

1R - 2136

WORKPLANS

DATE:

May 2009

Hansen, Edward J., EMNRD

From: Jason Henry [JHenry@paalp.com]
Sent: Tuesday, July 21, 2009 8:43 AM
To: Hansen, Edward J., EMNRD
Cc: Jeffrey P Dann
Subject: Updated analytical data for DCP Plant to Lea Station 6" #2 (1R-2136)
Attachments: DCP Plant to Lea Station 6-Inch #2 1RP-2136.pdf

Ed,

During our last phone discussion regarding your review of the remediation strategy report for the DCP Plant to Lea Station #2 site (1R-2136) you had requested that Plains obtain an additional bottomhole sample from the excavated area. A 5-point composite soil sample (**Comp. Floor @ 15'**) was collected from the bottomhole of the excavation on 06/24/2009 and submitted for laboratory analyses of TPH and BTEX. Attached are an updated site map, an updated analytical table, and the laboratory analytical report for the sample. Upon your review of the additional data for the site, Plains respectfully requests to proceed with the proposed remediation activities outlined in the remediation strategy report.

Hope you had a good vacation and thanks for your time.

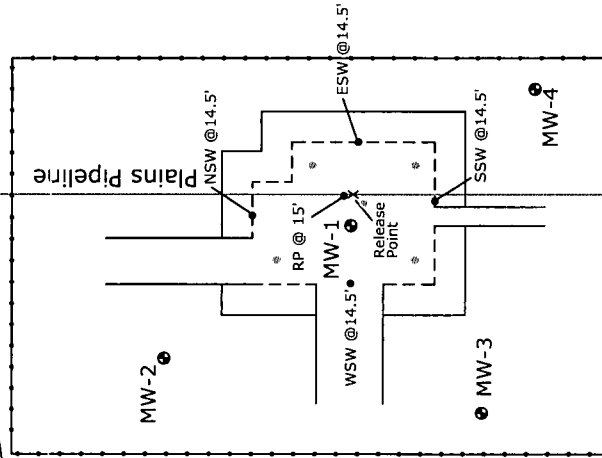
Jason Henry
575-441-1099

This inbound email has been scanned by the MessageLabs Email Security System.



Powerline

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



Legend:

- Excavation Extents
- Pipeline
- Monitor Well
- Soil Sample Location

- Powerline
- Fence
- Composite Soil Sample Points

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

Basin Environmental Services

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

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX AND TPH IN SOIL

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

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	DATE ANALYZED	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030					METHOD: 8015M					TOTAL TPH C ₆ -C ₃₅ (mg/Kg)
					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 ₆ -C ₁₂ (mg/Kg)	DRO C ₁₃ -C ₂₈ (mg/Kg)	ORO C ₂₉ -C ₃₅ (mg/Kg)		
RP @ 15'	15 Feet	02/18/09	02/24/09	In-Situ	8.847	157.400	44.8	118.3	32.13	361.477	6,510	490	<15.6	7,000	
WSW @ 14.5'	14.5 Feet	03/05/09	03/11/09	In-Situ	<0.0010	<0.0021	<0.0010	<0.0021	<0.0010	<0.0021	<15.6	<15.6	<15.6	<15.6	
ESW @ 14.5'	14.5 Feet	03/05/09	03/11/09	In-Situ	<0.0010	<0.0021	0.0011	0.0043	0.0036	0.009	<15.7	<15.7	<15.7	<15.7	
SSW @ 14.5'	14.5 Feet	03/05/09	03/11/09	In-Situ	<0.0010	<0.0021	<0.0010	<0.0021	<0.0010	<0.0021	<15.4	<15.4	<15.4	<15.4	
NSW @ 14.5'	14.5 Feet	03/05/09	03/11/09	In-Situ	<0.0010	<0.0021	0.0025	0.0072	0.0033	0.013	<15.7	<15.7	<15.7	<15.7	
Stockpile Baseline	-	03/05/09	03/11/09	-	<0.0010	<0.0021	0.0014	0.0246	0.0545	0.0805	109	321	<78.3	430	
SB-1 @ 10'	10 Feet	04/15/09	04/21/09	In-Situ	<0.0517	0.701	1.233	4.548	1.53	8.012	725	504	<155	1,229	
SB-1 @ 20'	20 Feet	04/15/09	04/21/09	In-Situ	<0.005	<0.0101	0.0753	0.4043	0.1922	0.6718	338	558	70	966	
SB-1 @ 30'	30 Feet	04/15/09	04/21/09	In-Situ	<0.0561	<0.1121	0.3639	2.283	0.979	3.6259	596	647	<84.1	1,243	
SB-1 @ 40'	40 Feet	04/15/09	04/21/09	In-Situ	<0.0052	<0.0103	<0.0052	<0.0103	<0.0052	<0.0103	51	332	29	411	
SB-1 @ 50'	50 Feet	04/15/09	04/21/09	In-Situ	<0.0011	<0.0021	<0.0011	0.0025	<0.0011	0.0025	18	91	<16	109	
SB-1 @ 60'	60 Feet	04/15/09	04/21/09	In-Situ	<0.0056	<0.0112	0.0081	0.0668	0.0311	0.106	143	413	46	602	
Comp. Floor @ 15'	15 Feet	06/24/09	07/03/09	In-Situ	<0.0010	<0.0036	0.0012	0.0023	0.0011	0.0082	<15.3	72.9	20	92.0	
MW-2 @ 10'	10 Feet	06/29/09	07/05/09	In-Situ	<0.0011	<0.0021	<0.0011	<0.0021	<0.0011	<0.0021	<16.1	<16.1	<16.1	<16.1	
MW-2 @ 20'	20 Feet	06/29/09	07/05/09	In-Situ	<0.0011	<0.0021	<0.0011	<0.0021	<0.0011	<0.0021	<16.1	<16.1	<16.1	<16.1	
MW-2 @ 30'	30 Feet	06/29/09	07/05/09	In-Situ	<0.0010	<0.0021	<0.0010	<0.0021	<0.0010	<0.0021	<15.7	<15.7	<15.7	<15.7	
MW-2 @ 40'	40 Feet	06/29/09	07/05/09	In-Situ	<0.0010	<0.0021	<0.0010	<0.0021	<0.0010	<0.0021	<15.4	<15.4	<15.4	<15.4	
MW-2 @ 50'	50 Feet	06/29/09	07/05/09	In-Situ	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<15.1	<15.1	<15.1	<15.1	
MW-2 @ 60'	60 Feet	06/29/09	07/05/09	In-Situ	<0.0010	<0.0021	<0.0010	<0.0021	<0.0010	<0.0021	<15.4	<15.4	<15.4	<15.4	
MW-2 @ 70'	70 Feet	06/29/09	07/05/09	In-Situ	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<15.2	<15.2	<15.2	<15.2	
MW-2 @ 75'	75 Feet	06/29/09	07/05/09	In-Situ	<0.0011	<0.0021	<0.0011	<0.0021	<0.0011	<0.0021	<15.7	<15.7	<15.7	<15.7	
MW-4 @ 10'	10 Feet	06/29/09	07/05/09	In-Situ	<0.0011	<0.0021	<0.0011	<0.0021	<0.0011	<0.0021	<15.9	<15.9	<15.9	<15.9	
MW-4 @ 20'	20 Feet	06/29/09	07/05/09	In-Situ	<0.0011	<0.0021	<0.0011	<0.0021	<0.0011	<0.0021	<15.8	<15.8	<15.8	<15.8	
MW-4 @ 30'	30 Feet	06/29/09	07/05/09	In-Situ	<0.0014	<0.0027	<0.0014	<0.0027	<0.0014	<0.0027	<20.2	94.5	50.8	145.3	
MW-4 @ 40'	40 Feet	06/29/09	07/05/09	In-Situ	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<15.3	<15.3	<15.3	<15.3	
MW-4 @ 50'	50 Feet	06/29/09	07/05/09	In-Situ	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<15.1	<15.1	<15.1	<15.1	
MW-4 @ 60'	60 Feet	06/29/09	07/05/09	In-Situ	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<15.1	<15.1	<15.1	<15.1	
MW-4 @ 70'	70 Feet	06/29/09	07/05/09	In-Situ	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<15.1	<15.1	<15.1	<15.1	
MW-4 @ 75'	75 Feet	06/29/09	07/05/09	In-Situ	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<15.0	<15.0	<15.0	<15.0	
MW-3 @ 10'	10 Feet	06/29/09	07/05/09	In-Situ	<0.0010	<0.0021	<0.0010	<0.0021	<0.0010	<0.0021	<15.7	<15.7	<15.7	<15.7	
MW-3 @ 20'	20 Feet	06/29/09	07/05/09	In-Situ	<0.0010	<0.0021	<0.0010	<0.0021	<0.0010	<0.0021	<15.7	<15.7	<15.7	<15.7	

