessa Laboratory Director





- 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.
- \* Outside XENCO's scope of NELAC Accreditation.

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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

	Phone	Fax
4143 Greenbriar Dr. Stafford, Tx 77477	(281) 240-4200	(281) 240-4280
9701 Harry Hines Blvd, Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
2505 North Falkenburg Rd. Tampa, FL 33619	(813) 620-2000	(813) 620-2033
5757 NW 158th St. Miami Lakes, FL 33014	(305) 823-8500	(305) 823-8555
12600 West I-20 East, Odessa, TX 79765	(432) 563-1800	(432) 563-1713
842 Cantwell Lane, Corpus Christi, TX 78408	(361) 884-0371	(361) 884-9116



Project Name: DCP Plant to Lea Station 6"

Work Orders : 322296,			Project II	): 2008-275									
Lab Batch #: 746367	Sample: 322296-001 / SM	IP Bat	tch: 1 Matri	x: Soil									
Units: mg/kg		SU	<b>RROGATE RF</b>	COVERY	STUDY								
BTEX by El	PA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags							
Allaiy	tes	ļ!	ļ!	101		ļ							
1,4-Dıfluorobenzene		0.0306	0.0300	102	80-120	l							
4-Bromotluorobenzene		0.0347	0.0300	116	80-120								
Lab Batch #: 746367	Sample: 322296-001 S / N	AS Bat	tch: <sup>]</sup> Matri	x: Soil									
Units: mg/kg		SU	RROGATE RF	COVERY	STUDY								
BTEX by El Analy	PA 8021B /tes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags							
1,4-Difluorobenzene		0.0274	0.0300	91	80-120								
4-Bromofluorobenzene		0.0310	0.0300	103	80-120	[							
Lah Ratch #: 746367	Sample: 322296-001 SD /	MSD Ba	toh: 1 Matri	v· Soil	L1								
Units: mg/kg	Sample.	SURROGATE RECOVERY STUDY											
rk Orders : 322296, Lab Batch #: 746367 Sample: 322296-001 / Units: mg/kg BTEX by EPA 8021B Analytes 4-Difluorobenzene Bromofluorobenzene Bromofluorobenzene Bromofluorobenzene Bromofluorobenzene Bromofluorobenzene Lab Batch #: 746367 Sample: 322296-001 S Units: mg/kg BTEX by EPA 8021B Analytes 4-Difluorobenzene Bromofluorobenzene Bromofluorobenzene Bromofluorobenzene Bromofluorobenzene Bromofluorobenzene Bromofluorobenzene Bromofluorobenzene Bromofluorobenzene Bromofluorobenzene Lab Batch #: 746367 Sample: 322296-002 / Units: mg/kg BTEX by EPA 8021B Analytes 4-Difluorobenzene Bromofluorobenzene		Amount	True		Control								
DIER OJ ZA		Found [A]	Amount [B]	Recovery %R	Limits %R	Flags							
Anaiy	tes	<u> </u>	L!	וען		<u> </u>							
1,4-Difluorobenzene		0.0273	0.0300	91	80-120	İ							
4-Bromofluorobenzene		0.0309	0 0300	103	80-120	<u> </u>							
Lab Batch #: 746367	Sample: 322296-002 / SM	IP Bat	tch: 1 Matri	x: Soil									
Units: mg/kg		SU	RROGATE RF	COVERY	STUDY								
BTEX by El Analy	PA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags							
1,4-Dıfluorobenzene		0.0306	0.0300	102	80-120								
4-Bromofluorobenzene		0.0341	0 0300	114	80-120	i							
Lab Batch #: 746367	Sample: 322296-003 / SM	IP Ba	tch: <sup>1</sup> Matri	x: Soil	<u></u>								
Units: mg/kg		SU	RROGATE RF	COVERY (	STUDY								
BTEX by El Analy	PA 8021B rtes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags							
1,4-Dıfluorobenzene		0.0307	0 0300	102	80-120								
4-Bromofluorobenzene		0.0338	0.0300	113	80-120	[							

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

\*\*\* Poor recoveries due to dilution

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



Project Name: DCP Plant to Lea Station 6"

Vork Orders : 322296,			Project II	): 2008-275		
Lab Batch #: 746367	Sample: 322296-004 / SM	P Bat	tch: 1 Matri	x: Soil		
Units: mg/kg	1	SU	<b>RROGATE RF</b>	COVERY	STUDY	
BTEX by EPA	A 8021B	Amount Found [A]	True Amount {B}	Recovery %R	Control Limits %R	Flags
Analyte	.s	<u> </u>	L!	ן ען		
1,4-Difluorobenzene		0.0310	0.0300	103	80-120	L
4-Bromofluorobenzene		0.0334	0.0300	111	80-120	L
Lab Batch #: 746367	Sample: 322296-005 / SM	P Baf	tch: <sup> </sup> Matri	x: Soil		
Units: mg/kg		SU	RROGATE RF	COVERY !	STUDY	
BTEX by EPA Analyte	<b>X 8021B</b> es	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0306	0.0300	102	80-120	Í
4-Bromofluorobenzene		0.0339	0.0300	113	80-120	í
Lab Batch #: 746367	Sample: 322296-006 / SM	P Ba	tch: <sup>1</sup> Matri	ix: Soil	<u>.</u>	
Units: mg/kg		SU	RROGATE RF	COVERY f	STUDY	
BTEX by EPA	A 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Allalyte	.S	I		100		I
A Dramafluorobenzene		0.0308	0.0300	103	80-120	<u> </u>
		0.0332	0.0300	111	80-120	
Lab Batch #: 746367	Sample: 522852-1-BKS / F	3KS Bat	tch: 1 Matri	x: Solid		
Units: mg/kg		SU	RROGATE RE	COVERY S	STUDY	
BTEX by EPA Analyte	x 8021B es	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Dıfluorobenzene		0.0292	0.0300	97	80-120	ſ
4-Bromofluorobenzene		0.0293	0.0300	98	80-120	
Lab Batch #: 746367	Sample: 522852-1-BLK /	BLK Ba	tch: <sup>1</sup> Matri	x: Solid	<u></u>	
Units: mg/kg	-	SU	<b>RROGATE RF</b>	COVERY	STUDY	
BTEX by EPA Analyte	N 8021B 25	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Dıfluorobenzene		0.0315	0.0300	105	80-120	[
4-Bromofluorobenzene		0.0331	0.0300	110	80-120	

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

\*\*\* Poor recoveries due to dilution

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



Project Name: DCP Plant to Lea Station 6"

Work Orders : 322296,		Project II	<b>):</b> 2008-275										
Lab Batch #: 746367 Sample: 522852-1-	-BSD / BSD Bat	ch: <sup>1</sup> Matri	x: Solid										
Units: mg/kg	SU	RROGATE RE	ECOVERY S	STUDY									
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags								
Analytes			191										
1,4-Difluorobenzene	0.0293	0.0300	98	80-120									
	0 0295	0 0300	98	80-120									
Lab Batch #: 746422 Sample: 322296-00	01 / SMP Bat	ch: <sup>1</sup> Matri	x: Soil										
Units: mg/kg	SU	SURROGATE RECOVERY STUDY											
TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags								
1-Chlorooctane	101	100	101	70-135									
o-Terphenyl	55.1	50.0	110	70-135									
Lab Batch #: 746422 Sample: 322296-00	01S/MS Bat	ch: 1 Matri	x: Soil	·									
Units: mg/kg	SU	RROGATE RE	<b>ECOVERY</b> S	STUDY	·								
TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags								
1-Chlorooctane	114	100	114	70-135									
o-Terphenyl	48.9	50.0	98	70-135									
Lab Batch #: 746422 Sample: 322296-00	D1 SD / MSD Bat	ch: <sup>1</sup> Matri	x: Soil										
Units: mg/kg	SU	RROGATE RE	COVERY	STUDY									
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags								
1-Chlorooctane	113	100	113	70-135									
o-Terphenyl	48.4	50.0	97	70-135									
Lab Batch #. 746422 Sample: 322296-00	02/SMP Bat	ch 1 Matri	r. Soil										
Units: mg/kg	SU SUI	RROGATE RI	ECOVERY	STUDY									
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags								
1-Chlorooctane	98.6	100	99	70-135									
o-Terphenyl	53.0	50.0	106	70-135									
			L	1									

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

\*\*\* Poor recoveries due to dilution

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



Project Name: DCP Plant to Lea Station 6"

Work Orders : 322296,			Project II	): 2008-275							
Lab Batch #: 746422	Sample: 322296-003 / SMP	MP Batch:   Matrix: Soil									
Units: mg/kg	· ·	SU	RROGATE RE	ECOVERY S	STUDY						
TPH By SV	V8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags					
1 Chlamaatana	yies	09.2	100		70.125						
o-Terphenvl		98.3 52 1	50.0	98	70-135						
746422	222206 004 / SMD			0-1		l					
Lab Batch #: 740422 Units: mg/kg	Sample: 322296-004 / Sivir		RROGATE RF	x: Soll	STUDY						
TPH By SV	V8015 Mod	Amount Found [A]	True Amount  B]	Recovery %R [D]	Control Limits %R	Flags					
1-Chlorooctane	<u>ytcs</u>	98.7	100	99	70-135						
o-Terphenyl		51.9	50.0	104	70-135						
Lab Batch #: 746422	Sample: 322296-005 / SMP	Ba	tch: <sup>1</sup> Matri	ix: Soil	<u> </u>	I					
Units: mg/kg	[]	SU	RROGATE RE	ECOVERY S	STUDY	1					
TPH By SV	V8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R {D}	Control Limits %R	Flags					
I-Chlorooctane		100	100	100	70-135						
o-Terphenyl		54.5	50.0	109	70-135						
Lab Batch #: 746422	Sample: 322296-006 / SMP	Ba	tch: <sup>1</sup> Matri	x: Soil	<u> </u>						
Units: mg/kg		SU	RROGATE RE	ECOVERY S	STUDY						
TPH By SV Anal	V8015 Mod vtes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags					
1-Chlorooctane		99.2	100	99	70-135						
o-Terphenyl		53.9	50.0	108	70-135						
Lab Batch #: 746422	Sample: 522884-1-BKS / B	KS Bar	tch: <sup>1</sup> Matri	x: Solid							
Units: mg/kg		SU	RROGATE RE								
TPH By SV Anal	v8015 Mod ytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags					
1-Chlorooctane	-	118	100	118	70-135						
o-Terphenyl		51.6	50.0	103	70-135						
					·						

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

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / BAll results are based on MDL and validated for QC purposes.



١

# Form 2 - Surrogate Recoveries

## Project Name: DCP Plant to Lea Station 6"

Vork Orders : 322296,	<b>Project ID:</b> 2008-275											
Lab Batch #: 746422 Sample: 522884-1-BLK	/ BLK Ba	BLK Batch: 1 Matrix: Solid										
Units: mg/kg	SU	RROGATE RJ	ECOVERY S	STUDY								
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags							
Analytes			ן נען	<u>                                     </u>	L							
1-Chlorooctane	98.4	100	98	70-135	I							
o-Terphenyl	54.6	50.0	109	70-135	·							
Lab Batch #: 746422 Sample: 522884-1-BSD	/ BSD Ba	tch: 1 Matri	ix: Solid									
Units: mg/kg	SU	RROGATE RJ	ECOVERY S	STUDY								
TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags							
I-Chlorooctane	117	100	117	70-135	i							
o-Terphenyl	52.5	50.0	105	70-135	i							

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





## Project Name: DCP Plant to Lea Station 6"

Work Order #: 322296 Analyst: ASA	Project ID: 2008-275           Date Prepared: 01/13/2009         Date Analyzed: 01/13/2009														
Lab Batch ID: 746367 Sample: 522852-1-1	BKS	Batc	h #: 1					Matrix: S	Solid						
Units: mg/kg		BLAN	K /BLANK S	SPIKE / H	BLANK S	PIKE DUPI	LICATE	RECOVE	ERY STUD	Y					
BTEX by EPA 8021B	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Bik. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag				
Analytes		[B]	[C]	[n]	[E]	Result [F]	[G]								
Benzene	ND	0.1000	0.0988	99	0.1	0.0978	98	1	70-130	35					
Toluene	ND	0.1000	0.0965	97	0.1	0.0958	96	1	70-130	35					
Ethylbenzene	ND	0.1000	0.1028	103	0.1	0 1022	102	1	71-129	35					
m,p-Xylenes	ND	0.2000	0.2038	102	0.2	0.2025	101	1	70-135	35					
o-Xylene	ND	0.1000	0.0985	99	0.1	0.0978	98	1	71-133	35					
Analyst: BHW	Da	ate Prepar	ed: 01/13/200	)9		Date Analyzed: 01/13/2009									
Lab Batch ID: 746422 Sample: 522884-1-1	BKS	Batcl	h #: 1					Matrix: S	Solid						
Units: mg/kg		BLAN	K /BLANK S	SPIKE / E	BLANK S	PIKE DUPI	LICATE	RECOVE	ERY STUD	Y					
TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag				
C6-C12 Gasoline Range Hydrocarbons	ND	1000	1110	111	1000	1110	111	0	70-135	35					
C12-C28 Diesel Range Hydrocarbons	ND	1000	1090	109	1000	1070	107	2	70-135	35					

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



## Project Name: DCP Plant to Lea Station 6"



Work Order # : 322296	<b>Project ID: 2008-275</b>												
Lab Batch ID:         746367         Q           Date Analyzed:         01/14/2009         1	C- Sample ID: Date Prepared:	322296 01/13/2	-001 S 009	Ba An	tch #: alyst:	l Matri: ASA	x: Soil						
Reporting Units: mg/kg	ļ	M	ATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY				
BTEX by EPA 8021B	Parent Sample	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag		
Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD			
Benzene	ND	0.1088	0 0666	61	0.1088	0.0689	63	3	70-130	35	X		
Toluene	ND	0.1088	0.0647	59	0.1088	0.0665	61	3	70-130	35	Х		
Ethylbenzene	ND	0.1088	0.0674	62	0.1088	0.0690	63	2	71-129	35	Х		
m,p-Xylenes	ND	0.2176	0.1332	61	0.2176	0.1359	62	2	70-135	35	Х		
o-Xylene	ND	0 1088	0.0612	56	0.1088	0.0629	58	4	71-133	35	X		
Lab Batch ID:         746422         Q           Date Analyzed:         01/14/2009         1	C- Sample ID: Date Prepared:	322296- 01/13/2	-001 S 009	Ba An	tch #: alyst:	1 <b>Matri</b> BHW	s: Soil						
Reporting Units: mg/kg		М	ATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY				
TPH By SW8015 Mod 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		
C6-C12 Gasoline Range Hydrocarbons	ND	1090	1160	106	1090	1180	108	2	70-135	35			
C12-C28 Diesel Range Hydrocarbons	ND	1090	1120	103	1090	1140	105	2	70-135	35			

Matrix Spike Percent Recovery [D] = 100\*(C-A)/BRelative 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"

Work Order #: 322296

Lab Batch #: 746380		P	Project IE	<b>):</b> 2008-275	5
Date Analyzed: 01/13/2009	Date Prepared: 01/	13/2009	Analys	t: BEV	
QC- Sample ID: 322296-001 D	Batch #:	ì	Matrix	x: Soil	
Reporting Units: %	SAMPLE	/SAMPLE D	DUPLICA	TE RECO	OVERY
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result	RPD	Control Limits %RPD	Flag
Analyte		<b>[B]</b>			
Percent Moisture	8.07	10.4	25	20	F

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

Env	vironment	al Lab of	Texa	)S								СН	AIN	0F	cu:	STOD	RE	COF	D /	AND		IAL Y	<b>/S</b> /S	s RI	EQU	EST	r			
									126 Odi	500 1 ess:	Wes a, Te	t I-2 ixas	10 Ea 1 797	st 65								Phor Fax	ne -	432 432	-563 -563	-180 -171	0 3			
	Project Manager	Camille Bryant														_	Proje	ici N	ame	• <u>D</u>	СР	Plan	t to	Le	a St	atio	n 6'			
	Company Name	Basin Environmental	Service 1	echnol	logies, LLC											_		Proj	ect f	ŧ <u>2</u>	)0B-	275								
	Company Address.	P. Q. Box 301											_				Pr	oject	Loc	: Le	a Co	ounty	(, NR	A						
	City/State/Zip	Lovington, NM 88260														-			PO #	н рл	<b>.</b> .	D Br	yan							
	Telephone No.	(575)505-7210				Fax No	_	/50	5) 70	96.1	429					- 84	nort i			x	]	andar	н т		Пт	BBC	, ,	n	NPC	
		1 Slaul					-	<u>(</u>			<u></u>						-	v			1 3 4	(igai)			U.	nivr				
	Sampler Signature	Jon Hong L	me -			e-mail	-	CIL	ЛУР		aju	<u>as</u>	11-00		uiu	ny co	"Ε			-		An	aiyz	e Fc	r				T	٦
(lab use	only)	27910															F			T	TCLP	┢╾┿	-	$\overline{+}$	x					242
ORDEF	<u>4# 3Ľ</u>			r · · · ·	······		—		Pre	serv	atio	18,	ofC	ontal	ners	Mat	1x	8	Τ	Т	Т	3	1	$\uparrow$	8					:–
AB # (lab uso only)	FIEI	D CODE	<b>Beginning Depth</b>	inding Depth	Date Sampled	Time Samp <del>le</del> d	wid Filterad	ctal # of Contamers	loe	HNO,	Ę	H,SO,	Na S.O.	None	Other ( Specdy)	3W - Drinking Water SL-Sud	4P=Non Potable Specify Ot	PH HELDE 1915 HA	ations (Ca. Mo. Na. K)	inions (Cl. SOM, Abultnity)	SAR / ESP / CEC	Aetals. As Ag Ba Cd Cr Pb Hg	/olaties	Semwolatiles	JTEX 80218/5030 or BTEX 8	40RM				RUSH TAT (Pre-schedue) 2 Standard TAT 4 DAY
01	SI	3-2 10'		1. <sup>w</sup>	9-Jan-09	1000		1	x		1	1	╈	╈	t	so	iL I	x	T	Ť	Ţ,	Ħ	1	Ť	x		t	$\square$	T	×
01	SI	3-2 20'			9-Jan-09	1010	$\Box$	1	x					T	L	so	L	x					$\Box$		x	$\Box$			_	X
03	SI	3-2 30'			9-Jan-09	1020	Ц	1	x		_	_				so	L	×	_	1	_		$\downarrow$	_	×	4	1	$\square$		_×
101	SE	3-2 40'			9-Jan-09	1030		1	X		_			4	1	so	L	×	_	+	<b>_</b>	$\vdash$	4	$\downarrow$	<u>×</u>		+	++		X
36	SE SE	3-2 50'			9-Jan-09	1045	H	1	X		-+	-+-			╞	SO	L	×	+-	+	-	┢╌┽	-+	+	<u>×</u>	+	+	╉╌┤	+	<b>X</b>
00	SI	3-2 60'			9-Jan-09	1055	Η	1	×	+	+	+	┿	+	+	so		×	+	╋	+	┝᠇┥	╉	-+	쒸	┿	┿	$\vdash$	+	수
							H	-	┝╋		+	+	╈	╈	╈	-	+	+	t	+	+	┝╌┼	+	+	+	╈	+	+	1	+
													1	T	T	1	-1	$\uparrow$	T	T	T				T	1	T			$\Box$
														T	1	Ť			T			$\square$			T					
Aclinquis	hed by Stanley		<u>я 1:</u>	ime しわ	Received of	A	7	10/	U.	+ 5				T	0	13-09	7:		1 Si > 10 0	abor ampi OCs abels ustor	ator Co Free ty se	/ Con ritain : of Hi contai sals o	ens i each inert inert in co	intec spac (s) ntar soler	: :(? :(e? ner(s (s)	i)		(COCO)		8, e e e
Relinquis			10	100 20 1708	Received by		<u> </u>	-,,						+	0 	ate	T T	me	- -	ampi by by	Barr Cou LU	ind De ipler/C rier?	alive Slient	red t Rep UPS	,,, ,,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	HL	Fe	Ľ	Lone	4 Star
	7'				and	hea Fi	9r	$\gamma$	n						۱ĩ	3 01	ю	31	A	empe	eratu	íe Uø	ion F	Rece	ipt		- 7	0		C

## Environmental Lab of Texas

.