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX AND TPH IN SOIL

PLAINS PIPELINE, L.P.
DCP PLANT TO LEA STATION 6-INCH #2
LEA COUNTY, NEW MEXICO

SRS: 2009-039

NMOCD REFERENCE NO: IRP-2136

MW-3 @ 30'	30 Feet	06/29/09	07/05/09	In-Situ	<0.0010	<0.0021	<0.0010	<0.0021	<0.0010	<0.0021	<15.5	<15.5	<15.5	<15.5
MW-3 @ 40'	40 Feet	06/29/09	07/06/09	In-Situ	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<15.2	<15.2	<15.2	<15.2
MW-3 @ 50'	50 Feet	06/29/09	07/06/09	In-Situ	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<15.1	<15.1	<15.1	<15.1
MW-3 @ 60'	60 Feet	06/29/09	07/06/09	In-Situ	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<15.1	<15.1	<15.1	<15.1
MW-3 @ 70'	70 Feet	06/29/09	07/06/09	In-Situ	<0.0010	<0.0021	<0.0010	<0.0021	<0.0010	<0.0021	<15.4	<15.4	<15.4	<15.4
MW-3 @ 75'	75 Feet	06/29/09	07/05/09	In-Situ	<0.0010	<0.0021	<0.0010	<0.0021	<0.0010	<0.0021	<15.5	<15.5	<15.5	<15.5
NMOCD Regulatory Standard					10					50				100

Analytical Report 336455
for
PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry
DCP Plant to Lea Station 6-Inch # 2
2009-039

07-JUL-09



12600 West I-20 East Odessa, Texas 79765

Texas certification numbers:

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

Florida certification numbers:

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

Arizona certification numbers:

Houston, TX AZ0738

South Carolina certification numbers:

Norcross(Atlanta), GA 98015

North Carolina certification numbers:

Norcross(Atlanta), GA 483

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



07-JUL-09

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

Reference: XENCO Report No: **336455**
DCP Plant to Lea Station 6-Inch # 2
Project Address: Lea County, NM

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 336455. 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. 336455 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

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Sample Cross Reference 336455



PLAINS ALL AMERICAN EH&S, Midland, TX

DCP Plant to Lea Station 6-Inch # 2

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Comp Floor @ 15'	S	Jun-24-09 14:30		336455-001



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

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

Project ID: 2009-039

Work Order Number: 336455

Report Date: 07-JUL-09

Date Received: 06/25/2009

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-763629 Percent Moisture

None

Batch: LBA-763866 TPH by SW8015 Mod

None



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

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

Project ID: 2009-039

Work Order Number: 336455

Report Date: 07-JUL-09

Date Received: 06/25/2009

*Batch: LBA-764550 BTEX-MTBE EPA 8021B
SW8021BM*

Batch 764550, Benzene RPD was outside laboratory control limits in the LCS. The RPD was within limits for the Matrix Spike and Matrix Spike duplicate. Analyst spiking error suspected. Samples affected are: 336455-001

SW8021BM

Batch 764550, Ethylbenzene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate.

Samples affected are: 336455-001.

The Laboratory Control Sample for m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits

SW8021BM

Batch 764550, Benzene, Toluene recovered below QC limits in the laboratory control sample these compounds were within QC limits in the CCVs as well as the Laboratory Control Sample Duplicate, analyst spiking error is suspected, there should be no appreciable affect to the sample data..

Samples affected are: 336455-001.

SW8021BM

Batch 764550, 4-Bromofluorobenzene recovered below QC limits; QC Data not confirmed by re-analysis. Samples affected are: 533130-1-BLK.



Certificate of Analysis Summary 336455
PLAINS ALL AMERICAN EH&S, Midland, TX
Project Name: DCP Plant to Lea Station 6-Inch # 2




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

Date Received in Lab: Thu Jun-25-09 09:05 am
Report Date: 07-JUL-09
Project Manager: Brent Barron, II

<i>Analysis Requested</i>		Lab Id:	336455-001				
		Field Id:	Comp Floor @ 15'				
		Depth:	SOIL				
		Matrix:					
		Sampled:	Jun-24-09 14:30				
BTEX by EPA 8021B	Extracted:	Jul-01-09 15:30					
	Analyzed:	Jul-03-09 02:58					
	Units/RL:	mg/kg RL					
	Benzene	ND 0.0010					
	Toluene	0.0036 0.0020					
	Ethylbenzene	0.0012 0.0010					
	m,p-Xylenes	0.0023 0.0020					
	o-Xylene	0.0011 0.0010					
	Total Xylenes	0.0034 0.0010					
	Total BTEX	0.0082 0.0010					
Percent Moisture		Extracted:					
	Analyzed:	Jun-25-09 16:00					
	Units/RL:	% RL					
Percent Moisture			1.94 1.00				
TPH By SW8015 Mod		Extracted:	Jun-27-09 11:17				
	Analyzed:	Jun-27-09 22:06					
	Units/RL:	mg/kg RL					
C6-C12 Gasoline Range Hydrocarbons			ND 15.3				
C12-C28 Diesel Range Hydrocarbons			72.9 15.3				
C28-C35 Oil Range Hydrocarbons			20.0 15.3				
Total TPH			92.9 15.3				

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

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Brent Barron
Odessa Laboratory Director



Flagging Criteria



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

BRL Below Reporting Limit.

RL Reporting Limit

* Outside XENCO's scope of NELAC Accreditation.

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(305) 823-8500	(305) 823-8555
(432) 563-1800	(432) 563-1713
(361) 884-0371	(361) 884-9116



Form 2 - Surrogate Recoveries

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

Work Orders : 336455,

Project ID: 2009-039

Lab Batch #: 764550

Sample: 533130-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 07/02/09 22:40

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0306	0.0300	102	80-120	

Lab Batch #: 764550

Sample: 533130-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 07/02/09 23:02

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0317	0.0300	106	80-120	

Lab Batch #: 764550

Sample: 533130-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 07/02/09 23:45

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0263	0.0300	88	80-120	
4-Bromofluorobenzene	0.0146	0.0300	49	80-120	*

Lab Batch #: 764550

Sample: 336455-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/03/09 02:58

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0250	0.0300	83	80-120	
4-Bromofluorobenzene	0.0265	0.0300	88	80-120	

Lab Batch #: 764550

Sample: 336622-003 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/03/09 07:36

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0292	0.0300	97	80-120	
4-Bromofluorobenzene	0.0305	0.0300	102	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

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

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



Form 2 - Surrogate Recoveries

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

Work Orders : 336455,

Project ID: 2009-039

Lab Batch #: 764550

Sample: 336622-003 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 07/03/09 07:58

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1,4-Difluorobenzene		0.0293	0.0300	98	80-120	
4-Bromofluorobenzene		0.0286	0.0300	95	80-120	

Lab Batch #: 763866

Sample: 532726-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 06/27/09 12:58

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1-Chlorooctane		108	100	108	70-135	
o-Terphenyl		47.4	50.0	95	70-135	

Lab Batch #: 763866

Sample: 532726-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 06/27/09 13:24

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1-Chlorooctane		106	100	106	70-135	
o-Terphenyl		46.6	50.0	93	70-135	

Lab Batch #: 763866

Sample: 532726-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 06/27/09 13:51

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1-Chlorooctane		93.3	100	93	70-135	
o-Terphenyl		49.8	50.0	100	70-135	

Lab Batch #: 763866

Sample: 336455-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 06/27/09 22:06

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes						
1-Chlorooctane		89.9	100	90	70-135	
o-Terphenyl		49.2	50.0	98	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

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

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



Form 2 - Surrogate Recoveries

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

Work Orders : 336455,

Project ID: 2009-039

Lab Batch #: 763866

Sample: 336334-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 06/27/09 23:48

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	194	200	97	70-135	
o-Terphenyl	89.6	100	90	70-135	

Lab Batch #: 763866

Sample: 336334-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 06/28/09 00:13

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	197	200	99	70-135	
o-Terphenyl	91.5	99.9	92	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

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

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



BS / BSD Recoveries



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

Work Order #: 336455

Analyst: ASA

Lab Batch ID: 764550

Sample: 533130-1-BKS

Date Prepared: 07/01/2009

Batch #: 1

Project ID: 2009-039

Date Analyzed: 07/02/2009

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY												
Units: mg/kg		BTEX by EPA 8021B										
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag	
	Benzene	ND	0.1000	0.0534	53	0.1	0.0802	80	40	70-130	35	LF
	Toluene	ND	0.1000	0.0608	61	0.1	0.0841	84	32	70-130	35	L
	Ethylbenzene	ND	0.1000	0.0722	72	0.1	0.0922	92	24	71-129	35	
	m,p-Xylenes	ND	0.2000	0.1470	74	0.2	0.1844	92	23	70-135	35	
	o-Xylene	ND	0.1000	0.0719	72	0.1	0.0880	88	20	71-133	35	

Analyst: BHW

Lab Batch ID: 763866

Sample: 532726-1-BKS

Date Prepared: 06/27/2009

Batch #: 1

Date Analyzed: 06/27/2009

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY												
TPH By SW8015 Mod		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
C6-C12 Gasoline Range Hydrocarbons		ND	1000	849	85	1000	843	84	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons		ND	1000	912	91	1000	899	90	1	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 # 2

Work Order #: 336455

Lab Batch ID: 764550

Date Analyzed: 07/03/2009

Reporting Units: mg/kg

Project ID: 2009-039

QC- Sample ID: 336622-003 S

Date Prepared: 07/01/2009

Batch #: 1 Matrix: Soil

Analyst: ASA

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Spiked Sample Result [F]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
BTEX by EPA 8021B												
Benzene	ND	0.1006	0.0873	87	0.1006	0.0879	0.0879	87	1	70-130	35	
Toluene	ND	0.1006	0.0712	71	0.1006	0.0719	0.0719	71	1	70-130	35	
Ethylbenzene	ND	0.1006	0.0399	40	0.1006	0.0394	0.0394	39	1	71-129	35	X
m,p-Xylenes	ND	0.2013	0.0793	39	0.2013	0.0840	0.0840	42	6	70-135	35	X
o-Xylene	ND	0.1006	0.0538	53	0.1006	0.0526	0.0526	52	2	71-133	35	X

Lab Batch ID: 763866

Date Analyzed: 06/27/2009

Reporting Units: mg/kg

QC- Sample ID: 336334-001 S

Date Prepared: 06/27/2009

Batch #: 1 Matrix: Soil

Analyst: BHW

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Spiked Sample Result [F]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
TPH By SW8015 Mod												
C6-C12 Gasoline Range Hydrocarbons	ND	1010	869	86	1010	878	878	87	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1010	970	96	1010	989	989	98	2	70-135	35	

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

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

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



Sample Duplicate Recovery



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

Work Order #: 336455

Lab Batch #: 763629

Project ID: 2009-039

Date Analyzed: 06/25/2009

Date Prepared: 06/25/2009

Analyst: WRU

QC- Sample ID: 336424-001 D

Batch #: 1

Matrix: Soil

Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	17.2	17.2	0	20	

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

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

BRL - Below Reporting Limit

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

Client: Basin / Plains
Date/ Time: 6.25.09 9:05
Lab ID #: 330455
Initials: AL

Sample Receipt Checklist

			Client Initials	
#1	Temperature of container/ cooler?	<input checked="" type="checkbox"/> Yes No	4.6 °C	
#2	Shipping container in good condition?	<input checked="" type="checkbox"/> Yes No		
#3	Custody Seals intact on shipping container/ cooler?	Yes No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	<input checked="" type="checkbox"/> Yes No	Not Present	
#5	Chain of Custody present?	<input checked="" type="checkbox"/> Yes No		
#6	Sample instructions complete of Chain of Custody?	<input checked="" type="checkbox"/> Yes No		
#7	Chain of Custody signed when relinquished/ received?	<input checked="" type="checkbox"/> Yes No		
#8	Chain of Custody agrees with sample label(s)?	<input checked="" type="checkbox"/> Yes No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	<input checked="" type="checkbox"/> Yes No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	<input checked="" type="checkbox"/> Yes No		
#11	Containers supplied by ELOT?	<input checked="" type="checkbox"/> Yes No		
#12	Samples in proper container/ bottle?	<input checked="" type="checkbox"/> Yes No	See Below	
#13	Samples properly preserved?	<input checked="" type="checkbox"/> Yes No	See Below	
#14	Sample bottles intact?	<input checked="" type="checkbox"/> Yes No		
#15	Preservations documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes No		
#16	Containers documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes No		
#17	Sufficient sample amount for indicated test(s)?	<input checked="" type="checkbox"/> Yes No	See Below	
#18	All samples received within sufficient hold time?	<input checked="" type="checkbox"/> Yes No	See Below	
#19	Subcontract of sample(s)?	Yes No	Not Applicable	
#20	VOC samples have zero headspace?	<input checked="" type="checkbox"/> Yes No	Not Applicable	

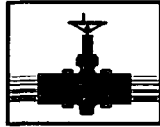
Variance Documentation

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

Regarding: _____

Corrective Action Taken: _____

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



PLAINS
PIPELINE, L.P.

RECEIVED

2009 JUN 1 PM 4:06

May 20, 2009

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

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

Dear Mr. Hansen:

Plains Pipeline, L.P. is pleased to submit the attached *Remediation Summary and Proposed Remediation Strategy*, dated May 2009, for the DCP Plant to Lea Station 6-inch #2 site. This site is located in Section 31 of Township 20 South, and Range 37 East of Lea County, New Mexico. This document details the proposed soil and groundwater remediation activities to be performed at the site.

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

Sincerely,

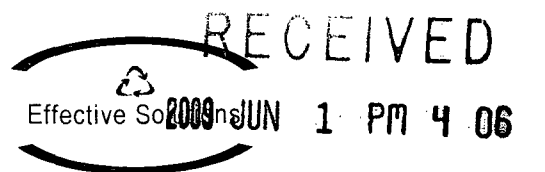
Jason Henry
Remediation Coordinator
Plains All American

CC: Larry Johnson, NMOCD, Hobbs Office

Enclosure

Basin Environmental Consulting, LLC

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



REMEDIATION SUMMARY

AND PROPOSED

REMEDIATION STRATEGY

**PLAINS PIPELINE, L.P. (231735)
DCP Plant to Lea Station 6-Inch #2
Lea County, New Mexico
Plains SRS # 2009-039**

**UNIT LTR "F" (SE ¼ /NW ¼), Section 31, Township 20 South, Range 37 East
Latitude 32.5316667° North, Longitude 103.2911111° West
NMOCD Reference # 1RP-2136**

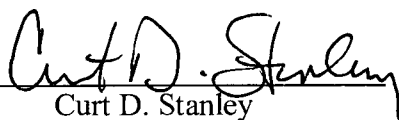
Prepared For:

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

Prepared By:

Basin Environmental Consulting, LLC
2800 Plains Highway
Lovington, New Mexico 88260

May 2009


Curt D. Stanley

Project Manager

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SUMMARY OF SOIL REMEDIATION ACTIVITIES	2
SUMMARY OF GROUNDWATER REMEDIATION ACTIVITIES	3
PROPOSED REMEDIATION ACTIVITIES	3
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FIGURES

- Figure 1 – Site Location Map
- Figure 2 – Site and Sample Location Map
- Figure 2 – Proposed Monitor Well Location Map

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- Table 1 – Concentrations of Benzene, BTEX and TPH in Soil

APPENDICES

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

INTRODUCTION AND BACKGROUND INFORMATION

Basin Environmental Consulting, LLC (Basin), on behalf of Plains Pipeline, L.P. (Plains), has prepared this Remediation Summary and Proposed Remediation Strategy for the release site known as DCP Plant to Lea Station 6-Inch #2 (SRS # 2009-039). The legal description of the release site is Unit Letter "F" (SE ¼ NW ¼), Section 31, Township 20 South, Range 37 East, in Lea County, New Mexico. The property affected by the release is owned by The State of New Mexico and is administered by the State Land Office (ROE permit #1777). The release site GPS coordinates are 32.5316667° North and 103.2911111° West. Please reference Figure 1 for a Site Location Map and Figure 2 for a Site and Sample Location Map. The Release Notification and Corrective Action (Form C-141) is provided as Appendix D.

On February 12, 2009, Plains discovered a crude oil release from a six (6)-inch steel pipeline. During initial response activities, Plains installed a temporary pipeline clamp on the pipeline to mitigate the release. The crude oil release resulted in a surface stain measuring approximately ten (10) feet in width and twelve (12) feet in length. The initial site assessment indicated approximately four (4) barrels of crude oil was released from the pipeline and Plains initially classified the release as "non-reportable". On February 17, 2009, following initial response activities, excavation of the hydrocarbon impacted soil began at the site. On February 25, 2009, Plains representatives reclassified the release as "reportable", based on the depth of soil impact and visual observations. Plains notified the New Mexico Oil Conservation Division (NMOCD) - Hobbs District Office of the release and a Release Notification and Corrective Action (Form C-141) was submitted. The Form C-141 indicated approximately twenty-five (25) barrels of crude oil was released from the pipeline, with no recovery. The cause of the release was attributed to external corrosion of the pipeline. General photographs of the site are provided as Appendix C.