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



#### Sample Receipt Checklist

	oumpre receipt				
				Client Initia	ıls
•	Temperature of container/ cooler?	(es)	No	-2.0 °C	
2	Shipping container in good condition?	A BB	No		
:3	Custody Seals intact on shipping container/ cooler?	Yes	No	(Not Present)	٦
4	Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
:5	Chain of Custody present?	Ves	No		٦.
6	Sample instructions complete of Chain of Custody?	(es)	No		7
7	Chain of Custody signed when relinquished/ received?	(es	No		7
'8	Chain of Custody agrees with sample label(s)?	les	No	ID written on Cont / Lid	
·g	Container label(s) legible and intact?	(es	No	Not Applicable	
:10	Sample matrix/ properties agree with Chain of Custody?	(Tes)	No		_
111	Containers supplied by ELOT?	(es)	No		
12	Samples in proper container/ bottle?	Yes	No	See Below	1
113	Samples properly preserved?	Yes	No	See Below	
114	Sample bottles intact?	Yes	No		
115	Preservations documented on Chain of Custody?	(es	No		
116	Containers documented on Chain of Custody?	Yes	No		-1
17	Sufficient sample amount for indicated test(s)?	Yes	No	See Below	٦
18	All samples received within sufficient hold time?	Yes	No	See Below	
÷19	Subcontract of sample(s)?	Yes	No	Not Applicable>	
120	VOC samples have zero headspace?	(Yes)	No	Not Applicable	

Variance Documentation

\_\_\_\_\_

Date/ Time

Contacted by,

Contact 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 323065

for

# PLAINS ALL AMERICAN EH&S

**Project Manager: Daniel Bryant** 

DCP Plant to Lea Station 6" 2008-275

23-JAN-09





12600 West I-20 East Odessa, Texas 79765

Texas certification numbers: Houston, TX T104704215-08B-TX - Odessa/Midland, TX T104704400-08-TX

Florida certification numbers: Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675 Norcross(Atlanta), GA E87429

> 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



23-JAN-09



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

Reference: XENCO Report No: **323065 DCP Plant to Lea Station 6**" Project Address: Lea County, NM

#### **Daniel Bryant**:

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 323065. 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. 323065 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron, II Odessa Laboratory Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America





# Sample Cross Reference 323065

## PLAINS ALL AMERICAN EH&S, Midland, TX

DCP Plant to Lea Station 6"

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
ESW @ 14.5'	S	Jan-21-09 13:30		323065-001
NESW @ 14.5'	S	Jan-21-09 13:40		323065-002
NWSW @ 14.5'	S	Jan-21-09 13:50		323065-003
SESW @ 14.5'	S	Jan-21-09 14:00		323065-004
SWSW @ 14.5'	S	Jan-21-09 14:10		323065-005
WSW @ 14.5'	S	Jan-21-09 14:20		323065-006
E Floor @ 15'	S	Jan-21-09 14:30		323065-007
W Floor @ 15'	S	Jan-21-09 14:40		323065-008
C Floor @ 15'	S	Jan-21-09 14:50		323065-009



Project Id: 2008-275

Contact: Daniel Bryant

### Certificate of Analysis Summary 323065 PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: DCP Plant to Lea Station 6"



Date Received in Lab: Thu Jan-22-09 08:24 am

Report Date: 23-JAN-09 Project Location: Lea County, NM Project Manager: Brent Barron, II 323065-003 323065-004 323065-005 323065-006 Lab Id: 323065-001 323065-002 Field Id: NESW @ 14 5' NWSW @ 14 5' SESW @ 14 5' SWSW @ 14 5' WSW @ 14 5' ESW @ 14 5' Analysis Requested Depth: SOIL SOIL SOIL SOIL SOIL Matrix: SOIL Jan-21-09 14 20 Sampled. Jan-21-09 13 30 Jan-21-09 13 40 Jan-21-09 13 50 Jan-21-09 14 00 Jan-21-09 14 10 Jan-22-09 15 30 Jan-22-09 15 30 Jan-22-09 15 30 Jan-22-09 15 30 Extracted: Jan-22-09 15 30 Jan-22-09 15 30 BTEX by EPA 8021B Jan-23-09 01 04 Analyzed: Jan-22-09 23 40 Jan-23-09 00 00 Jan-23-09 00 21 Jan-23-09 00 43 Jan-23-09 05 38 Units/RL. RL RL RL mg/kg RL RL mg/kg mg/kg mg/kg mg/kg RL mg/kg Benzene 0 0127 0 0010 0 0102 0 0010 0 0146 0 0010 0 0186 0.0010 ND 0 0508 ND 0 0010 0 3422 0 1016 0 0099 Toluene 0 1879 0 0020 0 0758 0 0020 0 1483 0 0020 0 1126 0 0020 0 0020 0 0437 0 0010 0 0120 0 0010 0 7845 0 0508 0 0053 0 0010 Ethylbenzene 0 0664 0 0010 0 0175 0 0010 0 1075 0 0020 0 0223 0 0020 2 674 0 1016 0 0124 0 0020 m,p-Xylenes 0 1976 0 0020 0 0444 0 0020 o-Xylene 0 0099 0 0010 0 0233 0 0010 0 0070 0 0010 1 0 24 0 0 508 0 0028 0 0010 0 0375 0 0010 Total Xylenes 0 0020 0 2351 0 0020 0 0 5 4 3 0 0 0 2 0 0 1308 0 0020 0 0 2 9 3 0 0 0 2 0 3 698 0 1016 0 0152 Total BTEX 0 1725 0 0010 4 8247 0 0508 0 0 3 0 4 0 0010 0 5021 0 0010 0 1578 0 0010 0 3374 0 0010 Extracted **Percent Moisture** Jan-22-09 17 00 Analyzed. Jan-22-09 17 00 % Units/RL. % RL % RL % RL % RL % RL RL 1 00 Percent Moisture 1 30 1 00 2 0 3 1 00 ND 1 00 206 1 00 1 53 1 00 2 32 Extracted: Jan-22-09 14 25 TPH By SW8015 Mod Jan-22-09 18 25 Jan-22-09 18 49 Jan-22-09 19 14 Jan-22-09 19 38 Jan-22-09 20 03 Analyzed: Jan-22-09 18 00 RL mg/kg RL Units/RL RL RL RL mg/kg RL mg/kg mg/kg mg/kg mg/kg C6-C12 Gasoline Range Hydrocarbons 153 170 15.1 38.8 153 215 152 ND 154 186 152 ND 15 2 ND 154 C12-C28 Diesel Range Hydrocarbons 15 2 ND 153 ND 151 2990 153 207 ND ND 153 ND 15 1 232 153 300 152 ND 154 C28-C35 Oil Range Hydrocarbons ND 15 2 ND Total TPH 186 152 ND 153 17 151 3260 8 153 452 152 154

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

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

Brent Barron

Odessa Laboratory Director



#### Certificate of Analysis Summary 323065 PLAINS ALL AMERICAN EH&S, Midland, TX



Project Name: DCP Plant to Lea Station 6"

Date Received in Lab: Thu Jan-22-09 08:24 am

Contact: Daniel Bryant . . 10.0

Project Id: 2008-275

reject Location: Lea County, NM					Report Date:	23-JAN-09	
					Project Manager:	Brent Barron, II	
	Lab Id:	323065-007	323065-008	323065-009			
An alunia Down onto d	Field Id:	E Floor @ 15'	W Floor @ 15'	C Floor @ 15'			
Anaiysis Requesiea	Depth:						
	Matrix:	SOIL	SOIL	SOIL			
	Sampled:	Jan-21-09 14 30	Jan-21-09 14 40	Jan-21-09 14 50			
BTEX by EPA 8021B	Extracted:	Jan-22-09 15 30	Jan-22-09 15 30	Jan-22-09 15 30			
	Analyzed:	Jan-23-09 01 25	Jan-23-09 05 59	Jan-23-09 06 20			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			1
Benzene		ND 0 0010	0 0836 0 0507	0 41 57 0 0513			
Toluene		0 0126 0 0020	4 161 0 1013	11 01 0 1026			
Ethylbenzene		0 0069 0 0010	4 509 0 0507	8918 0 0513			
m,p-Xylenes		0 0218 0 0020	11 50 0 1013	25 42 0 1026			
o-Xylene		0 0049 0 0010	4 017 0 0507	9 998 0 0513			
Total Xylenes		0 0267 0 0020	15 517 0 1013	35 418 0 1026			
Total BTEX		0 0462 0 0010	24 2706 0 0507	55 7617 0 0513			
Percent Moisture	Extracted:						
	Analyzed:	Jan-22-09 17 00	Jan-22-09 17 00	Jan-22-09 17 00			
	Units/RL:	% RL	% RL	% RL			
Percent Moisture		ND 100	1 28 1 00	2 57 1 00			
TPH By SW8015 Mod	Extracted:	Jan-22-09 14 25	Jan-22-09 14 25	Jan-22-09 14 25			
	Analyzed:	Jan-22-09 20 27	Jan-22-09 20 51	Jan-22-09 21 16			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
C6-C12 Gasoline Range Hydrocarbons		ND 151	913 15 2	404 15 4			
C12-C28 Diesel Range Hydrocarbons		37.9 15.1	328 15 2	550 154			
C28-C35 Oil Range Hydrocarbons		ND 151	25 0 15 2	102 15 4			
Total TPH		379 151	1266 15 2	1056 154			

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

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

Brent Barron

Odessa Laboratory Director

.





- 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.
- \* Outside XENCO's scope of NELAC Accreditation.

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY.

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

	Phone	Fax
4143 Greenbriar Dr. Stafford, Tx 77477	(281) 240-4200	(281) 240-4280
9701 Harry Hines Blvd, Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
2505 North Falkenburg Rd, Tampa, FL 33619	(813) 620-2000	(813) 620-2033
5757 NW 158th St, Miami Lakes, FL 33014	(305) 823-8500	(305) 823-8555
12600 West I-20 East, Odessa, TX 79765	(432) 563-1800	(432) 563-1713
842 Cantwell Lane, Corpus Christi, TX 78408	(361) 884-0371	(361) 884-9116



Project Name: DCP Plant to Lea Station 6"

	Project II	<b>D:</b> 2008-275		
AP Bat	tch: 1 Matri	ix: Soil		
SU	<b>RROGATE RJ</b>	ECOVERY	STUDY	
Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		[D]	!	1
0.0330	0.0300	110	80-120	
0.0343	0.0300	114	80-120	
AP Bat	tch: 1 Matr	ix: Soil		
SU	RROGATE RI	ECOVERY	STUDY	
Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
0.0390	0.0300	130	80-120	*
0.0320	0.0300	107	80-120	
<u> </u>	tch: 1 Matr	1x: Soil	<u> </u>	
SU	RROGATE RI	ECOVERY	STUDY	
Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
ļ!		וסן		
0 0332	0.0300	111	80-120	
0.0320	0.0300	107	80-120	L
1P Bat	tch: 1 Matri	ix: Soil		
SU!	<b>RROGATE RI</b>	ECOVERY S	STUDY	
Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
0.0342	0.0300	114	80-120	
0.0266	0.0300	89	80-120	
1 /IP Bat	tch: 1 Matr	ix: Soil	<u> </u>	
SURROGATE RECOVERY STUDY				
SU	<b>RROGATE RI</b>	COVERT .		
SU Amount Found [A]	RROGATE R True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
SU Amount Found [A]	RROGATE R	Recovery %R [D]	Control Limits %R	Flags
	IP         Bat           Amount         Found           Found         [A]           0.0330         0.0343           Amount         Found           Amount         Found           Found         [A]           0.0390         0.0320           AP         Bat           0.0390         0.0320           AP         Bat           SU         Amount           Found         [A]           0.0320         Amount           Found         [A]           0.0342         0.0266           AP         Ba	Project II         AP       Batch:       1       Matri         Amount       True         Found       Amount       III         Amount       True         Amount       Image: Amount       Image: Amount         Image: Amount       Image: Amount       Image: Amount         Image: Amount       True       Matri         O.0330       O.0300       O.0300         Image: Amount       True       Matri         Amount       True       Matri         Amount       True       Amount       Image: Amount         Image: Amount       True       Amount<	Project ID: 2008-275 $IP$ Batch:IMatrix: SoilSURROGATE RECOVERYAmountTrueRecovery $[A]$ $[B]$ $\ensuremath{\%R}^{6R}$ $[D]$ 0.03300.03001100.03430.0300114 $AP$ Batch:1Matrix: SoilSURROGATE RECOVERYAmountTrueFoundAmountRecovery $[A]$ $[B]$ $\ensuremath{\%R}^{6R}$ $[D]$ 0.03900.03001300.03200.0300107 $AP$ Batch:1Matrix: SoilSURROGATE RECOVERY $Amount$ TrueFoundAmountRecovery $[A]$ $[B]$ $\ensuremath{\%R}^{6R}$ $[D]$ 0.03200.0300107 $AP$ Batch:1Matrix: SoilSURROGATE RECOVERY $Amount$ TrueFoundAmountRecovery $[A]$ $[B]$ $\ensuremath{\%R}^{6R}$ $[D]$ 0.03200.03001110.03200.03001110.03200.03001110.03200.03001110.03200.03001110.03200.03001110.03200.03001110.03200.03001110.03200.03001110.03200.03001140.03420.030089 $A$	Project ID: 2008-275         AP       Batch: 1 Matrix: Soil         SURROGATE RECOVERY STUDY         Amount       True Amount       Control Limits %R         [A]       [B]       %R       Control Limits %R         [A]       [B]       %R       %R         0.0330       0.0300       110       80-120         0.0343       0.0300       114       80-120         0.0343       0.0300       114       80-120         Amount       True Found       Recovery Me       Control Limits %R         [A]       [B]       %R       Control Limits         0.0390       0.0300       130       80-120         0.0320       0.0300       107       80-120         AP       Batch:       1       Matrix: Soil         SURROGATE RECOVERY STUDY         Amount       True Found       Recovery Me       Control Limits         [A]       [B]       %R [D]       0.0320       0.0300         0.0320       0.0300       107       80-120         Amount       True Found       Recovery Me       Control Limits         [A]       [B]       %R [D]       Control Limits

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

\*\*\* Poor recoveries due to dilution

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



Project Name: DCP Plant to Lea Station 6"