NMOCD SITE CLASSIFICATION

According to data obtained from the New Mexico Office of the State Engineer (NMOSE), no water wells have been registered in Section 30. A groundwater trend reference map utilized by NMOCD indicates groundwater should be encountered at approximately fifty (50) to seventy-five (75) feet below ground surface (bgs). Soil boring (SB-1) advanced by Plains and subsequently converted to a groundwater monitor well (MW-1) at the release site, indicated groundwater was encountered at a depth of approximately seventy-six (76) feet bgs. The analytical results of the soil samples collected during the advancement of the soil boring, indicated hydrocarbon impact exceeding the NMOCD regulatory standard, was present at the groundwater interface. The depth of hydrocarbon impact results in a score of twenty (20) 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 less than 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.

The NMOCD guidelines indicate the DCP Plant to Lea Station 6-Inch #2 release site has an ranking score of twenty (20). Based on this score, the soil remediation levels for a site with a ranking score of twenty (20) points are as follows:

- Benzene – 10 mg/Kg (ppm)
- BTEX – 50 mg/Kg (ppm)
- TPH – 100 mg/Kg (ppm)

SUMMARY OF SOIL REMEDIATION ACTIVITIES

On February 17, 2009, following initial response activities, excavation of the hydrocarbon impacted soil began at the site. Excavated soil was stockpiled on-site on a plastic liner to mitigate the potential leaching of contaminants into the vadose zone. The excavation of impacted soil was completed on March 3, 2009. Approximately 2,700 cubic yards of soil was stockpiled on-site during excavation activities. The final dimensions of the excavation were approximately sixty-six (66) feet in width, approximately eighty (80) feet in length and fifteen (15) feet in depth.

On February 18, 2009, a soil sample (RP @ 15') was collected from the initial investigation trench at approximately fifteen (15) feet bgs. The analytical results indicated benzene concentration was 8.847 mg/Kg, the BTEX concentration was 361.477 mg/Kg and the total petroleum hydrocarbon (TPH) concentration was 7,000 mg/Kg. Table 1 summarizes the Concentrations of Benzene, BTEX and TPH in Soil. Analytical reports are provided as Appendix B.

On March 5, 2009, four (4) excavation sidewall soil samples (WSW @ 14.5', ESW @ 14.5', SSW @ 14.5' and NSW @ 14.5') were collected and submitted to the laboratory for analysis. The analytical results indicated benzene concentrations were less than the laboratory method detection limit (MDL) of 0.001 mg/Kg for each soil sample. BTEX concentrations ranged from less than the laboratory MDL of 0.001 mg/Kg for soil samples WSW @ 14.5' and SSW @ 14.5' to 0.013 mg/Kg for soil sample NSW @ 14.5'. TPH concentrations were less than the appropriate laboratory MDL for each soil sample. A baseline stockpile soil sample (Stockpile Baseline) was collected from the excavated soil to evaluate the soil and determine its potential use as backfill material. The analytical results indicated the benzene concentration was less than the laboratory MDL of 0.001 mg/Kg, the BTEX concentration was 0.0805 mg/Kg and the TPH concentration was 430 mg/Kg.

On April 15, 2009, one (1) soil boring (SB-1) was advanced at the release site to evaluate the vertical extent of soil impact. A soil boring log is provided as Appendix A. Soil samples were collected at five (5) foot drilling intervals and field screened using a Photo-Ionization Detector (PID). Selected soil samples were submitted to the laboratory for determination of concentrations of benzene, toluene, ethyl-benzene and xylene (BTEX) and total petroleum hydrocarbon (TPH) using EPA SW-846 8021b and SW-846 8015M, respectively.

Soil boring SB-1 was located approximately ten (10) feet west of the release point, on the excavation floor at approximately fifteen (15) feet bgs. The soil boring was advanced to a total depth of approximately seventy-five (75) feet. Soil samples were collected at ten (10), twenty

(20), thirty (30), forty (40), fifty (50), and sixty (60) feet and were submitted to the laboratory. The laboratory analytical results indicated benzene concentrations were less than the laboratory MDL and the NMOCD regulatory standard for all of the submitted soil samples. The laboratory analytical results indicated BTEX constituent concentrations ranged from less than the laboratory MDL of 0.0103 mg/Kg in the soil sample collected at forty (40) feet to 8.012 mg/Kg in the soil sample collected at ten (10) feet. The laboratory analytical results indicated TPH concentrations ranged from 109 mg/Kg in the soil sample collected at fifty (50) feet to 1,243 mg/Kg in the soil sample collected at thirty (30) feet.

Soil boring SB-1 was advanced from the excavation floor at approximately fifteen (15) feet bgs. Adjusting the depth of the soil boring, in relation to the ground surface, results in an actual soil boring depth of approximately ninety (90) feet bgs. During the advancement of the soil boring, groundwater was encountered at approximately sixty-one feet drilling depth or approximately seventy-six (76) feet bgs. A temporary casing was installed in the soil boring to allow a groundwater sample to be collected for analysis. During the collection of the groundwater sample phase-separated hydrocarbons (PSH) were observed in the groundwater sample and the groundwater sample was not submitted to the laboratory. Plains immediately notified NMOCD representatives at the NMOCD Hobbs District Office and the NMOCD Santa Fe Office of the impact to groundwater at the release site. On April 16, 2009, soil boring SB-1 was converted to a four (4) inch monitor well (MW-1). A description of the groundwater remediation activities conducted at the site is included in the Summary of Groundwater Remediation Activities below.

SUMMARY OF GROUNDWATER REMEDIATION ACTIVITIES

On April 15, 2009, a temporary casing was installed in the soil boring (SB-1) to allow a groundwater sample to be collected for analysis. During the collection of the groundwater sample, phase-separated hydrocarbons (PSH) were observed in the groundwater sample and the groundwater sample was not submitted to the laboratory. Plains immediately notified NMOCD representatives at the NMOCD Hobbs District Office and the NMOCD Santa Fe Office of the impact to groundwater at the release site. On April 16, 2009, soil boring SB-1 was converted to a four (4) inch monitor well (MW-1).

Currently, Plains is removing PSH from the monitor well (MW-1) on a twice weekly schedule. As of May 15, 2009, approximately 49 gallons (1.17 barrels) of PSH have been removed from the monitor well and disposed of at a NMOCD permitted disposal. PSH thicknesses ranged from 2.81 feet on April 28, 2009 to 5.68 feet on May 13, 2009.

PROPOSED REMEDIATION ACTIVITIES

Plains proposes the following remediation activities designed to progress the DCP Plant to Lea Station 6-Inch #2 release site toward an NMOCD approved closure:

- Plains proposes to collect a stockpile soil sample for each 500 cy of stockpiled soil. The soil samples will be submitted to the laboratory and analyzed for concentrations of BTEX using EPA method 8021b and TPH using SW-846 8015M. Provided the analytical results indicate the TPH concentration of the soil sample is less than 1,000 mg/Kg, the soil will be stockpiled and used as backfill. Should the analytical results indicate the TPH

concentration of any of the stockpile soil samples exceed 1,000 mg/Kg, the affected soil will be blended and re-sampled until TPH concentrations are less than 1,000 mg/Kg.

- Plains proposes to install a twenty (20) mil polyurethane liner in the excavation. The monitor well (MW-1) located in excavation will be extended to the top of the excavation using a four (4) inch diameter PVC riser pipe with an outer eight (8) inch diameter protective casing. The eight (8) inch casing will be fitted with a forty (40) mil boot, which will be chemically welded to the twenty (20) mil liner to protect to impermeability of the liner. The liner will be cushioned by a six (6) inch layer of sand above and below the liner to protect the liner from damage during excavation backfilling activities. The excavation will be backfilled and compacted in twelve (12) inch lifts. Following backfill activities, the area between the four (4) inch monitor well casing and the eight casing will be filled with sand. On completion of the backfill activities the surface will be contoured to fit the surrounding topography. Reseeding of the site with vegetation acceptable to the New Mexico State Land Office will take place at the conclusion of the remediation activities.
- Upon receipt of New Mexico State Land Office and NMOCD approval, Plains proposes to install a minimum of three (3) additional monitor wells (MW-2 through MW-4) in an up-gradient, cross-gradient and down-gradient position, respectively. Soil samples will be collected at five (5) foot drilling intervals and field screened using a PID. Selected soil samples will be submitted to the laboratory for determination of concentrations of BTEX and TPH using EPA SW-846 8021b and SW-846 8015M, respectively. A Proposed Monitor Well Location Map is provided as Figure 3. Based on the analytical results of the initial groundwater investigation, additional monitor wells may be required to adequately delineate the impact to groundwater at the site.
- Monitor wells containing PSH will be monitored on a twice weekly frequency. Any PSH removed from the monitor wells will be disposed of at a NMOCD permitted facility or reintroduced into the Plains pipeline system at the Plains Lea Station Facility.