Lab Batch #: 747356         Sample: 323065-006 / SMP         Batch:         1         Matrix:         Soil           Units:         mg/kg         SURROGATE RECOVERY STUDY         Control Innits         Frage         Frage         Control Innits         Frage         Frage         Control Innits         Frage         Frage         Control Innits         Frage         Frage         Frage         Control Innits         Frage         Frage         Frage         Frage         Frage         Frage         Frage         Control Innits         Frage	Vork Orders : 323065,			Project II	):2008-275		
Units:         mg/kg         SURROGATE         RECOVERY STUDY           BTEX by EPA 8021B         Amount (Al         True (Al         Recovery (Bl         Limits %R         Plag           14-Diffuorobenzene         0.0322         0.0300         107         80-120         -           4-Bromoffuorobenzene         0.0322         0.0300         111         80-120         -           Lab Batch #:         747356         Sample:         323065-007 /SMP         Batch:         1         Matrix:         Soil           Units:         mg/kg         SURROGATE         RECOVERY STUDY         - </th <th>Lab Batch #: 747356</th> <th>Sample: 323065-006 / SMI</th> <th><u>P</u> Ba<sup>t</sup></th> <th>tch: 1 Matri</th> <th>x: Soil</th> <th></th> <th></th>	Lab Batch #: 747356	Sample: 323065-006 / SMI	<u>P</u> Ba <sup>t</sup>	tch: 1 Matri	x: Soil		
BTEX by EPA 8021B         Anount IAI         True Anount IAI         True Anount IBI         True Anount IBI         Recovery %R         Control Limits %R         Flag           1.4-Diffuorobenzene         0.0322         0.0300         107         80-120         -           4-Bromofluorobenzene         0.0334         0.0300         111         80-120         -           Lab Batch #:         747356         Sample: 323065-007 / SMP         Batch:         1         Matrix:         Soil           BTEX by EPA 8021B         Amount IAI         Amount IBI         Amount Amount IAI         True Found IBI         Recovery %R         Control ILimits %R         Flag           1.4-Difluorobenzene         0.0319         0.0300         106         80-120         -           4-Bromofluorobenzene         0.0313         0.0300         111         80-120         -           Lab Batch #:         747356         Sample: 323065-007 S / MS         Batch:         I         Matrix: Soil         -           Lab Batch #:         747356         Sample: 323065-007 S / MS         Batch:         I         Matrix: Soil         -           1.4-Difluorobenzene         0.0286         0.0300         96         80-120         -         -           1.4-Difluor	Units: mg/kg		SU	RROGATE RE	COVERY S	STUDY	
Analytes         ID         ID           1.4-Diffuorobenzene         0.0322         0.0300         107         80-120           4-Bromofluorobenzene         0.0334         0.0300         111         80-120           Lab Batch #: 747356         Sample: 323065-007 / SMP         Batch::         1         Matrix: Soil           Units:         mg/kg         SURROGATE         EECOVERY STUDY           Analytes         1/1         1/1         80-120           1.4-Diffuorobenzene         0 0319         0.0300         106         80-120           4-Bromofluorobenzene         0 0319         0.0300         106         80-120           4-Bromofluorobenzene         0.0333         0.0200         111         80-120           4-Bromofluorobenzene         0.0333         0.0200         111         80-120           4-Bromofluorobenzene         0.0333         0.0200         111         80-120           Lab Batch #: 747356         Sample: 323065-007 S / MS         Batch::         I         Matrix: Soil           Units:         mg/kg         SURROGATE         EECOVERY STUDY           Analytes         0.0288         0.0300         99         80-120           1.4-Diffuorobenzene         0.0296 <th>BTEX by I</th> <th>EPA 8021B</th> <th>Amount Found [A]</th> <th>True Amount  B]</th> <th>Recovery %R</th> <th>Control Limits %R</th> <th>Flags</th>	BTEX by I	EPA 8021B	Amount Found [A]	True Amount  B]	Recovery %R	Control Limits %R	Flags
1.4-Difluorobenzene         0.0322         0.0300         107         80-120           4-Bromofluorobenzene         0.0334         0.0300         111         80-120           Lab Batch #: 747356         Sample: 323065-007 / SMP         Batch: 1         Matrix: Soil           BTEX by EPA 8021B         Amount         True Found IAI         Manount IBI         Recovery %R         Limits %R         Plag           1.4-Difluorobenzene         0.0319         0.0300         106         80-120         -           4-Bornofluorobenzene         0.0333         0.0300         106         80-120         -           4-Bornofluorobenzene         0.0333         0.0300         106         80-120         -           Lab Batch #: 747356         Sample: 323065-007 S / MS         Batch:         I         Matrix: Soil         -           BTEX by EPA 8021B         Amount IAI         Amount IBI         Amount Amount IAI         Recovery %R         Control Limits %R         Flag           1.4-Difluorobenzene         0.0286         0.0300         96         80-120         -           1.4-Difluorobenzene         0.0286         0.0300         99         80-120         -           1.4-Difluorobenzene         0.0286         0.0300         99 <td>Ana</td> <td>lytes</td> <td>·'</td> <td>1'</td> <td>[D]</td> <td>1</td> <td>í</td>	Ana	lytes	·'	1'	[D]	1	í
4-Bromofluorobenzene         0.0334         0.0300         111         80-120           Lab Batch #: 747356         Sample: 323065-007 / SMP         Batch:         1         Matrix: Soil           Units: mg/kg         SURROGATE RECOVERY STUDY           BTEX by EPA 8021B         Amount [A]         True Recovery %R         Control binits         Flag           1.4-Difluorobenzene         0.0319         0.0300         106         80-120           4-Bromofluorobenzene         0.0333         0.0300         111         80-120           Lab Batch #: 747356         Sample: 323065-007 S / MS         Batch:         1         Matrix: Soil           Units: mg/kg         SURROGATE RECOVERY STUDY         Flag         Flag           Analytes         0.0333         0.0300         111         80-120           Lab Batch #: 747356         Sample: 323065-007 S / MS         Batch:         1         Matrix: Soil           I.4-Difluorobenzene         0.02288         0.0300         96         80-120           Lab Batch #: 747356         Sample: 323065-007 SD / MSD         Batch:         1         Matrix: Soil           Units: mg/kg         SURROGATE RECOVERY STUDY         Analytes         Initis         96         80-120         Initis	1,4-Difluorobenzene		0.0322	0.0300	107	80-120	I
Lab Batch #:         747356         Sample:         323065-007 / SMP         Batch:         1         Matrix:         Soil           Units:         mg/kg         SURROGATE RECOVERY STUDY           BTEX by EPA 8021B         Amount Found         True Annalytes         Recovery /1Al         Control BTEX         Flag           1.4-Difluorobenzene         0.0319         0.0300         106         80-120         -           4-Bromofluorobenzene         0.0333         0.0300         111         80-120         -           Lab Batch #:         747356         Sample:         323065-007 S / MS         Batch:         1         Matrix:         Soil           Units:         mg/kg         SURROGATE RECOVERY STUDY         - <td>4-Bromofluorobenzene</td> <td></td> <td>0.0334</td> <td>0.0300</td> <td>111</td> <td>80-120</td> <td></td>	4-Bromofluorobenzene		0.0334	0.0300	111	80-120	
Units: mg/kg     SURROGATE RECOVERY STUDY       BTEX by EPA 8021B     Amount Found [A]     True Amount [B]     Recovery %R [D]     Control binits %R     Flag       1.4-Difluorobenzene     0.0319     0.0300     106     80-120     -       1.4-Difluorobenzene     0.0333     0.0300     111     80-120     -       1.4-Difluorobenzene     0.0333     0.0300     111     80-120     -       1.4-Difluorobenzene     0.0288     0.0300     111     80-120     -       BTEX by EPA 8021B     Amount Found     True Amount [B]     Recovery %R     Control Limits %R     Flag       1.4-Difluorobenzene     0.0288     0.0300     96     80-120     -       1.4-Difluorobenzene     0.0296     0.0300     99     80-120     -       1.4-Difluorobenzene     0.0296     0.0300     99     80-120     -       Lab Batch #: 747356     Sample: 323065-007 SD/MSD     Batch:     1     Matrix: Soil       Units: mg/kg     SURROGATE RECOVERY STUDY     -     -       Analytes     India     Amount [B]     Recovery %R     Control Limits %R     -       1.4-Difluorobenzene     0.0300     0.0300     100     80-120     -       Lab Batch #: 747356     Sample: 323065-007 SD/MSD	Lab Batch #: 747356	Sample: 323065-007 / SM	P Ba	tch: 1 Matri	ix: Soil		
BTEX by EPA 8021B         Amount Found [A]         True Amount [B]         Recovery %R         Control %R         Flags %R           1.4-Drfluorobenzene         0.0319         0.0300         106         80-120         -           4-Bromofluorobenzene         0.0333         0.0300         111         80-120         -           Lab Batch #:         747356         Sample: 323065-007 S / MS         Batch:         I         Matrix:         Soil           Units:         mg/kg         SURROGATE         Recovery Manual         Control Recovery Manual         Flags           Manualytes         0.0288         0.0300         96         80-120         -           Lab Batch #:         747356         Sample: 323065-007 SD / MSD         Batch:         I         Matrix:         Soil           1.4-Difluorobenzene         0.0288         0.0300         96         80-120         -           Lab Batch #:         747356         Sample: 323065-007 SD / MSD         Batch:         I         Matrix:         Soil           Units:         mg/kg         SURROGATE         Recovery Manual         Control Limits         -           1.4-Difluorobenzene         0.0300         0.0300         0.0300         100         80-120	Units: mg/kg	Ī	SU	RROGATE RF	ECOVERY S	STUDY	
1.4-Diffuorobenzene         0.0319         0.0300         106         80-120           4-Bromoffuorobenzene         0.0333         0.0300         111         80-120           Lab Batch #: 747356         Sample: 323065-007 S / MS         Batch:         I         Matrix: Soil           BTEX by EPA 8021B         Amount [A]         True [B]         Macroscope         Control Limits %R         Flags           1.4-Diffuorobenzene         0.0288         0.0300         96         80-120         -           1.4-Diffuorobenzene         0.0288         0.0300         99         80-120         -           4-Bromoffuorobenzene         0.0296         0.0300         99         80-120         -           Lab Batch #: 747356         Sample: 323065-007 SD / MSD         Batch:         1         Matrix: Soil         -           Units: mg/kg         SURROGATE RECOVERY STUDY         -         -         -         -           BTEX by EPA 8021B         Amount [A]         True Found [A]         Matrix: Soil         -         -           1.4-Diffuorobenzene         0.0300         0.0300         100         80-120         -           1.4-Bromoffuorobenzene         0.0300         0.0300         100         80-120         - </td <td>BTEX by J Ana</td> <td>EPA 8021B Ilytes</td> <td>Amount Found [A]</td> <td>True Amount [B]</td> <td>Recovery %R  D]</td> <td>Control Limits %R</td> <td>Flags</td>	BTEX by J Ana	EPA 8021B Ilytes	Amount Found [A]	True Amount [B]	Recovery %R  D]	Control Limits %R	Flags
4-Bromofluorobenzene         0.0333         0.0300         111         80-120           Lab Batch #:         747356         Sample:         323065-007 S / MS         Batch:         1         Matrix:         Soil           Units:         mg/kg         SURROGATE         RECOVERY         STUDY           BTEX by EPA 8021B         Amount IAI         True Found IAI         Matrix:         Soil           Analytes         0.0288         0.0300         96         80-120           1,4-Difluorobenzene         0.0288         0.0300         96         80-120           A-Bromofluorobenzene         0.0288         0.0300         96         80-120           Lab Batch #:         747356         Sample:         323065-007 SD / MSD         Batch:         1         Matrix:         Soil           Units:         mg/kg         SURROGATE         RECOVERY STUDY           BTEX by EPA 8021B         Amount IAI         Frage         Amount IAI         Brue         Control Imits         Frage           1.4-Difluorobenzene         0.0300         0.0300         100         80-120         Emmotifue           1.4-Difluorobenzene         0.0300         0.0300         100         80-120         Emmotifue           La	1,4-Dıfluorobenzene		0 03 19	0.0300	106	80-120	ſ
Lab Batch #: 747356         Sample: 323065-007 S / MS         Batch:         I         Matrix: Soil           Units:         mg/kg         SURROGATE RECOVERY STUDY           BTEX by EPA 8021B         Amount [A]         True [B]         Recovery %R         Control Limits         Flag           1.4-Diffuorobenzene         0.0288         0.0300         96         80-120         4.80000         99         80-120         4.80000         99         80-120         4.80000         99         80-120         4.80000         99         80-120         4.80000         99         80-120         4.80000         99         80-120         4.80000         99         80-120         4.80000         99         80-120         4.80000         4.80000         99         80-120         4.80000         4.80000         99         80-120         4.80000         4.80000         1.41         1         1.800000         1.80000         1.800000	4-Bromofluorobenzene		0.0333	0.0300	111	80-120	1
Lab Batch #: 11155     Dampet Sector M and M     True Amount IBI     Recovery %R     Control Limits %R       BTEX by EPA 8021B     Amount IBI     Amount IBI     Recovery %R     IDI     Imits %R       1.4-Difluorobenzene     0.0288     0.0300     96     80-120       4-Bromofluorobenzene     0.0296     0.0300     99     80-120       Lab Batch #: 747356     Sample: 323065-007 SD / MSD     Batch: 1     Matrix: Soil       Units: mg/kg     SURROGATE RECOVERY STUDY       BTEX by EPA 8021B     Amount Found IAI     True Recovery V%R       Analytes     IDI     %R     Flags       1.4-Difluorobenzene     0.0300     0.0300     100     80-120       Lab Batch #: 747356     Sample: 323065-008 / SMP     Batch: 1     Matrix: Soil       I.4-Difluorobenzene     0.0300     0.0300     100     80-120       I.4-Difluorobenzene     0.0300     0.0300     100     80-120       Lab Batch #: 747356     Sample: 323065-008 / SMP     Batch: 1     Matrix: Soil       Units: mg/kg     SURROGATE RECOVERY STUDY     Imits %R     Flags       1.4-Difluorobenzene     0.0300     0.0300     100     80-120       I.ab Batch #: 747356     Sample: 323065-008 / SMP     Batch: 1     Matrix: Soil       Units: mg/kg	Lah Ratch #: 747356	Sample: 323065-007 S / N	AS Ba	toh i Matri	iv Soil	<u> </u>	
BTEX by EPA 8021B     Amount Found [A]     True Amount [B]     True Manunt [B]     Control We (D)     Control Limits %R     Flag       1,4-Difluorobenzene     0.0288     0.0300     96     80-120     -       4-Bromofluorobenzene     0.0296     0.0300     99     80-120     -       Lab Batch #: 747356     Sample: 323065-007 SD / MSD     Batch:     1     Matrix: Soil     -       Units: mg/kg     SURROGATE RECOVERY STUDY       BTEX by EPA 8021B     Amount Found [A]     True Recovery [A]     Recovery %R     Control Limits %R     Flag       1,4-Difluorobenzene     0.0300     0.0300     100     80-120     -       Lab Batch #: 747356     Sample: 323065-008 / SMP     Batch:     1     Matrix: Soil       1,4-Difluorobenzene     0.0300     0.0300     100     80-120       1.4-Difluorobenzene     0.0300     0.0300     100     80-120       Lab Batch #: 747356     Sample: 323065-008 / SMP     Batch:     1     Matrix: Soil       Units: mg/kg     SURROGATE RECOVERY STUDY     -     -     -       Lab Batch #: 747356     Sample: 323065-008 / SMP     Batch:     1     Matrix: Soil       Units: mg/kg     SURROGATE RECOVERY STUDY     -     -     -       Lab Batch #: 747356     Sa	Units: mg/kg	Sampre,		RROGATE RI	ECOVERY S	STUDY	·····
Analytes         IPI           1,4-Difluorobenzene         0.0288         0.0300         96         80-120           4-Bromofluorobenzene         0.0296         0.0300         99         80-120           Lab Batch #: 747356         Sample: 323065-007 SD / MSD         Batch:         1         Matrix: Soil           Units:         mg/kg         SURROGATE RECOVERY STUDY           BTEX by EPA 8021B         Amount [A]         True [B]         Recovery % % R         Control Limits % % R           1,4-Difluorobenzene         0.0300         0.0300         100         80-120           4-Bromofluorobenzene         0.0300         0.0300         100         80-120           4-Bromofluorobenzene         0.0300         0.0300         100         80-120           Lab Batch #: 747356         Sample: 323065-008 / SMP         Batch:         1         Matrix: Soil           Units:         mg/kg         SURROGATE RECOVERY STUDY         Example: 323065-008 / SMP         Batch:         1         Matrix: Soil           Units:         mg/kg         SURROGATE RECOVERY STUDY         Example: 323065-008 / SMP         Batch:         1         Matrix: Soil           Units:         mg/kg         Surrod         Amount [A]         Flags         %R	BTEX by I	EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
1.4-Difluorobenzene         0.0288         0.0300         96         80-120           4-Bromofluorobenzene         0.0296         0.0300         99         80-120           Lab Batch #:         747356         Sample:         323065-007 SD / MSD         Batch:         1         Matrix:         Soil           Units:         mg/kg         SURROGATE         RECOVERY STUDY         SURO         Limits         Flags           Analytes         1/4-Difluorobenzene         0.0300         0.0300         100         80-120           1.4-Difluorobenzene         0.0300         0.0300         100         80-120           4-Bromofluorobenzene         0.0300         0.0300         100         80-120           4-Bromofluorobenzene         0.0300         0.0300         100         80-120           Lab Batch #:         747356         Sample:         323065-008 / SMP         Batch:         1         Matrix:         Soil           Units:         mg/kg         SURROGATE         RECOVERY STUDY         SUROGATE         Control         Limits           BTEX by EPA 8021B         Amount         True         Recovery         V/M         Flags           [Analytes         [Al]         [B]         V/M	Ana	lytes	I	<u> </u>	וען		L
4-Bromofluorobenzene         0.0296         0.0300         99         80-120           Lab Batch #:         747356         Sample:         323065-007 SD / MSD         Batch:         1         Matrix:         Soil           Units:         mg/kg         SURROGATE         RECOVERY         STUDY           BTEX by EPA 8021B         Amount [A]         True [A]         Recovery [B]         Control Limits %R         Flags           Analytes         0.0300         0.0300         100         80-120            1,4-Difluorobenzene         0.0300         0.0300         100         80-120            Lab Batch #:         747356         Sample:         323065-008 / SMP         Batch:         1         Matrix:         Soil           Units:         mg/kg         Sumple:         323065-008 / SMP         Batch:         1         Matrix:         Soil           Units:         mg/kg         Sumple:         323065-008 / SMP         Batch:         1         Matrix:         Soil           BTEX by EPA 8021B         Amount [A]         True [A]         Matrix:         Soil         Control Limits         Flags           Matrix:         mg/kg         Sumple:         323065-008 / SMP         Batch:	1,4-Difluorobenzene		0.0288	0.0300	96	80-120	L
Lab Batch #: 747356       Sample: 323065-007 SD / MSD       Batch:       1       Matrix: Soil         Units:       mg/kg       SURROGATE       RECOVERY STUDY         BTEX by EPA 8021B       Amount [A]       True [B]       Recovery %R [D]       Control Limits %R [D]       Flags         1,4-Diffluorobenzene       0.0300       0.0300       100       80-120       -         4-Bromofluorobenzene       0.0300       0.0300       100       80-120       -         Lab Batch #:       747356       Sample:       323065-008 / SMP       Batch:       1       Matrix:       Soil         Units:       mg/kg       SurroGATE       RECOVERY STUDY       -       -       -         BTEX by EPA 8021B       Amount [A]       Imatrix:       Soil       -       -       -         BTEX by EPA 8021B       Amount [A]       Flags       -	4-Bromofluorobenzene		0.0296	0.0300	99	80-120	L
Units: mg/kgSURROGATE RECOVERY STUDYBTEX by EPA 8021BAmount Found [A]True Amount [B]Recovery %R [D]Control Limits %RAnalytes0.03000.030010080-1201,4-Difluorobenzene0.03000.030010080-1204-Bromofluorobenzene0.03000.030010080-120Lab Batch #: 747356Sample: 323065-008 / SMPBatch:1Matrix: SoilUnits: mg/kgSURROGATE RECOVERY STUDYBTEX by EPA 8021BAmount Found [A]True Amount [B]Control Limits %R (D]1,4-Difluorobenzene0.04220.030014180-1204-Bromofluorobenzene0.04220.030014180-120	Lab Batch #: 747356	Sample: 323065-007 SD / 7	MSD Ba	.tch: 1 Matri	ix: Soil		
BTEX by EPA 8021BAmount Found [A]True Amount [B]Recovery %R [D]Control Limits %RFlags1,4-Difluorobenzene0.03000.030010080-1204-Bromofluorobenzene0.03000.030010080-120Lab Batch #: 747356Sample: 323065-008 / SMPBatch:1Matrix: SoilUnits: mg/kgSURROGATE RECOVERY STUDYBTEX by EPA 8021BAmount Found [A]True Amount [B]Control %R %RFlags1,4-Difluorobenzene0.04220.030014180-120*4-Bromofluorobenzene0.04220.030014180-120*	Units: mg/kg		SU	RROGATE RF	<b>ECOVERY</b> S	STUDY	
1,4-Difluorobenzene       0.0300       0.0300       100       80-120         4-Bromofluorobenzene       0.0300       0.0300       100       80-120         Lab Batch #: 747356       Sample: 323065-008 / SMP       Batch:       1       Matrix:       Soil         Units: mg/kg       SURROGATE RECOVERY STUDY         BTEX by EPA 8021B       Amount [A]       True [B]       Recovery %R [D]       Control Limits %R       Flags         1,4-Difluorobenzene       0.0422       0.0300       141       80-120       *         4-Bromofluorobenzene       0.0833       0.0300       278       80-120       *	BTEX by I Ana	EPA 8021B Ilytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene       0.0300       0.0300       100       80-120         Lab Batch #: 747356       Sample: 323065-008 / SMP       Batch:       1       Matrix: Soil         Units:       mg/kg       SURROGATE       RECOVERY       STUDY         BTEX by EPA 8021B       Amount Found [A]       True [B]       Recovery %R       Control Limits       Flags         Analytes       0.0422       0.0300       141       80-120       *	1,4-Difluorobenzene		0.0300	0.0300	100	80-120	[
Lab Batch #: 747356       Sample: 323065-008 / SMP       Batch:       1       Matrix: Soil         Units: mg/kg       SURROGATE RECOVERY STUDY         BTEX by EPA 8021B       Amount Found [A]       True [B]       Recovery %R [D]       Control Limits %R       Flags         1,4-Difluorobenzene       0.0422       0.0300       141       80-120       *         4-Bromofluorobenzene       0.0833       0.0300       278       80-120       *	4-Bromofluorobenzene		0.0300	0.0300	100	80-120	í
Units: mg/kgSURROGATE RECOVERY STUDYBTEX by EPA 8021BAmount Found [A]True Amount [B]Control Limits %R [D]Analytes0.04220.030014180-120*1,4-Difluorobenzene0.08330.030027880-120*	Lab Batch #: 747356	Sample: 323065-008 / SM	P Ba	itch: 1 Matri	ix: Soil		
BTEX by EPA 8021BAmount Found [A]True Amount [B]Control Limits %R [D]Analytes0.04220.030014180-120*4-Bromofluorobenzene0.08330.030027880-120*	Units: mg/kg		SU	RROGATE RF	ECOVERY S	STUDY	
Analytes         1           1,4-Difluorobenzene         0.0422         0.0300         141         80-120         *           4-Bromofluorobenzene         0.0833         0.0300         278         80-120         *	BTEX by I	EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R (D)	Control Limits %R	Flags
4-Bromofluorohenzene 0.0833 0.0300 278 80-120 *	1 4-Difluorobenzene		0.0422	0.0300		80-120	
	4-Bromofluorobenzene		0.0422	0.0300	278	80-120	*

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

\*\*\* Poor recoveries due to dilution

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



Project Name: DCP Plant to Lea Station 6"

Vork Orders : 323065,		Project II	<b>D:</b> 2008-275			
Lab Batch #: 747356 Sample: 323065-0	109 / SMP Bat	ch: 1 Matri	ix: Soil			
Units: mg/kg	SU	<b>RROGATE RI</b>	ECOVERY S	STUDY		
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags	
Analytes		I	[D]		l	
1,4-Difluorobenzene	0 0423	0.0300	141	80-120	*	
4-Bromofluorobenzene	0.2230	0.0300	743	80-120	*	
Lab Batch #: 747356 Sample: 523469-1	-BKS / BKS Baf	tch: 1 Matri	ix: Solid			
Units: mg/kg	SU	<b>RROGATE RJ</b>	ECOVERY ?	STUDY		
BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1,4-Dıfluorobenzene	0.0277	0.0300	92	80-120		
4-Bromofluorobenzene	0.0282	0.0300	94	80-120		
Lab Batch #: 747356 Sample: 523469-1	-BLK / BLK Bat	tch: 1 Matr	ix: Solid	L		
Units: mg/kg	SU!	SURROGATE RECOVERY STUDY				
BTEX by EPA 8021B	Amount Found [A]	True Amount {Bj	Recovery %R	Control Limits %R	Flags	
Analytes		ļ	נען		ļ	
1,4-Dıfluorobenzene	0.0319	0.0300	106	80-120	j	
4-Bromofluorobenzene	0.0318	0.0300	106	80-120	<u> </u>	
Lab Batch #: 747356 Sample: 523469-1	-BSD / BSD Bat	ch: 1 Matri	ix: Solid			
Units: mg/kg	SU	RROGATE RF	ECOVERY S	STUDY		
BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1,4-Dıfluorobenzene	0.0281	0.0300	94	80-120	 I	
4-Bromofluorobenzene	0.0272	0.0300	91	80-120	 	
Lab Batch #: 747358 Sample: 322999-0	04 S / MS Bat	tch: <sup>1</sup> Matri	ix: Soil	L		
Units: mg/kg	SU!	<b>RROGATE RI</b>	ECOVERY !	STUDY		
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
Allalytes	• • •	-		1		
1-Chlorooctane	123	100	123	70-135		

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

\*\*\* Poor recoveries due to dilution

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



Project Name: DCP Plant to Lea Station 6"

Work Orders : 323065,		Project II	<b>):</b> 2008-275			
Lab Batch #: 747358 Sample: 3229	999-004 SD / MSD Bat	tch: <sup>1</sup> Matri	x: Soil			
Units: mg/kg	SU	RROGATE RI	<b>ECOVERY</b>	STUDY		
TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount  B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooctane	122	100	122	70-135		
o-Terphenyl	53.8	50.0	108	70-135		
Lab Batch # 747358 Sample 3230		toh 1 Matri	v. Soil	L		
Lab Batch #: 147556 Sample: 5256		RROGATE RI	COVERY S	STUDY		
TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooctane	109	100	109	70-135		
o-Terphenyl	57.2	50.0	114	70-135		
Lab Batch #: 747358 Sample: 3230	65-002 / SMP Bat	tch: 1 Matri	x: Soil			
Units: mg/kg	SU	RROGATE RI	ECOVERY S	STUDY	<del></del>	
TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooctane	107	100	107	70-135		
o-Terphenyl	57.4	50.0	115	70-135		
Lab Batch #: 747358 Sample: 3230	065-003 / SMP Bat	tch:   Matri	x: Soil			
Units: mg/kg	SU	RROGATE RI	ECOVERY S	STUDY		
TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooctane	101	100	101	70-135		
o-Terphenyl	54.3	50.0	109	70-135		
Lab Batch #: 747358 Sample: 3230	65-004 / SMP Bat	tch: 1 Matri	x: Soil			
Units: mg/kg	SU	SURROGATE RECOVERY STUDY				
TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooctane	103	100	103	70-135		
o-Terphenyl	57.3	50.0	115	70-135		

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

\*\*\* Poor recoveries due to dilution

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



Project Name: DCP Plant to Lea Station 6"

Work Orders : 323065,			Project II	<b>D:</b> 2008-275		
Lab Batch #: 747358	Sample: 323065-005 / SMI	P Bat	tch: <sup>1</sup> Matri	x: Soil		
Units: mg/kg		SU	RROGATE RI	ECOVERY	STUDY	
TPH By S	W8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
All2						
1-Chlorooctane		109	100	109	70-135	
		57.1	50.0	114	70-135	
Lab Batch #: 747358	Sample: 323065-006 / SMI	P Bat	tch: 1 Matri	x: Soil		
Units: mg/kg		SU	RROGATE RI	ECOVERY	STUDY	
TPH By S	W8015 Mod alytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		107	100	107	70-135	
0-Terphenyl		57.7	50.0	115	70-135	
Lab Batch #: 747358	Sample: 323065-007 / SMI	P Bat	tch: 1 Matri	x: Soil	1	
Units: mg/kg	. [	SURROGATE RECOVERY STUDY				
TPH By S	W8015 Mod alvtes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		105	100	105	70-135	
o-Terphenyl		55.0	50.0	110	70-135	
Lab Batch #: 747358	Sample: 323065-008 / SMI	P Ba	tch: <sup>1</sup> Matri	x: Soil	·	
Units: mg/kg	. [	SU	RROGATE RI	ECOVERY	STUDY	
TPH By S An:	W8015 Mod alytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	•	118	100	118	70-135	
o-Terphenyl		55.1	50.0	110	70-135	
Lab Batch #: 747358	Sample: 323065-009 / SM	P Bat	tch: 1 Matri	ix: Soil		
Units: mg/kg		SU	RROGATE RI	ECOVERY	STUDY	
TPH By S	W8015 Mod alytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
I-Chlorooctane		27.1	100	27	70-135	**
o-Terphenyl		11.0	50.0	22	70-135	**
			· · · · · · · · · · · · · · · · · · ·			

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

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B All results are based on MDL and validated for QC purposes.



Project Name: DCP Plant to Lea Station 6"

Work Orders: 323065,			Project II	D:2008-275		
Lab Batch #: 747358	Sample: 523479-1-BKS /	BKS Ba	itch: 1 Matri	ix: Solid		
Units: mg/kg		SU	RROGATE RI	ECOVERY	STUDY	
TPH By SV Anal	V8015 Mod lytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		121	100	121	70-135	
o-Terphenyl		53.1	50.0	106	70-135	
Lab Batch #: 747358	Sample: 523479-1-BLK /	BLK Ba	itch: 1 Matri	ix: Solid		
Units: mg/kg	-	SURROGATE RECOVERY STUDY				
TPH By SV Anal	V8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	•	104	100	104	70-135	·
o-Terphenyl	<u> </u>	57.6	50.0	115	70-135	
Lab Batch #: 747358	Sample: 523479-1-BSD / 1	BSD Ba	itch: 1 Matri	ix: Solid	· · · · · ·	
Units: mg/kg		su	RROGATE RI	ECOVERY	STUDY	
TPH By SV Anal	V8015 Mod lytes	Amount Found [A]	True Amount [B]	Recovery %R  D	Control Limits %R	Flags
1-Chlorooctane		120	100	120	70-135	
o-Terphenyl		53.9	50.0	108	70-135	

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

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / BAll results are based on MDL and validated for QC purposes.



LATE WE PART ALLERING Y



## **Project Name: DCP Plant to Lea Station 6"**

Work Order #: 323065	D	nto Duomau		0			Pro Date A	ject ID: 2	2008-275		
Lab Batch ID: 747356         Sample: 523469-1-	3KS	Batcl	eu: 01/22/200 h #: 1				Dute A	Matrix: S	Solid		
Units: mg/kg		BLAN	K /BLANK S	SPIKE / F	BLANK S	SPIKE DUPI	LICATE	RECOVE	ERY STUD	ŶŶ	
BTEX by EPA 8021B	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate Bassit IEI	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes		լոյ		[0]		Kesun [F]	[9]				ļ
Benzene	ND	0.1000	0 1002	100	0.1	0 1035	104	3	70-130	35	
Toluene	ND	0.1000	0.0952	95	0 1	0.0983	98	3	70-130	35	Ĺ
Ethylbenzene	ND	0.1000	0.0987	99	0.1	0.1039	104	5	71-129	35	
m,p-Xylenes	ND	0.2000	0.1947	97	0.2	0.2059	103	6	70-135	35	
o-Xylene	ND	0.1000	0.0946	95	0.1	0.0981	98	4	71-133	35	
Analyst: BHW	D	ate Prepar	ed: 01/22/200	9			Date A	nalyzed: ()	1/22/2009		
Lab Batch ID: 747358 Sample: 523479-1-	BKS	Batc	h#: 1					Matrix: S	Solid		
Units: mg/kg		BLAN	K/BLANK S	SPIKE / I	BLANK S	SPIKE DUPI	LICATE	RECOVE	ERY STUD	Ŷ	
TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	1000	1110	111	1000	1100	110	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	1080	108	1000	1080	108	0	70-135	35	

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



### Project Name: DCP Plant to Lea Station 6"



Work Order # : 323065						Project II	D: 2008-2	75			
Lab Batch ID: 747356 ( Date Analyzed: 01/23/2009	QC- Sample ID: Date Prepared:	323065- 01/22/2	-007 S 009	Ba An	tch #: alyst:	l Matrix ASA	k: Soil				
Reporting Units: mg/kg		M	ATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY :	STUDY		
BTEX by EPA 8021B	Parent Sample	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Benzene	ND	0.1007	0.0827	82	0.1007	0.0875	87	6	70-130	35	
Toluene	0 0126	0.1007	0.1042	91	0.1007	0.1071	94	3	70-130	35	
Ethylbenzene	0.0069	0.1007	0.0805	73	0.1007	0.0809	73	0	71-129	35	
m,p-Xylenes	0.0218	0.2014	0.1711	74	0.2014	0.1807	79	7	70-135	35	
o-Xylene	0.0049	0.1007	0 0781	73	0.1007	0.0816	76	4	71-133	35	
Lab Batch ID: 747358	QC- Sample ID:	322999	-004 S	Ba	tch #:	1 Matrix	x: Soil				
<b>Date Analyzed:</b> 01/22/2009	Date Prepared:	01/22/2	009	An	alyst:	BHW					
Reporting Units: mg/kg		M	ATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERYS	STUDY		
TPH By SW8015 Mod 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
C6-C12 Gasoline Range Hydrocarbons	ND	1090	1190	109	1090	1190	109	0	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1090	1140	105	1090	1120	103	2	70-135	35	

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





## Project Name: DCP Plant to Lea Station 6"

Work Order #: 323065

Lab Batch #: 747304 Date Analyzed: 01/22/2009 OC- Sample ID: 322999-005 D	Date Prepared: 01 Batch #:	Project ID: 2008-275           Prepared: 01/22/2009         Analyst: BEV           Batch #: 1         Matrix: Soil					
Reporting Units: %	SAMPLI	E / SAMPLE	DUPLIC	ATE REC	OVERY		
Percent Moisture Analyte	Parent Samp Result [A]	le Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag		
Percent Moisture	9.59	8.90	7	20			

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

	12600 West I-20 Eas	4			
	Odessa, Texas 7976	5	Phone Fax	432-563-1800 432-563-1713	
Project Manager: Camille Bryant		Project N	ame: DCP Plant to	Lea Station 6	
Company Name Basin Environmental Service Technologies, LLC		Proje	ct #: 2008-275		
Company Address P. O. Box 301		Project	Loc Lea County, N	M	
City/State/Zip Lovington, NM 88260		P	O#. PAA - D Bryan	n.	
Telephone No 1575)605-7210 Fax	No (505) 396-1429	Report Forma	at. X Standard		
Sampler Signature Burginit e-m	nail cibryant@basin-co	nsulting com	_	-	-
			Analya	ze For	
373065			TOTAL	X	32
	Meservation & For Con	Reality Matrix 40	E B	9260	
			2 44 10 10 10 10 10 10 10 10 10 10 10 10 10	BIE	Internet
			Allea a Cd		
	Le Contra	1005 1 100 1005 1 100 1005	Ag B	S B	AT IP
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	S.O. C. Lad	Att	ns (Cl rs (Cl rs As		EH T
	H H H H H H H H H H H H H H H H H H H	N N N N N N N N N N N N N N N N N N N	Carta SAR Nete Volar	S B C N	
ESW@14.5' 1/21/2009 1330		SOIL X	┼┼┾┿┿┥	×	┼┽╆┽╯
NESW@14.5' 1/21/2009 1340		SOIL X		X	╎┥╉╎
NWSW@14.5' 1/21/2009 1350		SOIL X	┟╶┼╌╎╼┿╸╎	X	┾ <del>┥┥</del> ┝
SESW@14.5' 1/21/2009 1400		SOIL X	<del>╷╷╷<sub>┍┥╸╎╶</sub>╎</del>	×	++++
SWSW@14.5' 1/21/2009 1410		SOIL X	┾┽┼╋┦╢	X	┽┽╄┦
WSW@14.5' 1/21/2009 1420		SOIL X	<del>┟╎╏┛╎</del> ╽	×	┥┽╆┽
E FLOOR@15' 1/21/2009 1430		SOIL X	<del>┦╶╿╶┤═╎╌╎╶</del> ┧	- X	┼┽╋┦
WFLOOR@15 1/21/2009 1440		SOIL X	<del>╎╎<sub>╵</sub>╎┥</del>		┾┼╃┼
			┼┾┼┽┼┤		┼┼╉╋
Instructions			Laboratory Comm	ents' 4 E	2 0 . C
			VOCs Free of Head	Intact? Ispace?	& N
Date Time Received by		Date Time	Labels on container	(s) ontainer(s)	
1 Henth 122/09 (F24			Custody seals on co	poler(s)	y di
		Date Time	Sample Hand Delya by Sampler/Qilen	t Rep) ?	¢ N
hed by Date Time Received by ELOT		Date Time	by Courier?	UPS DHL F	HEX Lone Star
1 ( have 1 )	tiolu-	C1/22/090824	Temperature Upon I	Receipt /.	0 °C