REPORTING

On completion of the proposed soil closure activities, Plains will submit a Remediation Summary and Soil Closure Request for NMOCD approval. Groundwater monitoring will continue on a twice weekly frequency and a 2009 Annual Monitoring Report will be submitted to the NMOCD before April 1, 2010.

LIMITATIONS

Basin Environmental Consulting, LLC has prepared this Remediation Summary and Proposed Remediation Strategy 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.

DISTRIBUTION:

- Copy 1: Ed Hansen
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
- Copy 2: Larry Johnson
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division (District 1)
1625 French Drive
Hobbs, New Mexico 88240
- Copy 3: Thaddeus Kostrubala
New Mexico State Land Office
310 Old Santa Fe Trail
P.O. Box 1148
Santa Fe, New Mexico 87504
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Denver City, Texas 79323
jhenry@paalp.com
- Copy 6: Curt D. Stanley
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Lovington, New Mexico 88260
cdstanley@basin-consulting.com



Figures

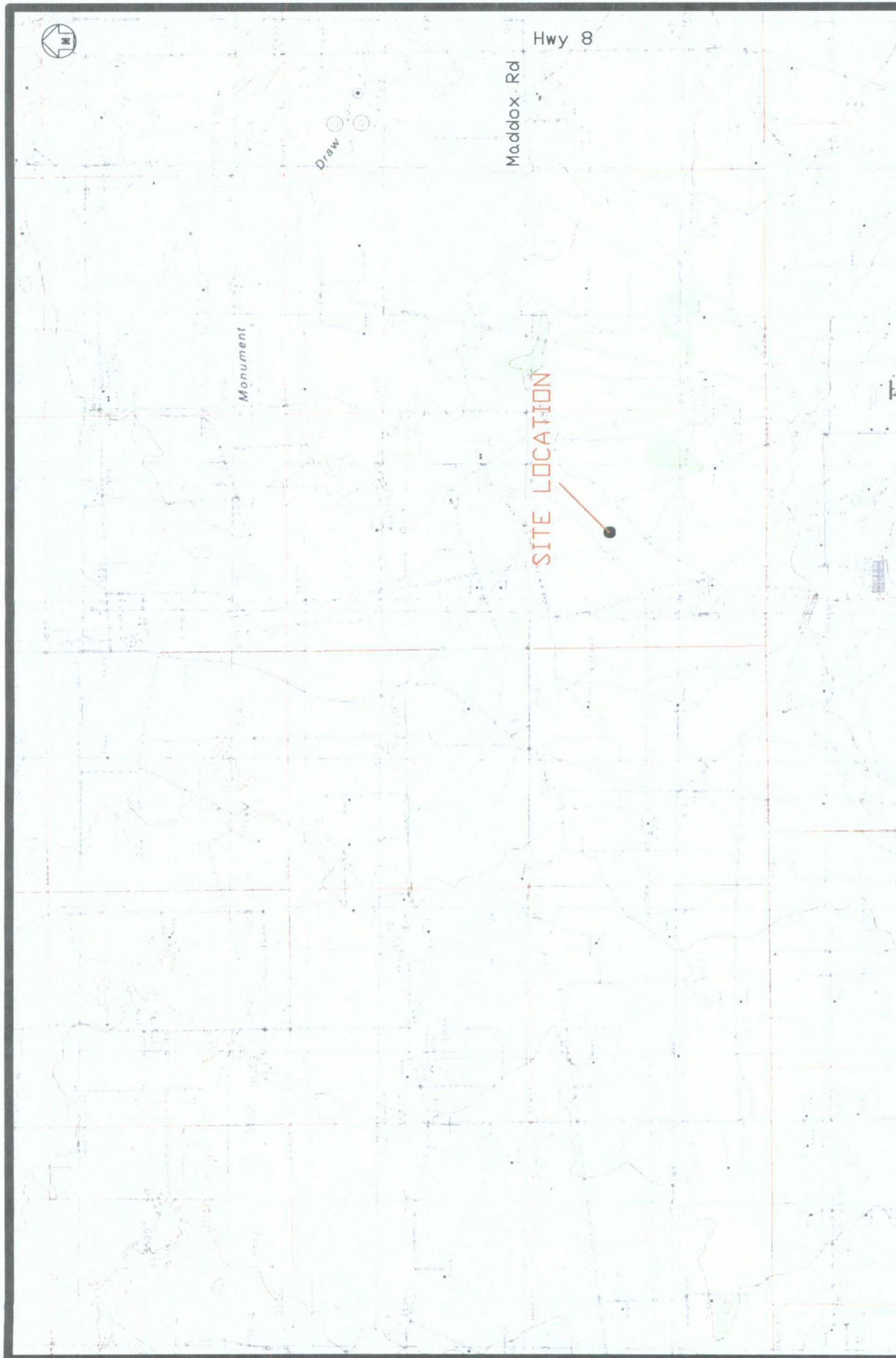


Figure 1
 Site Location Map
 Plains Pipeline, L.P.
 DCP Plant to Lea Station 6-Inch #2
 Lea County, New Mexico
 SRS 2009-039
 1RP-2136



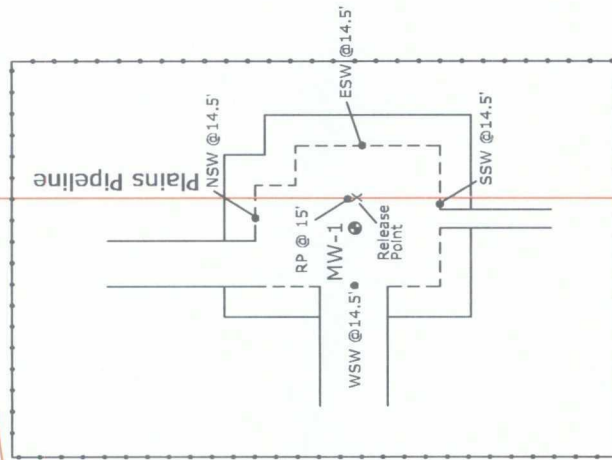
Basin Environmental Services

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



Powerline

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



Southern Union Gas Pipeline

El Paso Pipeline

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



Legend:

- Excavation Extents
- Pipeline
- Monitor Well
- Soil Sample Location

- Powerline
- Fence

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

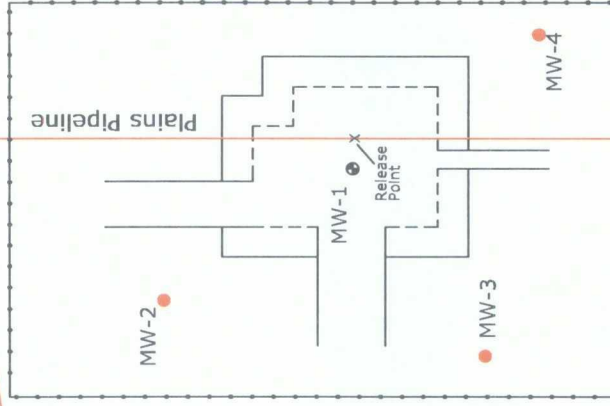
Basin Environmental Services

Prep By: CDS
April 17, 2009
Checked By: CJB
Scale 1"=70'



Powerline

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



El Paso Pipeline
Southern Union Gas Pipeline

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



Legend:

- Excavation Extents
- Pipeline
- Monitor Well
- Proposed Monitor Well

--- Powerline
--- Fence

Figure 3

Proposed Monitor Well Location Map
Plains Pipeline, L.P.
DCP to Lea Station 6-inch #2
Lea County, New Mexico
SRS # 2009-039
NMOCD Ref # 1RP-2136

Basin Environmental Services

Prep By: CDS
April 17, 2009
Checked By: CJB
Scale 1"=70'