#### Environmental Lab of Texas

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

Client	Pasin / Plans
Date/ Time.	<u>(1)72/09 @ 424</u>
Lab ID #	322065
Initials	

#### Sample Receipt Checklist

			Client Initial
Temperature of container/ cooler?	(Yes)	No	<b>0°°C</b>
Shipping container in good condition?	(Yes)	No	
Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present
Custody Seals intact on sample bottles/container?	Yes	No	Not Present
Chain of Custody present?	Yes	No	
Sample instructions complete of Chain of Custody?	res	No	
Chain of Custody signed when reinquished/ received?	Yes	No	
Chain of Custody agrees with sample label(s)?	Yes,	No	ID written on Cont./ Lid
Container label(s) legible and intact?	Yes	No	Not Applicable
Sample matrix/ properties agree with Chain of Custody?	Yes	No	
Containers supplied by ELOT?	(Ye)	No	
Samples in proper container/ bottle?	Yes	No	See Below
Samples properly preserved?	(Yes	No	See Below
Sample bottles intact?	(Yes	No	
Preservations documented on Chain of Custody?	(Yes)	No	
Containers documented on Chain of Custody?	Yes	No	
Sufficient sample amount for indicated test(s)?	Yes	No	See Below
All samples received within sufficient hold time?	(Yes)	No	See Below
Subcontract of sample(s)?	Yes	No	Not Applicable
VOC samples have zero headspace?	Yes	No	Not Applicable
	Temperature of container/ cooler? Shipping container in good condition? Custody Seals intact on shipping container/ cooler? Custody Seals intact on sample bottles/container? Chain of Custody present? Sample instructions complete of Chain of Custody? Chain of Custody agrees with sample label(s)? Container label(s) legible and intact? Sample matrix/ properties agree with Chain of Custody? Container supplied by ELOT? Samples in proper container/ bottle? Sample bottles intact? Preservations documented on Chain of Custody? Containers documented on Chain of Custody? Containers documented on Chain of Custody? Sufficient sample amount for indicated test(s)? All samples received within sufficient hold time? Subcontract of sample(s)?	Temperature of container/ cooler?       (Yes)         Shipping container in good condition?       (Yes)         Custody Seals intact on shipping container/ cooler?       Yes         Custody Seals intact on sample bottles/container?       (Yes)         Chain of Custody present?       (Yes)         Sample instructions complete of Chain of Custody?       (Yes)         Chain of Custody signed when relinquished/ received?       (Yes)         Chain of Custody agrees with sample label(s)?       (Yes)         Container label(s) legible and intact?       (Yes)         Sample matrix/ properties agree with Chain of Custody?       (Yes)         Samples in proper container?       (Yes)         Samples properly preserved?       (Yes)         Samples properly preserved?       (Yes)         Sample bottles intact?       (Yes)         Preservations documented on Chain of Custody?       (Yes)         Containers documented on Chain of Custody?       (Yes)         Containers accumented on Chain of Custody?       (Yes)         Containers documented on Chain of Custody?       (Yes)         Sufficient sample amount for indicated test(s)?       (Yes)         All samples received within sufficient hold time?       (Yes)         Subcontract of sample(s)?       Yes         VOC samples ha	Temperature of container/ cooler?       CYes       No         Shipping container in good condition?       CYes       No         Custody Seals intact on shipping container/ cooler?       Yes       No         Custody Seals intact on sample bottles/container/       CYes       No         Chain of Custody present?       Yes       No         Sample instructions complete of Chain of Custody?       Yes       No         Chain of Custody grees with sample label(s)?       Yes       No         Chain of Custody agrees with sample label(s)?       Yes       No         Container label(s) legible and intact?       Yes       No         Sample matrix/ properties agree with Chain of Custody?       Yes       No         Sample matrix/ properties agree with Chain of Custody?       Yes       No         Sample in proper container/ bottle?       Yes       No         Samples in proper container/ bottle?       Yes       No         Samples bottles intact?       Yes       No         Sample bottles intact?       Yes <t< td=""></t<>

#### Variance Documentation

# Analytical Report 325004

for

# PLAINS ALL AMERICAN EH&S

**Project Manager: Daniel Bryant** 

DCP Plant to Lea Station 6-Inch 2008-275

20-FEB-09





12600 West I-20 East Odessa, Texas 79765

Texas certification numbers: Houston, TX T104704215-08B-TX - Odessa/Midland, TX T104704400-08-TX

Florida certification numbers: Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675 Norcross(Atlanta), GA E87429

> 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



20-FEB-09



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

Reference: XENCO Report No: 325004 DCP Plant to Lea Station 6-Inch Project Address: Lea County, NM

#### **Daniel Bryant**:

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 325004. 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. 325004 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron, II Odessa Laboratory Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America





## Sample Cross Reference 325004

## PLAINS ALL AMERICAN EH&S, Midland, TX

DCP Plant to Lea Station 6-Inch

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Stockpile # 1	S	Feb-12-09 13:30		325004-001
Stockpile # 2	S	Feb-12-09 13:35		325004-002
Stockpile # 3	S	Feb-12-09 13:40		325004-003
Stockpile # 4	S	Feb-12-09 13:45		325004-004
Stockpile # 5	S	Feb-12-09 13:50		325004-005



Certificate of Analysis Summary 325004 PLAINS ALL AMERICAN EH&S, Midland, TX



Project Name: DCP Plant to Lea Station 6-Inch

Date Received in Lab: Fri Feb-13-09 04:09 pm Report Date: 20-FEB-09

Contact: Daniel Bryant Project Location: Lea County, NM

Project Id: 2008-275

								Project Ma	nager:	Brent Barron,	II	
	Lab Id:	325004-001		325004-0	02	325004-	003	325004-0	004	325004-	005	
Anglusia Paguastad	Field Id:	Stockpile # 1		Stockpile	#2	Stockpile	e # 3	Stockpile	#4	Stockpile	# 5	
Analysis Requesieu	Depth:											
	Matrix.	SOIL		SOIL	ĺ	SOIL		SOIL		SOIL		
	Sampled:	Feb-12-09 13 30		Feb-12-09 1	3 35	Feb-12-09	13 40	Feb-12-09	13 45	Feb-12-09	13 50	
BTEX by EPA 8021B	Extracted:	Feb-17-09 10 15	5	Feb-17-09 1	0 15	Feb-19-09	16 45	Feb-17-09	10 15	Feb-17-09	10 15	
	Analyzed:	Feb-18-09 08 18	3	Feb-18-09 (	08 39	Feb-20-09	02 02	Feb-18-09	09 20	Feb-18-09	09 40	
	Units/RL:	mg/kg H	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Benzene		ND 0.05	35	0 3828	0 0535	3 013	0 2837	ND	0 0534	ND	0 0538	
Toluene		ND 010	70	1 867	0 1071	18 01	0 5673	0 1841	0 1067	0 2910	0 1076	
Ethylbenzene		0 9546 0 05	35	2 779	0 0535	10 27	0 2837	1 255	0 0534	0 91 54	0 0538	
m,p-Xylenes		4 183 0 10	70	10 72	0 1071	64 14	0 5673	6 117	0 1067	3 560	0 1076	
o-Xylene		3 278 0 053	35	7 116	0 0535	12 88	0 2837	3 042	0 0534	2 1 3 0	0 0538	
Total Xylenes		7.461 0.053	35	17 836	0 0535	77 02	0 2837	9 159	0 0534	5 69	0.0538	
Total BTEX		8 4156 0 053	35	22 8648	0 0535	108 313	0 2837	10 5981	0 0534	6 8964	0 0538	
Percent Moisture	Extracted:											
	Analyzed:	Feb-13-09 17 00		Feb-13-09 1	7 00	Feb-13-09	1 <b>7</b> 00	Feb-13-09	17 00	Feb-13-09	17 00	
	Units/RL:	% F	RL	%	RL	%	RL	%	RL	%	RL	
Percent Moisture		6 56 1	00	6 62	1 00	11 87	1 00	6 32	1 00	7 04	1 00	
TPH By SW8015 Mod Extrac		Feb-17-09 22 26	5	Feb-17-09 2	22 26	Feb-17-09	22 26	Feb-17-09	22 26	Feb-17-09	22 26	
	Analyzed:	Feb-18-09 18 52	2	Feb-18-09	9 15	Feb-18-09	19 38	Feb-18-09	20 01	Feb-18-09	20 24	
	Units/RL:	mg/kg F	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
C6-C12 Gasoline Range Hydrocarbons		1380 1	61	1310	80 3	2720	85 1	1060	80 1	436	80 7	
C12-C28 Diesel Range Hydrocarbons		645 1	61	593	80 3	576	85 1	518	80 1	245	80.7	
C28-C35 Oil Range Hydrocarbons		ND 1	61	ND	80 3	ND	85 1	ND	80 1	ND	80 7	
Total TPH		2025 1	61	1903	80 3	3296	85 1	1578	80 1	681	80 7	

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

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

Brent Barron

Odessa Laboratory Director





- 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.
- \* Outside XENCO's scope of NELAC Accreditation.

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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

	Phone	Fax
4143 Greenbriar Dr. Stafford, Tx 77477	(281) 240-4200	(281) 240-4280
9701 Harry Hines Blvd, Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
2505 North Falkenburg Rd, Tampa, FL 33619	(813) 620-2000	(813) 620-2033
5757 NW 158th St, Miami Lakes, FL 33014	(305) 823-8500	(305) 823-8555
12600 West I-20 East, Odessa, TX 79765	(432) 563-1800	(432) 563-1713
842 Cantwell Lane, Corpus Christi, TX 78408	(361) 884-0371	(361) 884-9116



Project Name: DCP Plant to Lea Station 6-Inch

Vork Orders : 325004,		Project II	<b>J:</b> 2008-275		
Lab Batch #: 749952 Sample: 324701-001 S / N	IS Bat	tch: 1 Matri	ix: Soil		
Units: mg/kg	SU	RROGATE RF	<b>ECOVERY</b> f	STUDY	
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
	0.0292		↓ <u>···</u> ′		<b> </b>
1,4-Diffuorobenzene	0.0285	0.0300	94 07	80-120	<b> </b>
	0.0277	0.0500			L
Lab Batch #: 749952 Sample: 324701-001 SD /	MSD Bat	ch: 1 Matri	x: Soil		
Units: mg/kg	SU	RROGATE RE	COVERY :	STUDY	
BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Dıfluorobenzene	0.0282	0.0300	94	80-120	
4-Bromofluorobenzene	0.0273	0.0300	91	80-120	[
Lab Ratch #• 749952. Sample: 325004-001 / SM	p Ba	toh: 1 Matri	iv Soil	L	
Units: mg/kg	SU SU	RROGATE RI	ECOVERY	STUDY	
DTEV by FDA 8071R	Amount	True	<u> </u>	Control	
	Found [A]	Amount [B]	Recovery %R IDI	Limits %R	Flags
Analytes	0.0000	0.0200	<u>  ""</u>		<b> </b>
1,4-Difluorobenzene	0.0332	0.0300	404	80-120	**
	V,1215	0.0300	404	80-120	<u> </u>
Lab Batch #: 749952 Sample: 325004-002 / SM	P Bat	.ch: 1 Matri	x: Soil		
Units: mg/kg	SU	RROGATE KE	COVERY :	STUDY	
BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R {D}	Control Limits %R	Flags
1,4-Dıfluorobenzene	0.0339	0.0300	113	80-120	<u> </u>
4-Bromofluorobenzene	0.1413	0.0300	471	80-120	**
Lab Batch #: 749952 Sample: 325004-004 / SM	P Bai	tch: 1 Matri	ix: Soil		
Units: mg/kg	SU	RROGATE RF	SCOVERY S	STUDY	
BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0352	0.0300	117	80-120	t
( )	0.1259	0.0300	420	80-120	**

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

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / BAll results are based on MDL and validated for QC purposes.



Project Name: DCP Plant to Lea Station 6-Inch

Vork Orders: 325004,			Project II	):2008-275		
Lab Batch #: 749952 S	sample: 325004-005 / SMP	Bat	tch: 1 Matri	x: Soil		
Units: mg/kg	- Г	SU	<b>RROGATE RF</b>	COVERY	STUDY	
BTEX by EPA 80	)21B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes		!		נטן	]	I
1,4-Difluorobenzene		0.0357	0.0300	119	80-120	
4-Bromofluorobenzene		0.0918	0.0300	306	80-120	**
Lab Batch #: 749952 S	<b>Sample:</b> 524960-1-BKS / BF	KS Bat	tch: 1 Matri	x: Solid		
Units: mg/kg	Ē	SU	<b>RROGATE RF</b>	COVERY !	STUDY	
BTEX by EPA 80 Analytes	)21B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Dıfluorobenzene		0.0276	0.0300	92	80-120	. <u></u>
4-Bromofluorobenzene		0.0261	0.0300	87	80-120	·
Lab Batch #: 749952 S	Sample: 524960-1-BLK / BI	LK Ba	tch: 1 Matri	x: Solid	·	
Units: mg/kg		SU	RROGATE RF	COVERY	STUDY	
BTEX by EPA 80	)21B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes				[ח]		I
1,4-Difluorobenzene		0.0313	0.0300	104	80-120	I
4-Bromofluorobenzene		0.0282	0.0300	94	80-120	
Lab Batch #: 749952 S	ample: 524960-1-BSD / BS	SD Bat	tch: 1 Matri	x: Solid		
Units: mg/kg		SU	RROGATE RE	COVERY S	STUDY	
BTEX by EPA 80 Analytes	21B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0273	0.0300	91	80-120	i
4-Bromofluorobenzene		0.0273	0.0300	91	80-120	i
Lab Batch #: 750237 S	Sample: 325004-003 / SMP	Ba	tch: <sup>1</sup> Matri	ix: Soil	<u> </u>	
Units: mg/kg		SU	RROGATE RF	COVERY	STUDY	
BTEX by EPA 80 Analytes	)21B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Dıfluorobenzene		0.0319	0.0300	106	80-120	ī
4-Bromofluorobenzene		0.0657	0 0300	219	80-120	1 **

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

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / BAll results are based on MDL and validated for QC purposes.



Project Name: DCP Plant to Lea Station 6-Inch

Work Orders : 325004,			Project II	<b>):</b> 2008-275		
Lab Batch #: 750237	Sample: 525080-1-BKS /	BKS Ba	tch: <sup>1</sup> Matri	x: Solid		
Units: mg/kg		SU	RROGATE RE	COVERY	STUDY	
BTEX by I	EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Ana	lytes			ועו		
1,4-Difluorobenzene		0.0262	0.0300	87	80-120	
4-Bromotluorobenzene		0.0241	0.0300	80	80-120	
Lab Batch #: 750237	Sample: 525080-1-BLK /	BLK Ba	tch: 1 Matri	x: Solid		
Units: mg/kg		SU	RROGATE RE	COVERY	STUDY	
BTEX by I	EPA 8021B lytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Dıfluorobenzene		0.0293	0.0300	98	80-120	
4-Bromofluorobenzene	<u></u>	0 0262	0.0300	87	80-120	
Lab Batch #: 750237	Sample: 525080-1-BSD /	BSD Bat	tch: 1 Matri	x: Solid	I	
Units: mg/kg	Units: mg/kg			COVERY	STUDY	
DTEV hy 1	DTEV by EDA 8031D				Control	
	EPA 0021B	Found [A]	Amount [B]	Recovery %R [D]	Limits %R	Flags
Alla			0.0200	1₩1 07	00.100	
1,4-Difluorobenzene		0.0261	0.0300	87	80-120	
4-Bromonuorobenzene		0.0240	0.0300	80	80-120	
Lab Batch #: 750044	Sample: 325004-001 / SM	IP Ba	tch: 1 Matri	x: Soil		
Units: mg/kg		SU	RROGATE RI	COVERY	STUDY	
TPH By SV Ana	W8015 Mod lytes	Amount Found [A]	True Amount  B	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		108	100	108	70-135	
o-Terphenyl		53.0	50 0	106	70-135	
Lab Batch #: 750044	Sample: 325004-002 / SM	1P Ba	tch: 1 Matri	x: Soil	<b>.</b>	
Units: mg/kg	<b>r</b>	SU	RROGATE RI	COVERY	STUDY	
TPH By SV	W8015 Mod lytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		118	100	118	70-135	
o-Terphenyl		53.4	50.0	107	70-135	

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

\*\*\* Poor recoveries due to dilution

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



Project Name: DCP Plant to Lea Station 6-Inch

Vork Orders: 325004,			Project II	<b>):</b> 2008-275		
Lab Batch #: 750044	Sample: 325004-003 / SM	P Baf	tch: 1 Matri	x: Soil		
Units: mg/kg		SU	RROGATE RE	COVERY S	STUDY	
TPH By SV	W8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Ana	lytes			[D]		
1-Chlorooctane		123	100	123	70-135	
o-Terphenyl		51.4	50.0	103	70-135	
Lab Batch #: 750044	Sample: 325004-004 / SM	P Ba	tch: <sup>1</sup> Matri	x: Soil		
Units: mg/kg	-	SU	RROGATE RP	ECOVERY S	STUDY	. <u></u>
TPH By SV	W8015 Mod Ilvtes	Amount Found [A]	True Amount  B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		112	100	112	70-135	
o-Terphenyl		51.7	50.0	103	70-135	
Lah Ratch #: 750044	Samule: 325004-005 / SM	ip Ba	toh: 1 Matri	i∗• Soil	<u>.</u>	
Units: mg/kg	Sampic		RROGATE RI	COVERY	STUDY	
		Amount	True		Control	
IPH by St	W8015 Mod	Found [A]	Amount  B]	Recovery %R	Limits %R	Flags
Ana	lytes			ען		
1-Chlorooctane		96.2	100	96	70-135	
o-Terphenyl		47.1	50.0	94	70-135	
Lab Batch #: 750044	Sample: 325090-001 S / M	IS Ba	tch:   Matri	x: Soil		
Units: mg/kg		SU	RROGATE RE	<b>ECOVERY</b> S	STUDY	
TPH By SV Ana	W8015 Mod alvtes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		114	100	114	70-135	
o-Terphenyl		58 8	50.0	118	70-135	
Lab Batch #: 750044	Sample: 325090-001 SD /	MSD Ba	tch: 1 Matri	x: Soil		
Units: mg/kg		SU	RROGATE RE	COVERY	STUDY	
TPH By SV	W8015 Mod Ilytes	Amount Found [A]	True Amount [B]	Recovery %R  D]	Control Limits %R	Flags
I-Chlorooctane		114	100	114	70-135	
o-Terphenyl		58.6	50.0	117	70-135	

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

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B All results are based on MDL and validated for QC purposes.