Tables

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX AND TPH IN SOIL

PLAINS PIPELINE, L.P.
DCP PLANT TO LEA STATION 6-INCH #2
LEA COUNTY, NEW MEXICO

SRS: 2009-039

NMOCD REFERENCE NO: 1RP-2136

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	DATE ANALYZED	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030						METHOD: 8015M				TOTAL TPH C ₆ -C ₃₅ (mg/Kg)
					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 ₆ -C ₁₂ (mg/Kg)	DRO C ₁₇ -C ₂₈ (mg/Kg)	ORO C ₂₉ -C ₃₅ (mg/Kg)		
RP @ 15'	15 Feet	02/18/09	02/24/09	In-Situ	8.847	157,400	44.8	118.3	32.13	361,477	6,510	490	<156	7,000	
WSW @ 14.5'	14.5 Feet	03/05/09	03/11/09	In-Situ	<0.0010	<0.0021	<0.0010	<0.0021	<0.0010	<0.0021	<15.6	<15.6	<15.6	<15.6	
ESW @ 14.5'	14.5 Feet	03/05/09	03/11/09	In-Situ	<0.0010	<0.0021	0.0011	0.0043	0.0036	0.009	<15.7	<15.7	<15.7	<15.7	
SSW @ 14.5'	14.5 Feet	03/05/09	03/11/09	In-Situ	<0.0010	<0.0021	<0.0010	<0.0021	<0.0010	<0.0021	<15.4	<15.4	<15.4	<15.4	
NSW @ 14.5'	14.5 Feet	03/05/09	03/11/09	In-Situ	<0.0010	<0.0021	0.0025	0.0072	0.0033	0.013	<15.7	<15.7	<15.7	<15.7	
Stockpile Baseline	-	03/05/09	03/11/09	-	<0.0010	<0.0021	0.0014	0.0246	0.0545	0.0805	109	321	<78.3	430	
SB-1 @ 10'	10 Feet	04/15/09	04/21/09	In-Situ	<0.0517	0.701	1.233	4.548	1.53	8.012	725	504	<155	1,229	
SB-1 @ 20'	20 Feet	04/15/09	04/21/09	In-Situ	<0.005	<0.0101	0.0753	0.4043	0.1922	0.6718	338	558	70	966	
SB-1 @ 30'	30 Feet	04/15/09	04/21/09	In-Situ	<0.0561	<0.1121	0.3639	2.283	0.979	3.6259	596	647	<84.1	1,243	
SB-1 @ 40'	40 Feet	04/15/09	04/21/09	In-Situ	<0.0052	<0.0103	<0.0052	<0.0103	<0.0052	<0.0103	51	332	29	411	
SB-1 @ 50'	50 Feet	04/15/09	04/21/09	In-Situ	<0.0011	<0.0021	<0.0011	0.0025	<0.0011	0.0025	18	91	<16	109	
SB-1 @ 60'	60 Feet	04/15/09	04/21/09	In-Situ	<0.0056	<0.0112	0.0081	0.0668	0.0311	0.106	143	413	46	602	
NMOCD Regulatory Standard					10					50				100	

Appendices






Appendix A

Soil Boring and Monitor Well Logs

Monitor Well MW-1

Date Drilled April 15, 2009
 Thickness of Bentonite Seal 45 Ft
 Depth of Exploratory Boring 75 Ft
 Depth to Groundwater Approximately 76 Ft
 Ground Water Elevation

 Indicates the PSH level measured on
 Indicates the groundwater level measured on April 16, 2009
 Indicates samples selected for Laboratory Analysis.
 PID Head-space reading in ppm obtained with a photo-ionization detector.

 Grout Surface Seal

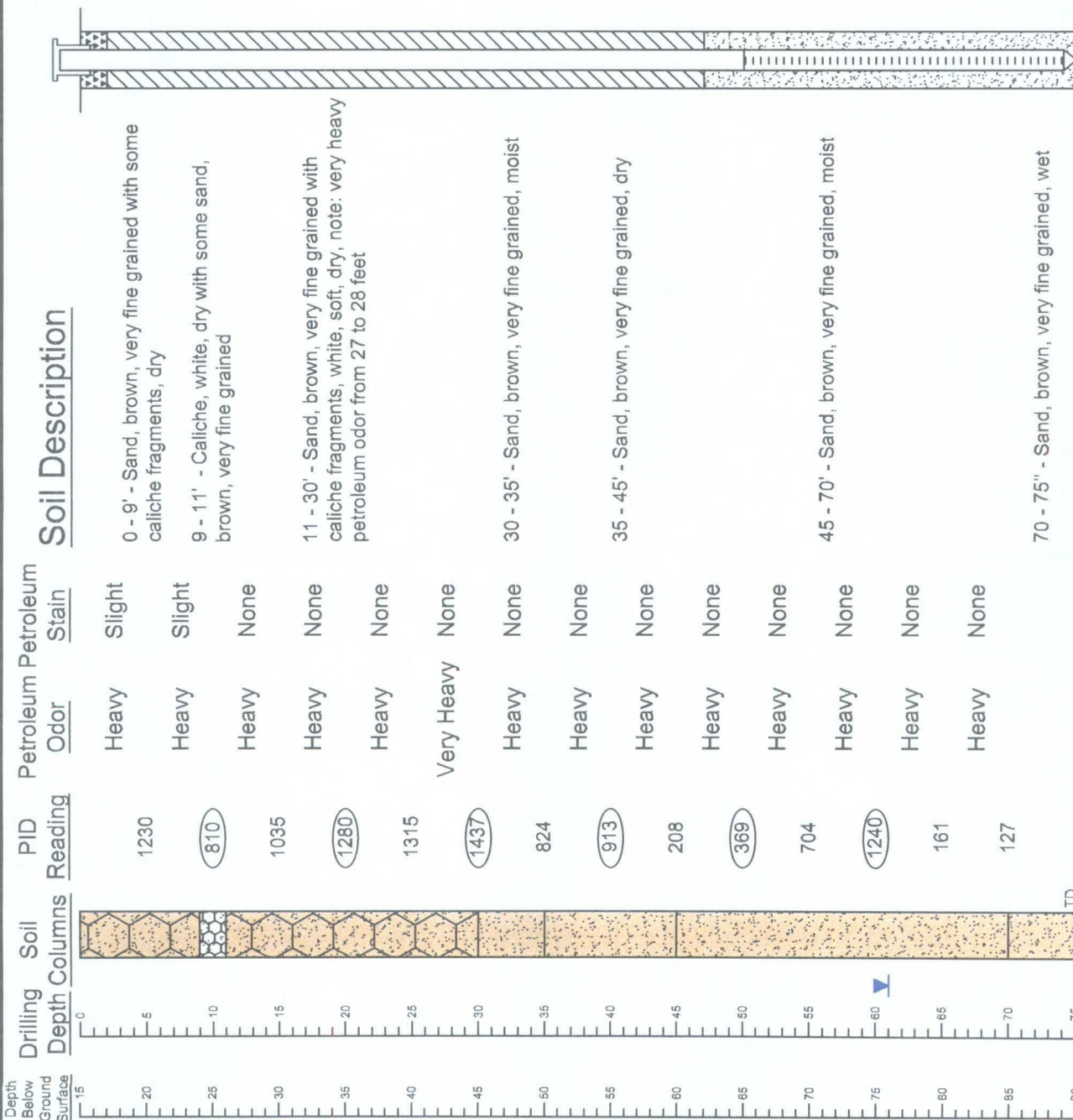
 Bentonite Pellet Seal

 Sand Pack

 Screen

Completion Notes

- 1.) The monitor well was advanced on date using air rotary drilling techniques.
- 2.) The well was constructed with 4" ID, 0.010 inch factory slotted, threaded joint, schedule 40 PVC pipe.
- 3.) The well is protected with a locked stick up steel cover and compression cap.
- 4.) The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.



Monitor Well Details
 MW-1

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

Basin Environmental Services

Prep By: CDS

Checked By: CDS

April 20, 2009



Appendix B

Analytical Reports

Analytical Report 325381
for
PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

DCP Plant to Lea Station 6 Inch # 2

2009-039

24-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



24-FEB-09

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

Reference: XENCO Report No: **325381**
DCP Plant to Lea Station 6 Inch # 2
Project Address: Lea County, NM

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 325381. 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. 325381 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

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Sample Cross Reference 325381



PLAINS ALL AMERICAN EH&S, Midland, TX
DCP Plant to Lea Station 6 Inch # 2

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
RP @ 15'	S	Feb-18-09 14:30		325381-001



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

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

Project ID: 2009-039

Work Order Number: 325381

Report Date: 24-FEB-09

Date Received: 19-FEB-09

Sample receipt non conformances and Comments:

None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-750218 Percent Moisture

None

Batch: LBA-750488 TX1005

/*^325427

1-Chlorooctane, o-Terphenyl recovered above QC limits . Matrix interferences is suspected;
data confirmed by re-analysis
Samples affected are: 325427-001.

C12-C28 Diesel Range Hydrocarbons detected in the blank below the MQL but above the SQL;
possible laboratory contamination.
Samples affected are: 325427-001.

/*^325427

/*^325274

C12-C28 Diesel Range Hydrocarbons detected in the blank below the MQL but above the SQL;
possible laboratory contamination.
Samples affected are: 325274-040, -052, -055, -036, -037, -038, -056, -050, -051, -039, -042, -043, -054, -041, -053.

/*^325274

/*^325381

SW8015MOD_NM

C28-C35 Oil Range Hydrocarbons, C6-C12 Gasoline Range Hydrocarbons detected in the
blank below the MQL but above the SQL; possible laboratory contamination.
Samples affected are: 325381-001.

/*^325381

/*^325345



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

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

Project ID: 2009-039

Work Order Number: 325381

Report Date: 24-FEB-09

Date Received: 19-FEB-09

C12-C28 Diesel Range Hydrocarbons detected in the blank below the MQL but above the SQL;
possible laboratory contamination.

Samples affected are: 325345-001, -002.

/*^325345

/*^325256

C12-C28 Diesel Range Hydrocarbons detected in the blank below the MQL but above the SQL;
possible laboratory contamination.

Samples affected are: 325256-001.

/*^325256

Batch: LBA-750488 TX1005

/*^325427

1-Chlorooctane, o-Terphenyl recovered above QC limits . Matrix interferences is suspected;
data confirmed by re-analysis

Samples affected are: 325427-001.

C12-C28 Diesel Range Hydrocarbons detected in the blank below the MQL but above the SQL;
possible laboratory contamination.

Samples affected are: 325427-001.

/*^325427

/*^325274

C12-C28 Diesel Range Hydrocarbons detected in the blank below the MQL but above the SQL;
possible laboratory contamination.

Samples affected are: 325274-040, -052, -055, -036, -037, -038, -056, -050, -051, -039, -042, -043, -054, -041, -053.

/*^325274

/*^325381



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

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

Project ID: 2009-039

Work Order Number: 325381

Report Date: 24-FEB-09

Date Received: 19-FEB-09

SW8015MOD_NM

C28-C35 Oil Range Hydrocarbons, C6-C12 Gasoline Range Hydrocarbons detected in the blank below the MQL but above the SQL; possible laboratory contamination.

Samples affected are: 325381-001.

/^325381*

/^325345*

C12-C28 Diesel Range Hydrocarbons detected in the blank below the MQL but above the SQL; possible laboratory contamination.

Samples affected are: 325345-001, -002.

/^325345*

/^325256*

C12-C28 Diesel Range Hydrocarbons detected in the blank below the MQL but above the SQL; possible laboratory contamination.

Samples affected are: 325256-001.

/^325256*

Batch: LBA-750532 BTEX-MTBE EPA 8021B

/^325547*

Benzene, Ethylbenzene, Toluene, o-Xylene recovered below QC limits in the Matrix Spike and Duplicate.

Samples affected are: 325547-003, -006, -015, -002, -009, -014, -005, -011, -016, -018, -001, -008, -010, -012, -004, -007, -013, -017.

The Laboratory Control Sample for Toluene, Benzene, Ethylbenzene, o-Xylene is within laboratory Control Limits

/^325547*



Certificate of Analysis Summary 325381

PLAINS ALL AMERICAN EH&S, Midland, TX

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

Project Id: 2009-039

Contact: Jason Henry

Project Location: Lea County, NM

Date Received in Lab: Thu Feb-19-09 08:34 am

Report Date: 24-FEB-09


Project Manager: Brent Barron, II



Analysis Requested	Lab Id:			325381-001	RP @ 15'	SOIL	Feb-18-09 14:30	Feb-23-09 16:00	Feb-24-09 02:36	mg/kg	RL
	Field Id:	Depth:	Matrix:								
BTEX by EPA 8021B	Sampled:										
	Extracted:										
	Analyzed:										
	Units/RL:										
	Benzene										
	Toluene										
	Ethylbenzene										
Percent Moisture	m,p-Xylenes										
	o-Xylene										
	Total Xylenes										
	Total BTEX										
	Extracted:										
TPH By SW8015 Mod	Analyzed:										
	Units/RL:										
C6-C12 Gasoline Range Hydrocarbons	Extracted:										
	Analyzed:										
	Units/RL:										
	C6-C12 Gasoline Range Hydrocarbons										
	C12-C28 Diesel Range Hydrocarbons										
Total TPH	C28-C35 Oil Range Hydrocarbons										
	Total TPH										

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

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Brent Barron
Odessa Laboratory Director



Flagging Criteria



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

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12600 West I-20 East, Odessa, TX 79765
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(813) 620-2000	(813) 620-2033
(305) 823-8500	(305) 823-8555
(432) 563-1800	(432) 563-1713
(361) 884-0371	(361) 884-9116



Form 2 - Surrogate Recoveries

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

Work Orders : 325381,

Project ID: 2009-039

Lab Batch #: 750532

Sample: 325381-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0397	0.0300	132	80-120	**
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

Lab Batch #: 750532

Sample: 325547-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0285	0.0300	95	80-120	
4-Bromofluorobenzene	0.0267	0.0300	89	80-120	

Lab Batch #: 750532

Sample: 325547-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0282	0.0300	94	80-120	
4-Bromofluorobenzene	0.0276	0.0300	92	80-120	

Lab Batch #: 750532

Sample: 8406250-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0250	0.0300	83	80-120	

Lab Batch #: 750532

Sample: 8406250-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0267	0.0300	89	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.



Form 2 - Surrogate Recoveries

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

Work Orders : 325381,

Project ID: 2009-039

Lab Batch #: 750532

Sample: 8406250-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0280	0.0300	93	80-120	
4-Bromofluorobenzene	0.0266	0.0300	89	80-120	

Lab Batch #: 750488

Sample: 325274-039 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	121	100	121	70-135	
o-Terphenyl	54.1	50.0	108	70-135	

Lab Batch #: 750488

Sample: 325274-039 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	121	100	121	70-135	
o-Terphenyl	54.4	50.0	109	70-135	

Lab Batch #: 750488

Sample: 325381-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	129	100	129	70-135	
o-Terphenyl	61.1	50.0	122	70-135	

Lab Batch #: 750488

Sample: 525234-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	114	100	114	70-135	
o-Terphenyl	58.2	50.0	116	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 # 2

Work Orders : 325381,

Project ID: 2009-039

Lab Batch #: 750488

Sample: 525234-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	100	105	70-135	
o-Terphenyl	51.2	50.0	102	70-135	

Lab Batch #: 750488

Sample: 525234-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	113	100	113	70-135	
o-Terphenyl	51.0	50.0	102	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.



BS / BSD Recoveries



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

Work Order #: 325381

Analyst: ASA

Lab Batch ID: 750532

Sample: 8406250-1-BKS

Date Prepared: 02/23/2009

Batch #: 1

Project ID: 2009-039

Date Analyzed: 02/24/2009

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY												
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]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Benzene		ND	0.1000	0.0832	83	0.1	0.0878	88	5	70-130	35	
Toluene		ND	0.1000	0.0849	85	0.1	0.0895	90	5	70-130	35	
Ethylbenzene		ND	0.1000	0.0881	88	0.1	0.0918	92	4	71-129	35	
m,p-Xylenes		ND	0.2000	0.1821	91	0.2	0.1904	95	4	70-135	35	
o-Xylene		ND	0.1000	0.0915	92	0.1	0.0961	96	5	71-133	35	

Analyst: BHW

Date Prepared: 02/21/2009

Date Analyzed: 02/21/2009

Lab Batch ID: 750488

Sample: 525234-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK/BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	1000	966	97	1000	960	96	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	23.6	1000	971	97	1000	976	98	1	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 # 2

Work Order #: 325381

Lab Batch ID: 750532

Date Analyzed: 02/24/2009

Reporting Units: mg/kg

Project ID: 2009-039

QC- Sample ID: 325547-001 S

Batch #: 1 Matrix: Soil

Date Prepared: 02/23/2009 Analyst: ASA

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY												
Reporting Units: mg/kg	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	0.1193	0.0766	64	0.1193	0.0764	64	0	70-130	35	X
	Toluene	ND	0.1193	0.0791	66	0.1193	0.0799	67	1	70-130	35	X
	Ethylbenzene	ND	0.1193	0.0816	68	0.1193	0.0829	69	2	71-129	35	X
	m,p-Xylenes	ND	0.2387	0.1686	71	0.2387	0.1723	72	2	70-135	35	
o-Xylene	ND	0.1193	0.0803	67	0.1193	0.0821	69	2	71-133	35	X	