.



Project Name: DCP Plant to Lea Station 6-Inch

Work Orders : 325004, Lab Batch #: 750044	Sample: 524995-1-BKS /	BKS Ba	Project II tch: <sup>1</sup> Matri	<b>):</b> 2008-275 <b>x:</b> Solid		
Units: mg/kg		SU	<b>RROGATE RI</b>	COVERY	STUDY	
TPH By SW3 Analy	8015 Mod tes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		112	100	112	70-135	
o-Terphenyl		51.0	50.0	102	70-135	
Lab Batch #: 750044	Sample: 524995-1-BLK /	BLK Ba	tch: <sup>1</sup> Matri	x: Solid		
Units: mg/kg		SU	RROGATE RI	ECOVERY	STUDY Control Limits %R 70-135 70-135 STUDY Control Limits %R 70-135 70-135 STUDY Control Limits %R Fl %R 70-135 70-135	
TPH By SW Analy	8015 Mod tes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		98.5	100	99	70-135	
o-Terphenyl		47.3	50.0	95	70-135	
Lab Batch #: 750044	Sample: 524995-1-BSD /	BSD Ba	tch: <sup>1</sup> Matri	x: Solid	<u> </u>	
Units: mg/kg		SU	<b>RROGATE RI</b>	ECOVERY	STUDY	
TPH By SW3 Analy	8015 Mod tes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		114	100	114	70-135	
o-Terphenyl		51.3	50.0	103	70-135	

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

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / BAll results are based on MDL and validated for QC purposes.





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

Work Order #: 325004		<b>Project ID: </b> 2008-275									
Analyst: ASA	D	ate Prepai	red: 02/17/200	)9			Date A	nalyzed: (	)2/18/2009		
Lab Batch ID: 749952 San	1 <b>ple: 524</b> 960-1-BKS	Bate	h#: 1					Matrix: S	Solid		
Units: mg/kg		BLAN	K /BLANK	SPIKE / I	BLANK S	SPIKE DUPI	LICATE	RECOVI	ERY STUD	Ŷ	
BTEX by EPA 80211 Analytes	B Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.1007	101	0.1	0.1078	108	7	70-130	35	
Toluene	ND	0.1000	0.0997	100	0.1	0.1076	108	8	70-130	35	
Ethylbenzene	ND	0.1000	0.0976	98	0.1	0.1055	106	8	71-129	35	
m,p-Xylenes	ND	0.2000	0.2020	101	0.2	0.2186	109	8	70-135	35	
o-Xylene	ND	0.1000	0.0997	100	0.1	0.1074	107	7	71-133	35	
Analyst: ASA	D	ate Prepai	red: 02/19/200	)9			Date A	nalyzed: (	2/20/2009	-	
Lab Batch ID: 750237 San	nple: 525080-1-BKS	-BKS Batch #: 1 Matrix: Sold									
Units: mg/kg		BLAN	K/BLANK	SPIKE / I	BLANK S	PIKE DUPI	LICATE	RECOVI	ERY STUD	Ŷ	
BTEX by EPA 80211 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Bik. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.1050	105	0.1	0.1043	104	1	70-130	35	
Toluene	ND	0,1000	0.1059	106	0.1	0.1051	105	1	70-130	35	
	112										
Ethylbenzene	0.0010	0.1000	0.1059	106	0.1	0.1048	105	1	71-129	35	
Ethylbenzene m,p-Xylenes	0.0010 ND	0.1000	0.1059 0.2198	106 110	0.1	0.1048 0.2179	105 109	1	71-129 70-135	35 35	

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





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

MARCH LAND MARK MALLY VILLA

Work Order #: 325004 Analyst: BHW Lab Batch ID: 750044	<b>Sample:</b> 524995-1-B	Da	ate Prepar Batcl	red: 02/17/200 h #: 1	9			Pro Date A	ject ID: 2 nalyzed: 0 Matrix: S	2008-275 02/18/2009 Solid		
Units: mg/kg		BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
TPH By SW80 Analytes	15 Mod	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydroc	arbons	ND	1000	963	96	1000	959	96	0	70-135	35	
C12-C28 Diesel Range Hydrocar	bons	ND	1000	979	98	1000	976	98	0	70-135	35	

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



# Form 3 - MS / MSD Recoveries

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



Work Order #: 325004						Project II	<b>D:</b> 2008-2'	75			
Lab Batch ID: 749952 Date Analyzed: 02/18/2009 Benorting Units: mg/kg	QC- Sample ID: Date Prepared:	324701- 02/17/2	-001 S 009	Ba An	tch #: alyst:	l Matrix ASA	x: Soil	OVEDV			
BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	ATRIA SPIK Spiked Sample Result [C]	E / MA I Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1103	0.0881	80	0.1103	0.0871	79	1	70-130	35	
Toluene	ND	0 1103	0.0828	75	0.1103	0.0807	73	3	70-130	35	
Ethylbenzene	ND	0.1103	0.0714	65	0.1103	0.0696	63	3	71-129	35	Х
m,p-Xylenes	ND	0.2206	0.1435	65	0.2206	0 1405	64	2	70-135	35	Х
o-Xylene	ND	0.1103	0.0720	65	0.1103	0 0713	65	1	71-133	35	X
Lab Batch ID: 750044 Date Analyzed: 02/19/2009	QC- Sample ID: Date Prepared:	325090- 02/17/2	-001 S 009	Ba An	tch #: alyst:	l <b>Matri</b> BHW	<b>x:</b> Soil				
Reporting Units: mg/kg		M	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
TPH By SW8015 Mod 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
C6-C12 Gasoline Range Hydrocarbons	ND	1150	1130	98	1150	1140	99	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1150	1160	101	1150	1160	101	0	70-135	35	

Matrix Spike Percent Recovery [D] = 100\*(C-A)/BRelative 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



; | |



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

Work Order #: 325004

Lab Batch #: 749606 Date Analyzed: 02/13/2009 QC- Sample ID: 325004-001 D	Date Prepared: 02/ Batch #:	13/2009 I	Project I Analy Matr	D: 2008-275 st: BEV ix: Soil	5
Reporting Units: %	SAMPLE	/ SAMPLE	DUPLIC	ATE REC	OVERY
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result	RPD	Control Limits %RPD	Flag
Analyte		B]			
Percent Moisture	6.56	7.02	7	20	

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

En۱	ronment	al Lab of Te	exa	S							СН	AIN	OF	cus	τοργ	RE	COR	D A	ND	AN.	ALY	/SIS	RE	QUE	:st					
								1: 0	2600 dess	Wes a, Te	t I-2 xas	0 Ea: 797(	st 55								Pho Fax	ne (. )	432- 432-	-563- -583-	1 <b>800</b> 1713	1				
	Project Manager	Camille Bryant			PAGE 03 O	F 03										Proje	ect N	ame	<u>D(</u>	2P F	Pian	it to	Lea	a Sta	tior	) 6-l	inch	J		
	Company Name	Basin Environmental Se	rvice T	echnol	logies, LLC	-				_					-		Proj	ect s	20	08-	275									
	Company Address	2800 Plains Hwy				-•				_						Pr	ojeci	Loc	Le	a Co	unty	<u>, NN</u>	4							
	City/State/Zip	Lovington, NM 88260				-												PO #	PA	A - I	В	ryant	ı							
	Telephone No	(575) 605-7210	· · · ·			Fax No	£	505)	396-	429					Rej	xort F	orm	at.	X	Ste	ndar	d		I 78	٦RP			NPC	DES	
	Sampler Signature	Capulle B.	álí.	<u>x</u> -	12-	e-mail	<u>c</u>	lpu	ant	<u>@b</u>	<u>ası</u>	<u>n-ç</u> a	onsi	ultin	g cor	<u>n</u>		_							_	_		_		
(leb use	only}	]	I	(	Lu + Her	Lu										ŀ		_	T	CLP	An	halyze	e Fo	Ì	T	T		$\square$	1	
ORDE	ເ#: (ກ ຢ່າ	1				1		Г	Pres	unatio	n å i	ol Ca	ntone	rs.	Matr	14	φĪ	Т	10	TAL		$\vdash$	-	4	İ				2 9	
LAB # (lab use only)	FiEL	.D CODE	Beginning Depth	Ending Depth	Date Sampled	Tkme Sampled	field Filtered	ice of containeds	HNO,	HCI (VOA X 2)	H-SO,	NACH	None (PAH)	Other ( Specify)	Ľiveľmitkag vaster SL−Svalge GW - Arcumburte S=ScUS, ki	NP=Yon-Potace Streets Other	TPH TE FOR TY 1005	Caboris (Ca Mg Na Ki	Anions (CI SO4 Alkalanty)	SAR / ESP / GEC	Matals As Ag Ba Cd Cr Pb Hg S	Volaties	Samtraistries	BTEX JOTTBASS or BTEX 8260 RCI	NORM	РАН	EPA Paint Fider Test	Chlorides E 300	RUSH TAT (Pre-Schadule) 24.	Stendard TAT
01	Stoc	kpile #1			2/12/2009	1330	1	ı x	:						Sa	1	x							x	L	L				x
07	Stoc	kpile #2			2/12/2009	1335		1)>	4		-+	_	-		So	1	×	1.	-				4	x	$\downarrow$	ļ	Ц		$\downarrow$	X
100	Stoc	kpile #3			2/12/2009	1340	-1	Ч×	4	$\left  \right $	-+	+	_		So	1	×	+				_	-+	x	-	$\vdash$	$\vdash$	-+	+	X
4	Stoc	kpile #4			2/12/2009	1345		<u>Ч×</u>	-	$\left  \right $	-+	+	+		Soi	1	<u>×</u>  -	┿			+	+	-	× -	╀	┢	┠	-	+	<u>×</u>
102	5,00	крие из		<u> </u>	2122008	1350	+	Ŧ	+-	$\uparrow$	+	+	+		50	ť		+		-	┥	╈	-	-+-	╈	┢	$\vdash$	+	+	^
								T				T	$\uparrow$										Í	T	Ĺ			1	Í	
											-	1	1												L				_	
<u> </u>				ļ			+	╇			-	+	╂	1		╇	+-	+			_	_	-	+-	╞	┝┥	$\vdash$	+	+	
Special	nstructions			ĺ	LI			L	1		1	1				1	1	Lai	orat		Con	nmer	nts ·	1	L		4	_	1	-
Reinquis	ed by	Date Cliste	™  4-	me 1 ( )	Received by									Da	te	Tr	me	Sai VO Lat Cu	nple Cs F xels ( stody stody	Con ree on co see	itaine of He ontel ils or ils or	ers in eadsp ner(s n con n coo	ntact pace () (tain) (tain)	7 17 er(s) 5)		5 8	1.45.45 A			
Relinquist	ned by	Date	Tar	ne	Received by									Da	8	Tu	ne	Sar	nple by S	Han iamp	d De ler/C	aliver Nent l	ed Rep	2		,	¥, Y	r N	4	
Reinquist	ed by	Date	Tir	ne	Received by ELO	ia Fa	רק ון	1				4	2	Dai 131	。 ジ1	Tir L	ne U'l	Ter	by C nper	iourie สับก็	nr? h Upr	יער מיז Re	iPS 2 ecelp	pt	L	Fed 5 (	ы U	.one	Star C	

.

# Page 15 of 16

L

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

Client	Tremba Liters
Date/ Time	21301 Neci
Lab ID #	Subac -1
Initials	1L-

#### Sample Receipt Checklist

				Client Initi
#1	Temperature of container/ cooler?	Yes	No	<u>ې د</u> ۲۰
#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?	Ves	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

Date/ Time.

Contact

Contacted by

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 334309

for

# PLAINS ALL AMERICAN EH&S

**Project Manager: Daniel Bryant** 

DCP Plant to Lea Station 6 Inch 2008-275

04-JUN-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

> 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



04-JUN-09



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

Reference: XENCO Report No: 334309 DCP Plant to Lea Station 6 Inch Project Address: Lea County, NM

#### **Daniel Bryant**:

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 334309. 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. 334309 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron, II Odessa Laboratory Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America





Sample Cross Reference 334309

## PLAINS ALL AMERICAN EH&S, Midland, TX

DCP Plant to Lea Station 6 Inch

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Stockpile # 3 A	S	Jun-01-09 09:00		334309-001
### CASE NARRATIVE



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

 Project ID:
 2008-275

 Work Order Number:
 334309

Report Date: 04-JUN-09 Date Received: 06/02/2009

Sample receipt non conformances and Comments: None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-761042 BTEX-MTBE EPA 8021B SW8021BM

Batch 761042, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data not confirmed by re-analysis Samples affected are: 334309-001 D. 4-Bromofluorobenzene recovered below QC limits QC Data not confirmed by re-analysis. Samples affected are: 531177-1-BLK.

Batch: LBA-761108 TPH by SW8015 Mod None

Batch: LBA-761116 Percent Moisture None



Project Id: 2008-275

Project Location: Lea County, NM

Contact: Daniel Bryant

Certificate of Analysis Summary 334309 PLAINS ALL AMERICAN EH&S, Midland, TX



Project Name: DCP Plant to Lea Station 6 Inch

Date Received in Lab: Tue Jun-02-09 04:20 pm

Report Date: 04-JUN-09

Project Manager: Brent Barron, II

	Lab Id:	334309-001			
Analysis Requested	Field Id:	Stockpile # 3 A			[
Analysis Requesieu	Depth:				
	Matrix	SOIL			
	Sampled:	Jun-01-09 09 00			
BTEX by EPA 8021B	Extracted:	Jun-03-09 10 00			
, i i i i i i i i i i i i i i i i i i i	Analyzed:	Jun-03-09 12 25			
	Units/RL	mg/kg RL		 	
Benzene		ND 0 0526		 	
Toluene		0 1604 0 1052			
Ethylbenzene		0 2298 0 0526		 	
m,p-Xylenes		1 108 0 1052			
o-Xylene		0 4427 0 0526			
Total Xylenes		1 5507 0 0526			
Total BTEX		1 9409 0 0526			
Percent Moisture	Extracted:				
	Analyzed:	Jun-04-09 08 37			
	Units/RL:	% RL			
Percent Moisture		5 09 1 00			
TPH By SW8015 Mod	Extracted <sup>.</sup>	Jun-03-09 13 10			
	Analyzed:	Jun-03-09 15 43			
	Units/RL:	mg/kg RL			
C6-C12 Gasoline Range Hydrocarbons		290 158			
C12-C28 Diesel Range Hydrocarbons		917 158			
C28-C35 Oil Range Hydrocarbons		257 158			
Total TPH		1464 158			

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

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

Brent Barron

Odessa Laboratory Director





- 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.

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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

	Phone	Fax
4143 Greenbriar Dr, Stafford, Tx 77477	(281) 240-4200	(281) 240-4280
9701 Harry Hines Blvd, Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
2505 North Falkenburg Rd, Tampa, FL 33619	(813) 620-2000	(813) 620-2033
5757 NW 158th St, Miami Lakes, FL 33014	(305) 823-8500	(305) 823-8555
12600 West I-20 East, Odessa, TX 79765	(432) 563-1800	(432) 563-1713
842 Cantwell Lane, Corpus Christi, TX 78408	(361) 884-0371	(361) 884-9116



# Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station 6 Inch

Work Orders : 334309 Lab Batch #: 761042	9, Sample: 531177-1-BKS/B	KS Ba	Project II tch: <sup> </sup> Matri	<b>D:</b> 2008-275 <b>x:</b> Solid		
Units: mg/kg	Date Analyzed: 06/03/09 10:51	SU	RROGATE RE	ECOVERY	STUDY	
BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0321	0.0300	107	80-120	
4-Bromofluorobenzene		0.0262	0.0300	87	80-120	[
Lab Batch #: 761042	Sample: 531177-1-BSD / B	SD Ba	tch:   Matri	x: Solid		
Units: mg/kg	Date Analyzed: 06/03/09 11:13	SU	RROGATE RI	ECOVERY	STUDY	
BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0321	0.0300	107	80-120	
4-Bromofluorobenzene		0.0265	0.0300	88	80-120	
Lab Batch #: 761042	Sample: 531177-1-BLK / B	LK Ba	tch: <sup>1</sup> Matri	x: Solid	•	•
Units: mg/kg	Date Analyzed: 06/03/09 11:55	SU	RROGATE RI	ECOVERY	STUDY	
BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0276	0.0300	92	80-120	
4-Bromofluorobenzene		0.0179	0.0300	60	80-120	**
Lab Batch #: 761042	Sample: 334309-001 / SMF	' Ba	tch: <sup>1</sup> Matri	x: Soil		
Units: mg/kg	Date Analyzed: 06/03/09 12:25	SU	RROGATE RI	ECOVERY	STUDY	
BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R {D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0241	0.0300	80	80-120	
4-Bromofluorobenzene		0 0336	0.0300	112	80-120	
Lab Batch #: 761042	Sample: 334309-001 D / M	D Ba	tch: <sup>1</sup> Matri	x: Soil		L
Units: mg/kg	Date Analyzed: 06/03/09 13:08	SU	RROGATE RE	COVERY	STUDY	
BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount  B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Dıfluorobenzene		0 0238	0.0300	79	80-120	**
4-Bromofluorobenzene		0.0339	0 0300	113	80-120	

\* Surrogate outside of Laboratory QC limits

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

\*\*\* Poor recoveries due to dilution

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

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



# Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station 6 Inch

Work Orders : 334309 Lab Batch #: 761108	), Sample: 531196-1-BKS/B	KS Ba	Project II tch: 1 Matri	D: 2008-275 ix: Solid		
Units: mg/kg	Date Analyzed: 06/03/09 14:33	SU	RROGATE RI	ECOVERY	STUDY	
ТРН	By SW8015 Mod Analytes	Amount Found [A]	True Amount {B	Recovery %R [D]	Control Limits %R	Flags
I-Chlorooctane		111	100	111	70-135	
o-Terphenyl		47 5	50.0	95	70-135	
Lab Batch #: 761108	Sample: 531196-1-BSD / B	SD Ba	tch: <sup>1</sup> Matri	ix: Solid		
Units: mg/kg	Date Analyzed: 06/03/09 14:57	SU	RROGATE RI	ECOVERY	STUDY	
ТРН	By SW8015 Mod Analytes	Amount Found  A	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		112	100	112	70-135	
o-Terphenyl		49 8	50.0	100	70-135	
Lab Batch #: 761108	Sample: 531196-1-BLK / B	LK Ba	tch: <sup>1</sup> Matri	ix: Solid		·
Units: mg/kg	Date Analyzed: 06/03/09 15:20	SU	RROGATE RI	ECOVERY	STUDY	
TPH	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		101	100	101	70-135	
o-Terphenyl		52.2	50.0	104	70-135	
Lab Batch #: 761108	Sample: 334309-001 / SMP	Ba	tch: 1 Matri	ix: Soil		
Units: mg/kg	Date Analyzed: 06/03/09 15:43	SU	RROGATE RI	ECOVERY	STUDY	
ТРН	By SW8015 Mod Analytes	Amount Found [A]	True Amount  B]	Recovery %R  D	Control Limits %R	Flags
1-Chlorooctane		98.1	100	98	70-135	
o-Terphenyl		50.4	50.0	101	70-135	
Lab Batch #: 761108	Sample: 334309-001 D / MI	D Ba	tch: 1 Matri	ix: Soil		
Units: mg/kg	Date Analyzed: 06/03/09 16:06	SU	RROGATE RI	ECOVERY	STUDY	
ТРН	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R  D]	Control Limits %R	Flags
1-Chlorooctane		106	100	106	70-135	
o-Terphenyl		54.7	50.0	109	70-135	

\* Surrogate outside of Laboratory QC limits

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

\*\*\* Poor recoveries due to dilution

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

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

•



-----

**BS / BSD Recoveries** 



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

Work Order #: 334309 Analyst: ASA	D	ate Prepar	ed: 06/03/200	9			Pro Date A	ject ID: 2 nalyzed: (	2008-275 )6/03/2009		
Lab Batch ID: 761042 Sample: 531177-1-	BKS	Bate	<b>h #:</b> 1					Matrix: S	Solid		
Units: mg/kg		BLAN	K/BLANK S	SPIKE / E	BLANK S	PIKE DUPI	LICATE	RECOVE	ERY STUD	Ŷ	
BTEX by EPA 8021B	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added (E.)	Blank Spike Duplicate Result [F]	Bik. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.1092	109	01	0.1099	110	1	70-130	35	
Toluene	ND	0.1000	0.1052	105	0.1	0.1059	106	1	70-130	35	
Ethylbenzene	ND	0.1000	0.1091	109	01	0 1104	110	1	71-129	35	
m,p-Xylenes	ND	0.2000	0.2205	110	0 2	0.2228	111	1	70-135	35	
o-Xylene	ND	0.1000	0.1041	104	0.1	0.1051	105	1	71-133	35	
Analyst: BHW Lab Batch ID: 761108 Sample: 531196-1-1	D	ate Prepar Batel	•ed: 06/03/200	19			Date A	nalyzed: () Matrix: S	)6/03/2009 Solid		
Units: mg/kg		BLAN	K/BLANK S	SPIKE / F	BLANK S	PIKE DUPI	ICATE	RECOVE	ERY STUD	ŶŶ	
TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	1000	798	80	1000	792	79	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	972	97	1000	968	97	0	70-135	35	

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



# Sample Duplicate Recovery



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

Work Order #: 334309

Lab Batch #: 761042			Project I	<b>D:</b> 2008-275	;
Date Analyzed: 06/03/2009 Date Pr	epared: 06/0	3/2009	Analy	st: ASA	
QC- Sample ID: 334309-001 D	Batch #: 1		Matr	ix: Soil	
Reporting Units: mg/kg	SAMPLE	SAMPLE	DUPLIC	ATE REC	OVERY
BTEX by EPA 8021B Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Benzene	ND	ND	NC	35	
Toluene	0.1604	0.1677	4	35	
Ethylbenzene	0.2298	0.2355	2	35	
m,p-Xylenes	1.108	1.171	6	35	
o-Xylene	0.4427	0.4821	9	35	
Lab Batch #: 761116					
Date Analyzed: 06/04/2009 Date Pr	epared: 06/0	4/2009	Analy	st: BEV	
QC- Sample ID: 334305-001 D	Batch #: 1		Matr	ix: Soil	
Reporting Units: %	SAMPLE	SAMPLE	DUPLIC	ATE REC	OVERY
Percent Moisture Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	ND	ND	NC	20	
			, no	20	ł
Lab Batch #:         761108           Date Analyzed:         06/03/2009         Date Pr           QC- Sample ID:         334309-001 D         H	epared: 06/0 Batch #: 1	3/2009	Analy Matr	st: BHW	
Lab Batch #:         761108           Date Analyzed:         06/03/2009         Date Pr           QC- Sample ID:         334309-001 D         H           Reporting Units:         mg/kg         H	epared: 06/0 Batch #: 1 SAMPLE	)3/2009 / <b>SAMPLE</b>	Analy Matr DUPLIC	st: BHW ix: Soil ATE REC	OVERY
Lab Batch #: 761108 Date Analyzed: 06/03/2009 Date Pr QC- Sample ID: 334309-001 D Reporting Units: mg/kg TPH By SW8015 Mod Analyte	epared: 06/0 Batch #: 1 SAMPLE . Parent Sample Result [A]	93/2009 / SAMPLE Sample Duplicate Result [B]	Analy Matr DUPLIC RPD	st: BHW ix: Soil ATE REC Control Limits %RPD	OVERY Flag
Lab Batch #: 761108 Date Analyzed: 06/03/2009 Date Pr QC- Sample ID: 334309-001 D Reporting Units: mg/kg TPH By SW8015 Mod Analyte C6-C12 Gasolune Range Hydrocarbons	epared: 06/0 Batch #: 1 SAMPLE A Parent Sample Result [A] 290	3/2009 / SAMPLE Sample Duplicate Result [B] 294	Analy Matr DUPLIC RPD	st: BHW ix: Soil ATE REC Control Limits %RPD 35	OVERY Flag
Lab Batch #: 761108 Date Analyzed: 06/03/2009 Date Pr QC- Sample ID: 334309-001 D Reporting Units: mg/kg TPH By SW8015 Mod Analyte C6-C12 Gasoline Range Hydrocarbons C12-C28 Diesel Range Hydrocarbons	epared: 06/0 Batch #: 1 SAMPLE / Parent Sample Result [A] 290 917	93/2009 / SAMPLE Sample Duplicate Result [B] 294 963	Analy Matr DUPLIC RPD	st: BHW ix: Soil ATE RECO Control Limits %RPD 35 35	OVERY Flag

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

			-																	1													
O LAB # (tab use ordy)	FIE Stoc	LD CODE kpile #3A	Beginning Depth	Ending Depth	6/1/2009	Time Sempled	Freid Fütered	- Total # of Contravers	ž	KMO3	Ę	HISO.	NaOH	N825,05	Norte Other ( Spectry)	DW-CHINENING WIRE 12-58	W cw - srownewser 5-508	Autor agentication and		Contract (Ca Ma Ma K)	ATAN'S CON ALASSAN	SAR JESH FOCC	Motuls As As Ea Cd Cr Pb	Valactes	Sembulations	× BTEX 00218/5030 M DTEX	RCI	NOPM	Criteriae E 300			TUSH IAI (Pre-Seneaus)	X Standard IAI & UAI
t use RDEI	anty). x#: 32	भेउंठवें		, 	I				Pr	eser	vatik *	201 & I	071	tonti	uners		datru Č		8 2		T	TCU	Mg 26	T		(8260						1 24 48, 72 tres	
	Telephone No: Sampler Signature	4575) 605-7210 Camillo 12	łų	an	£	Fax No: e-mail	-	(so: cib	5) 3 ory.	ine-1 ant	429 @t	pas	<u>n-c</u>	:on	sulti	- - ng.	Rep-	21 F	orn	ati	E	] sı	and	ard		C	] TR	RP		۵	NPD	ES	
	Company Name Company Address	Basin Environmental Co P.O. Box 381	nsultir	g. U.C														Pro	Proj Sjeci	Loc	*: <u>S</u> :: <u>L</u>	RS:	¥ 21	08- ty, t	·27 :	5							
	Project Manager	Camilie Bryant														-	ŧ	roje	ict N	ати	». <u>D</u>	CP	Plo	Int	to L	.ea	Sta	llon	<b>6</b> h	nch			

and the second sec

	Environmental La	ab of Tex	as		
	Variance/ Corrective Action Rel	nort- Samo	ie Log-li	n	
		,			
Client	basin / Plains				
Date/ Time:	6.2.09 16.20	*			
Lab ID #	334309				
Initials	<u> </u>				
666615.					
	Sample Receipt	Checklist		,	
Terrer terrer	the standard state of	T VA	Nia	1 6 0 00	Client In
#1 Lempera	rure or container/ cooler/	Yed	No	0.0 0	
#2 Gustoriu	Seals intact on shipning container/ cooler?	Yes	No	Not Present	
#4 Custody	Seals intact on sample hottles/ container?	Xes	No	Not Present	<u> </u>
#5 Chain of	Custody present?	Yes	No	1000100000	t
#6 Sample I	astructions complete of Chain of Custody?	Yes	No		t
#7 Chain of	Custody signed when relinguished/ received?	Yes	No		t
#8 Chain of	Custody agrees with sample label(s)?	(Yéà	No	D watten on Cont / Lid	<u> </u>
#9 · Containe	r label(s) legible and intact?	Yes	No	Not Applicable	1
#10 Sample	matrix' properties agree with Chain of Custody?	Yes	No		
#11 Containe	ers supplied by ELOT?	Yes	No	· · · · · · · · · · · · · · · · · · ·	<u>t</u>
#12 Samples	s in proper container/ bottle?	Yes	No	See Below	<u>†                                    </u>
#13 Sample	s properly preserved?	Yës	No	See Below	T
#14 Sample	bottles intact?	Yes	No		1
#15 Preserv	ations documented on Chain of Custody?	Yes	No		1
#16 Contain	ers documented on Chain of Custody?	Yes	No	· · ·	1.
#17. Sufficier	nt sample amount for indicated test(s)?	Ves	No	See Below	
#18 All sam	ples received within sufficient hold time?	Yes	No	See Below	,
#19 Subcon	tract of sample(s)?	Yes	No	Not Applicable	
#20 VOC sa	mples have zero headspace?	(Yes)	No	Not Applicable	1
,	Varianzo Docu	montation		-,	•
		memanon			
Contact:	Contacted by.			Date/ Time:	
Perardiac					
rregarung,					· .
	· · · · · · · · · · · · · · · · · · ·		·		·····
Corrective Ad	ction Taken.			- · · ·	,
	٨.		*****	· · · · · · · · · · · · · · · · · · ·	
				4 .	
				· .	~~~~

trans.

and the second of the second s

.

# Analytical Report 322295

for

# PLAINS ALL AMERICAN EH&S

**Project Manager: Daniel Bryant** 

DCP Plant to Lea Station 6" 2008-275

14-JAN-09





12600 West I-20 East Odessa, Texas 79765

Texas certification numbers: Houston, TX T104704215-08B-TX - Odessa/Midland, TX T104704400-08-TX

Florida certification numbers: Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675 Norcross(Atlanta), GA E87429

> 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



14-JAN-09



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

Reference: XENCO Report No: 322295 DCP Plant to Lea Station 6" Project Address: Lea County, NM

#### **Daniel Bryant**:

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 322295. 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. 322295 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron, II Odessa Laboratory Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America





Sample Cross Reference 322295

## PLAINS ALL AMERICAN EH&S, Midland, TX

DCP Plant to Lea Station 6"

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Prelim GW	W	Jan-09-09 12:35		322295-001



Project Id: 2008-275

Project Location: Lea County, NM

Contact: Daniel Bryant

Certificate of Analysis Summary 322295 PLAINS ALL AMERICAN EH&S, Midland, TX



Project Name: DCP Plant to Lea Station 6"

Date Received in Lab: Tue Jan-13-09 10:36 am

Report Date: 14-JAN-09

Project Manager: Brent Barron, II

	and the second sec					
Lab Id:	322295-001					
Field Id:	Prelim GW					
Depth:						
Matrix:	WATER					
Sampled:	Jan-09-09 12 35					
Extracted:	Jan-13-09 11 00					
Analyzed:	Jan-13-09 13 39					
Units/RL:	mg/L RL					
	ND 0 0010					
	ND 00020					
	ND 0 0010					
	ND 00020					
	ND 0 0010					
	ND 0 0010					
	ND 0 0010					
	Lab Id: Field Id: Depth: Matrix: Sampled: Extracted: Analyzed: Units/RL:	Lab Id:       322295-001         Field Id:       Prelım GW         Depth:       WATER         Matrix:       WATER         Sampled:       Jan-09-09 12 35         Extracted:       Jan-13-09 13 39         Units/RL:       mg/L       RL         ND       0 0010         ND       0 0020         ND       0 0010         ND       0 0010	Lab Id:       322295-001         Field Id:       Prelim GW         Depth:	Lab Id:       322295-001         Field Id:       Prelim GW         Depth:	Lab Id:       322295-001         Field Id:       Prelim GW         Depth:	Lab Id:       322295-001         Field Id:       Prelim GW         Depth:

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

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

Brent Barron Odessa Laboratory Director





- 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.
- \* Outside XENCO's scope of NELAC Accreditation.

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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

	Phone	Fax
4143 Greenbriar Dr. Stafford, Tx 77477	(281) 240-4200	(281) 240-4280
9701 Harry Hines Blvd . Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
2505 North Falkenburg Rd. Tampa, FL 33619	(813) 620-2000	(813) 620-2033
5757 NW 158th St, Miami Lakes, FL 33014	(305) 823-8500	(305) 823-8555
12600 West I-20 East, Odessa, TX 79765	(432) 563-1800	(432) 563-1713
842 Cantwell Lane, Corpus Christi, TX 78408	(361) 884-0371	(361) 884-9116



# Form 2 - Surrogate Recoveries

Project Name: DCP Plant to Lea Station 6"

<b>/ork Orders :</b> 322295,		Project II	<b>):</b> 2008-275		
Lab Batch #: 746326 Sample	: 322082-005 S / MS Ba	itch: 1 Matri	x: Water		
Units: mg/L	SU	JRROGATE RI	<b>ECOVERY</b> S	STUDY	
BTEX by EPA 8021B	Amount Found [A]	True Amount {B]	Recovery %R	Control Limits %R	Flags
Analytes		1~1	[D]		I
1,4-Dıfluorobenzene	0.0304	0.0300	101	80-120	·
4-Bromofluorobenzene	0 0296	0.0300	99	80-120	i
Lab Batch #: 746326 Sample	e: 322082-005 SD / MSD Br	atch: 1 Matri	ix: Water		
Units: mg/L	SU	JRROGATE RJ	ECOVERY S	STUDY	
BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
v 1,4-Difluorobenzene	0.0292	0.0300	97	80-120	i
4-Bromofluorobenzene	0.0300	0 0300	100	80-120	
Lab Batch #: 746326 Sample	- 322295-001 / SMP Br	stch: 1 Matr	ix: Water		
Units: mg/L	ST	JRROGATE RJ	ECOVERY ?	STUDY	
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
Analytes			D		I
1,4-Difluorobenzene	0 0322	0.0300	107	80-120	
4-Bromofluorobenzene	0 0326	0.0300	109	80-120	L
Lab Batch #: 746326 Sample	2: 522824-1-BKS / BKS B8	atch: 1 Matri	ix: Water		<u></u>
Units: mg/L	SU	JRROGATE RI	ECOVERY S	STUDY	
BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R  D	Control Limits %R	Flags
1,4-Difluorobenzene	0.0288	0.0300	96	80-120	l
4-Bromofluorobenzene	0.0260	0.0300	87	80-120	l
Lab Batch #: 746326 Sample	e: 522824-1-BLK / BLK Br	atch: 1 Matr	ix: Water		
Units: mg/L	SU	JRROGATE RJ	ECOVERY S	STUDY	
BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R  D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	1
4-Bromofluorobenzene	0.0305	0.0300	102	80-120	i

\*\* 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"

Work Orders: 322295,

**Project ID: 2008-275** 

Lab Batch #: 746326	Sample: 522824-1-	BSD / BSD Ba	tch: <sup>1</sup> Mati	rix: Water		
Units: mg/L		SU	RROGATE R	ECOVERY	STUDY	
BTEX by H	EPA 8021B ytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0270	0.0300	90	80-120	
4-Bromofluorobenzene		0.0252	0.0300	84	80-120	

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





### Project Name: DCP Plant to Lea Station 6"

Work Order #: 322295 Analyst: ASA Lab Batch ID: 746326 Sample: 522824-1-B Units: mg/L	Da KS	ate Prepar Batcl BLAN	ed: 01/13/200 h #: 1 K /BLANK S	9 <b>5PIKE / E</b>	BLANK S	PIKE DUPI	Proj Date A	ject ID: 2 nalyzed: 0 Matrix: V RECOVE	2008-275 01/13/2009 Water ERY STUD	Ŷ	
BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Biank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.0919	92	0.1	0.0874	87	5	70-125	25	
Toluene	ND	0.1000	0.0867	87	0.1	0.0825	83	5	70-125	25	
Ethylbenzene	ND	0.1000	0.0883	88	0.1	0.0848	85	4	71-129	25	
m,p-Xylenes	ND	0.2000	0.1734	87	0.2	0.1666	83	4	70-131	25	
o-Xylene	ND	0 1000	0 0843	84	0.1	0.0812	81	4	71-133	25	

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



#### Project Name: DCP Plant to Lea Station 6"



Work Order #: 322295						Project II	<b>D:</b> 2008-23	75				
Lab Batch ID: 746326 ( Date Analyzed: 01/13/2009 Reporting Units: mg/L	QC- Sample ID: 322082-005 S Batch #: 1 Matrix: Water Date Prepared: 01/13/2009 Analyst: ASA MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag	
Benzene	ND	0.1000	0.0952	95	0 1000	0.0984	98	3	70-125	25		
Toluene	ND	0.1000	0.0935	94	0.1000	0.0962	96	2	70-125	25		
Ethylbenzene	ND	0.1000	0.0996	100	0.1000	0.1028	103	3	71-129	25		
m,p-Xylenes	ND	0.2000	0.1977	99	0.2000	0.2036	102	3	70-131	25		
o-Xylene	ND	0.1000	0.0960	96	0.1000	0.0989	99	3	71-133	25		

Matrix Spike Percent Recovery [D] = 100\*(C-A)/BRelative 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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST 12600 West L20 East 00695a, Texas 79755 Fax: 422-553-1713	Project Name. DCP Plant to Lea Station 6"	Project #: 2008-275	Desident Loss 1 and Tourish MM	Proped Loc: Lea County MM	PO #: PAA • D. Bryant	(505) 396-1429 Report Format: X Standard TRRP [	<u>cibryant@basin-consulting_com</u>	Analyze For	TOTAL X	Preservation & 1 of containers Mastrix	k W           x 901E030 Φ B E E X 92           x 901E030 Φ B E C X 90           x 901E030 Φ B E C X 90           x 1 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 +	3         Самоникание         Самоникание           3         Самоникание         Самоникание           3         Самоникание         Самоникание           3         Самоникание         Самоникание           4         Ноголикание         Самоникание           5         Самоникание         Самоникание           6         Самоникание         Самоникание           7         Самоникание         Самоникание           7         Самоникание         Самоникание           6         Самоникание         Самоникание					Laboratory Comments Sember Contenents VICoS Free of Headspace?	- H Dave Tree Lebter contractively - H Dave Tree Lebter contractively (1) - H Dave Tree Contractive (1) - H Dave Tree Co	by Samplerichent Rep 2
		ogres, LLC				Fax No	e-mail				belqms2 ef belqms2 er	9-Jan-09 1235					,	Received by A	1 2
xas		dce Technol						p			ing Depth ing Depth	бөд ——						• <u>1</u> (0	1731
ıvironmental Lab of Te	Project Manager Camille Bryant	Company Name Basin Environmental Serv	Company Address B O Roy W1	Cumpany Audress F. U. Box 301	City/Stale/Zip Levington, NM 88260	Talaphone No (575)605-7210	Sampler Signature					FIELD CODE					al instructions	Stenley Ilizing	Mar An

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

Client	BUSINENU, FKINS
Date/ Time	11309 10:36
Lab ID #	321295
initials	CIL

#### Sample Receipt Checklist

#1       Temperature of container/ cocler?       Get       No       To       Clie         #1       Temperature of container/ cocler?       Ges       No       To       CO       C         #2       Shipping container in good condition?       Ges       No       To       Cole       C         #3       Custody Seals intact on shipping container/ cooler?       Yes       No       Not Present?       Yes       No       Not Present?         #4       Custody Seals intact on sample bottles/ container?       Yes       No       Not Present?       Yes       No         #5       Chain of Custody present?       Yes       No       Image: Seals intact on sample bottles/ container?       Yes       No         #6       Sample instructions complete of Chain of Custody?       Yes       No       Image: Seals intact on sample label(s)?       Yes       No         #7       Chain of Custody signed when relinquished/ received?       Yes       No       Image: Seals intact on cont / Lid       Image: Seals intact on sample label(s)?       Yes       No       Image: Seals intact on cont / Lid       Image: Seals intact on cont / Lid       Yes       No	
#1       Temperature of container/ cooler?       Yes       No       7       0°C         #2       Shipping container in good condition?       Yes       No       1000000000000000000000000000000000000	at Initials
#2       Shipping container in good condition?       Tes       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       Not Present         #6       Sample instructons 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(5)?       Yes?       No         #8       Chain of Listody agrees with sample label(5)?       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       Not Present )         #6       Sample instructions complete of Chain of Custody?       Yes       No         #7       Chain of Custody signed when relinguished/ received?       Yes       No         #8       Chain of Custody agrees with sample label(s)?       Yes'       No       Ib written on Cont / Lud         #8       Chain of Lustody agrees with sample label(s)?       Yes'       No       Not Apple able	
#4     Custody Seals intact on sample bottles/ container?     Yes     No     Not Present       #5     Chain of Custody present?     Yes     No     Not Present       #6     Sample instructions complete of Chain of Custody?     Yes     No     No       #7     Chain of Custody signed when relinquished/ received?     Yes     No     No       #8     Chain of Custody agrees with sample label(s)?     Yes     No     Ib written on Cont / Lid       #8     Chain of Listody agrees with sample label(s)?     Yes     No     No     Actional Listody agrees with sample label(s)?	
#5 Chain of Custody present?     Yes No     No     Sample instructions complete of Chain of Custody?     Yes No     No     Transport of Custody signed when refinquished/ received?     Yes No     Ib written on Cont / Lid     Contract of Ustody agrees with sample label(s)?     Yes No     Ib written on Cont / Lid     Contract of Ustody     No     N	
#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     Continue label(s) Inst Agrees in the instruction	
#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 Continued label(s) leads and utget?	
#8 Chain of Custody agrees with sample label(s)? (es' No iD written on Cont / Lid	
1#B Container (aballe) legible and intact?	
1#5 Compiler label(s) regime and intact	
#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? Kes 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.	<u> </u>
Regarding					
Corrective Action	Taken.				
Check all that App	iy 🗌 s 🗌 c	ee attached e-mail lient understands a ooling process had	/ fax and would like to proceed I begun shortly after samp	with analysis ling event	

Appendix B Soil Boring Logs

.

					Soil Boring SB	-1							
Depth <u>(feet)</u>	Soil <u>Columns</u>	PID Reading	Petroleum F <u>Odor</u>	Petroleum <u>Stain</u>	Soil Description		Soil Paring Dataila						
		435	Heavy	Slight	0 - 5' - Clay, medium brown, sandy, fine with caliche nodules	e grained	Date Drilled October 24, 2008 Thickness of Bentonite Seal 72 Ft						
		(100)	Heavy	Slight	5 - 10' - Gravel, medium brown, well roo sandy	unded,	Depth of Exploratory Boring <u>N/A</u>						
- 15		1,015	Moderate	None	10' - 15' - Sand, light brown, well-round grained with some gravel.	led, fine	Ground Water Elevation <u>N/A</u>						
- - - 20		(395)	Slight	None									
		459	Slight	None									
- 30		(181)	None	None	15 - 35' - Sand, light brown, very fine gr	rained.	<ul> <li>Indicates the PSH level measured on</li> <li>Indicates the groundwater level measured on</li> </ul>						
		137	None	None			<ul> <li>Indicates samples selected for Laboratory Analysis</li> <li>PID Head-space reading in ppm obtained with a photo-ionization detector</li> </ul>						
		(813)	None	None	35 - 40' - Sand, light brown, very fine g damp	rained,							
		212	Heavy	None	40 - 45' - Sand, light brown, very fine gr with gravel, moist	rained,							
- 50		(886)	Slight	None	45 - 50' - Sand, reddish brown, very fin with gravel, moist	ne grained							
-		1 002	Slight	None	50 - 60' - Sand, reddish brown, very fin	ne grained							
		1,003	Slight	None	with gravel, dry	-	Notes						
60 	14 20 4 20 14 br>14 20 14 14 20 14 14 14 20 14 14 14 14 14 14 14 14 14 14 14 14 14	(1,024)	Slight	None			<ol> <li>The soil boring was advanced on date using air rotary dnilling techniques</li> </ol>						
- 65 -		955	Slight	None	60 - 70' - Clay, dark red with some calic	che	2) The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual						
	TO	622 108	Ongin	IAOUG	Noquies		3) The depths indicated are referenced from below ground surface. (bgs)						
16			Boring	Log Details	MERCENTRY NOW LEVE DEU DEU		Racin Environmental Services						
			Soil B	oring SB-1			Dasin Environmental Services						
	CP Plan	t to lea	Plains M	arketing, L.P	Jounty, New Mexico		Prep By CDS Checked By CDS						

Depth	Soil	PID	Petroleum	Petroleum	Soil Boring SB	8-2		*o	·		
(feet)	Columns	Reading	<u>Odor</u>	<u>Stain</u>	Soil Description						
Ē		26.1	None	None	0 - 5' - Clay, tan, sandy with caliche no	dules		Soil Boring Det	tails		-
		(38.1)	None	None	5 - 10' - Clay, tan-brown, sandy with ca nodules	aliche	Date Dnil Thickness Depth of	ed January s of Bentonite Seal <u>67</u> Exploratory Bonng <u>67</u>	7 9, 2009 Ft Ft		
- - - - 15 -		37.1	None	None	10 - 20' - Sand, light brown fine grained caliche nodules, damp	d with	Depth to Ground V	Groundwater			
Ē	$\Sigma$		None	None							
20		22.9	None	None	20 - 25' - Sand, light brown, very fine g with caliche nodules, dry	grained					
- 30		(35.3)	None	None	25' - 30 - Sand, light brown fine grained caliche nodules, damp	d with	y v	Indicates the PSH level r	measured or	n	-
	an an an an an an an an an an an an an a	$\bigcirc$	None	None			0	Indicates samples select	ted for Labo	pratory Analysis.	
- 35		23.9	None	None	30 - 40' - Sand, brown, fine grained, dry	у	PID	Head-space reading in p	pm obtained	d with a photo⊣oniza	ion detector
- 40		27.7									
- - 45 -		28.9	None	None	40 - 50' - Sand, brown, very fine graine gravel, damp	ed with					
50 E		(39.6)	None	None							
- 55		47.9	None	None	50 - 63' - Sand, reddish brown, with cal	liche					
		AGA	None	None	noulies, damp		Notes				
Ē		- <b>7</b> 0. <b>4</b>	None	None			1) The soil bo	oring was advanced on date	e using air ro	otary drilling	
E 65	TD	26.8 36.9	None	None	60 - 72' - Clay, dark red with some calio nodules	che	techniques 2.) The lines b boundaries	<ul> <li>between material types show</li> <li>between transitions may be</li> </ul>	wn on the p e gradual.	rofile log represent a	pproximate
							3.) The depths	s indicated are referenced f	from below (	ground surface. (bgs)	
			Boring Soil E	Log Details Boring SB-2			В	asin Enviro	onme	ental Se	rvices
	P Plant	to Lea S	Station 6-1 Plains M	Inch Lea Iarketing L F	County, New Mexico			Prep By CDS	[	Checked By CDS	
								March 16, 2009		· · · · · ·	

Appendix C Photographs



Initial Response at DCP Plant to Lea Station 6-Inch Release Site



DCP Plant to Lea Station 6-Inch Release Site



DCP Plant to Lea Station 6-Inch Release Site Soil Boring SB-1



DCP Plant to Lea Station 6-Inch Release Site Soil Boring SB-2



DCP Plant to Lea Station 6-Inch Release Site Remediation Completed and Backfilled



DCP Plant to Lea Station 6-Inch Release Site Remediation Completed and Backfilled

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

`-| State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised October 10, 2003

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

			Rele	ase Notifi	catio	$\mathbf{a}$ and $\mathbf{C}$	rrective A	ction-		an an an an an an an an an an an an an a					
						OPERA'	TOR		🛛 Initi	al Report	Π	Final Report			
Name of Co	onipany	Plains Pipel	ine. LP	<u></u>		Contact	Daniel Bryan								
Address		P.O. Box 31	19 Mic	lland, Tx 7970	2	Telephone N	No. (432) 557-5	865							
Facility Nat	me	DCP Plant to	o Lea Sta	tion 6"		Facility Type Pipeline									
Surface Ow	mer NM S	SLO		Mineral (	Owner				Lease M	No.					
				LOC	ATIO	N OF REI	EASE								
Una Letter	Section 30	Township 20S	Range 37E	Feet from the	North	/South Line	Feet from the	East/W	est Line	County Lea					
ž	_I		l]	atitude N 32	.542461	° Longitude	e W 103.288617	7°		, , ,	NE	100'			
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				NA'I	TURE	OF REL	EASE								
Type of Rele	ase Cri	ide Oil				Volume of	Release 10 bbls		Volume I	Recovered	0 bbls				
Source of Re	aease o	steer pipeline				10/8/2008	iour of Occurrence	e	Date and 10/8/2008	Hour of Dis 8 15:00	covery				
was Immedi	iate Notice	Given?	Yes 🔲	No 🗌 Not R	equired	If YES, To Larry John	Whom? son	d	10.002000			*******			
By Whom?	Daniel Bry	ant		*******		Date and H	lour 10/9/2008	08:200	AT AT "	d_aaaa					
WES & WEIGT	course Rea	iched?	Van M	No		If YES, Vo	olume Impacting t	he Waiis	wints a	Desid W.A	1				
- 		<b>ل</b> ــا		NO					<u>rt 1</u>	6 2008	}				
: (# 3 % 2517CLA	urse was In	npacted, Deser	ibe Fully.*					U		0					
т К И К						• ,		1	NP		H	A A			
· · · · · · · · · · · · · · · · · · · ·	rse of Prob	lem and Remer	tial Action	Taken *				A PI	S.		¥ \$				
anacomati corre citais per elsy to fam clian ti	ossion of a 6 Operating 0 ppm, Th	" pipeline caus pressure of the e gravity of the	ed a relea: e pipeline e crude is (	se of crude oil. C is 45 psi. Depth 55.	Clamp w of the pi	as installed or peline at the r	the pipeline to m release location is	ntigate th approxin	ne release. nately 3*	. Throughpi bgs. H2S co	ut on th ontent o	e line is 660 f the crude			
Sector Are	a Affected	and Cleanup A	ction Tak	en.* .			******								
Aspected area	a measured	an average of	30' X 95'	Area will be re	mediate	d per applicat	le guidelines.								
Cherry certi seguidants al suble beach shauld ther o or the environ freteral, state.	fy that the ill operators or the envi- operations homent. In a or local lay	information go are required to ronment. The save failed to a iddition, NMO ws and/or regu	ven above ) report an acceptanc dequately CD accept lations.	is true and comp d/or file certain r e of a C-141 repo investigate and r rance of a C-141	elete to the release n ort by the remediate report de	ne best of my otifications ar e NMOCD m e contaminati oes not relieve	knowledge and un ad perform correct arked as "Final Re on that pose a thre e the operator of r	nderstand tive actio eport" do cat to grou esponsibi	I that purs ns for rele es not reli und water ility for co	suant to NM cases which ieve the oper r, surface wa ompliance w	OCD ru may en rator of ater, hui vith any	iles and idanger liability man health other			
	(	Do 1					OIL CONS	SERVA	TION	DIVISIC	<u>DN</u>				
Pages 27 1	: Daniel I	shrant				Approved by	DistricENVIRIO	NMEN	TAL FN						
inte Envire	onmental R	/C Specialist				Approval Dat	u: 10.16.0	8 Ex	piration	Date: (Z.	16.1	08			
F-mail Addre	ss: dmbrya	ant@paalp.com	1			Conditions of	Approval.			Attached					
and Inli	16/DR		Phone	(437) 557-5865		SARN	TEANA P	,1/1		1					
Aczech Addin	tional Shee	ets If Necessa	ry	(154) 557-50015	ł	w/ Da	LO IL ENTRE	ON B	<del>y</del>		IRP-	1971			

FGRL 0234051014