Lab Batch ID: 750488

Date Analyzed: 02/23/2009

Reporting Units: mg/kg

QC- Sample ID: 325274-039 S

Batch #: 1 Matrix: Soil

Date Prepared: 02/21/2009 Analyst: BHW

Reporting Units: mg/kg											
MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY 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
	ND	1120	1100	98	1120	1100	98	0	70-135	35	
	C6-C12 Gasoline Rancg Hydrocarbons	ND	1120	1120	100	1120	1130	101	1	70-135	35

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

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

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



Sample Duplicate Recovery



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

Work Order #: 325381

Lab Batch #: 750218

Project ID: 2009-039

Date Analyzed: 02/19/2009

Date Prepared: 02/19/2009

Analyst: BEV

QC- Sample ID: 325381-001 D

Batch #: 1

Matrix: Soil

Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	3.70	7.29	65	20	F

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

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

Client: Basin / Plains
Date/ Time: 02/19/09 8:34
Lab ID #: 325381
Initials: gus

Sample Receipt Checklist

Client Initials

#1	Temperature of container/ cooler?	<u>Yes</u>	No	2.5 ° C	
#2	Shipping container in good condition?	<u>Yes</u>	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	<u>Yes</u>	No	Not Present	
#5	Chain of Custody present?	<u>Yes</u>	No		
#6	Sample instructions complete of Chain of Custody?	<u>Yes</u>	No		
#7	Chain of Custody signed when relinquished/ received?	<u>Yes</u>	No		
#8	Chain of Custody agrees with sample label(s)?	<u>Yes</u>	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	<u>Yes</u>	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	<u>Yes</u>	No		
#11	Containers supplied by ELOT?	<u>Yes</u>	No		
#12	Samples in proper container/ bottle?	<u>Yes</u>	No	See Below	
#13	Samples properly preserved?	<u>Yes</u>	No	See Below	
#14	Sample bottles intact?	<u>Yes</u>	No		
#15	Preservations documented on Chain of Custody?	<u>Yes</u>	No		
#16	Containers documented on Chain of Custody?	<u>Yes</u>	No		
#17	Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No	See Below	
#18	All samples received within sufficient hold time?	<u>Yes</u>	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	Not Applicable	
#20	VOC samples have zero headspace?	<u>Yes</u>	No	Not Applicable	

Variance Documentation

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

Regarding: _____

Corrective Action Taken:

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

Analytical Report 326865
for
PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry
DCP Plant to Lea Station 6-inch #2
2009-039

13-MAR-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
Miramar, FL E86349
Norcross(Atlanta), GA E87429

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

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

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Midland - Corpus Christi - Atlanta



13-MAR-09

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

Reference: XENCO Report No: **326865**
DCP Plant to Lea Station 6-inch #2
Project Address: Lea County, NM

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 326865. 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. 326865 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

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Sample Cross Reference 326865



PLAINS ALL AMERICAN EH&S, Midland, TX

DCP Plant to Lea Station 6-inch #2

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
WSW @ 14.5'	S	Mar-05-09 14:00		326865-001
SSW @ 14.5'	S	Mar-05-09 14:05		326865-002
ESW @ 14.5'	S	Mar-05-09 14:10		326865-003
NSW @ 14.5'	S	Mar-05-09 14:15		326865-004
Stockpile Baseline	S	Mar-05-09 14:20		326865-005



Certificate of Analysis Summary 326865
PLAINS ALL AMERICAN EH&S, Midland, TX
Project Name: DCP Plant to Lea Station 6-inch #2



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

Date Received in Lab: Fri Mar-06-09 05:17 pm


Report Date: 13-MAR-09

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	Field Id:	Depth:	Matrix:	Sampled:	326865-001 WSW @ 14.5'	326865-002 SSW @ 14.5'	326865-003 ESW @ 14.5'	326865-004 NSW @ 14.5'	326865-005 Stockpile Baseline
	Extracted:	Analyzed:	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg
BTEx by EPA 8021B	Benzene	Mar-10-09 15:45	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
	Toluene	Mar-11-09 12:24	ND	0.0021	ND	0.0021	ND	0.0021	ND	0.0021
	Ethylbenzene	Mar-10-09 15:45	ND	0.0010	ND	0.0010	0.0011	0.0010	0.0025	0.0010
	m,p-Xylenes	Mar-11-09 12:24	ND	0.0021	ND	0.0021	0.0043	0.0021	0.0072	0.0021
	o-Xylene	Mar-10-09 15:45	ND	0.0010	ND	0.0010	0.0036	0.0010	0.0033	0.0010
	Total Xylenes	Mar-11-09 12:24	ND	0.0010	ND	0.0010	0.0079	0.0010	0.0105	0.0010
Total BTEx			ND	0.0010	ND	0.0010	0.009	0.0010	0.013	0.0010
Percent Moisture	Extracted:	Mar-09-09 17:00								
	Analyzed:	Mar-09-09 17:00	%	RL	%	RL	%	RL	%	RL
TPH By SW8015 Mod	Extracted:	Mar-09-09 20:00	3.57	1.00	2.42	1.00	4.60	1.00	4.19	1.00
	Analyzed:	Mar-09-09 20:00	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
	Units/RL:	Mar-09-09 22:50	ND	15.6	ND	15.4	ND	15.7	ND	15.7
Total TPH	C6-C12 Gasoline Range Hydrocarbons	Mar-09-09 20:00	ND	15.6	ND	15.4	ND	15.7	ND	15.7
	C12-C28 Diesel Range Hydrocarbons	Mar-09-09 20:00	ND	15.6	ND	15.4	ND	15.7	ND	15.7
	C28-C35 Oil Range Hydrocarbons	Mar-09-09 20:00	ND	15.6	ND	15.4	ND	15.7	ND	15.7
	Total TPH	Mar-09-09 20:00	ND	15.6	ND	15.4	ND	15.7	ND	15.7

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 Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty, to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Brent Barron
Odessa Laboratory Director



Flagging Criteria



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

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(305) 823-8500	(305) 823-8555
(432) 563-1800	(432) 563-1713
(361) 884-0371	(361) 884-9116



Form 2 - Surrogate Recoveries

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

Work Orders : 326865,

Project ID: 2009-039

Lab Batch #: 752169

Sample: 526173-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/11/09 05:53

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0302	0.0300	101	80-120	
4-Bromofluorobenzene	0.0290	0.0300	97	80-120	

Lab Batch #: 752169

Sample: 526173-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/11/09 06:14

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0306	0.0300	102	80-120	
4-Bromofluorobenzene	0.0294	0.0300	98	80-120	

Lab Batch #: 752169

Sample: 526173-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/11/09 06:55

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0258	0.0300	86	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

Lab Batch #: 752169

Sample: 326865-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/11/09 12:24

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0234	0.0300	78	80-120	**
4-Bromofluorobenzene	0.0281	0.0300	94	80-120	

Lab Batch #: 752169

Sample: 326865-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/11/09 12:44

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0252	0.0300	84	80-120	
4-Bromofluorobenzene	0.0301	0.0300	100	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.



Form 2 - Surrogate Recoveries

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

Work Orders : 326865,

Project ID: 2009-039

Lab Batch #: 752169

Sample: 326865-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/11/09 13:05

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0235	0.0300	78	80-120	**
4-Bromofluorobenzene	0.0330	0.0300	110	80-120	

Lab Batch #: 752169

Sample: 326865-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/11/09 13:25

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0229	0.0300	76	80-120	**
4-Bromofluorobenzene	0.0282	0.0300	94	80-120	

Lab Batch #: 752169

Sample: 326865-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/11/09 13:45

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0231	0.0300	77	80-120	**
4-Bromofluorobenzene	0.0452	0.0300	151	80-120	**

Lab Batch #: 752052

Sample: 526114-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/09/09 20:54

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	128	100	128	70-135	
o-Terphenyl	64.0	50.0	128	70-135	

Lab Batch #: 752052

Sample: 526114-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/09/09 21:17

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	125	100	125	70-135	
o-Terphenyl	56.6	50.0	113	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 #2

Work Orders : 326865,

Project ID: 2009-039

Lab Batch #: 752052

Sample: 526114-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/09/09 21:41

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	100	110	70-135	
o-Terphenyl	51.5	50.0	103	70-135	

Lab Batch #: 752052

Sample: 326865-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/09/09 22:50

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	111	100	111	70-135	
o-Terphenyl	50.8	50.0	102	70-135	

Lab Batch #: 752052

Sample: 326865-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/09/09 23:14

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	100	107	70-135	
o-Terphenyl	48.5	50.0	97	70-135	

Lab Batch #: 752052

Sample: 326865-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/09/09 23:38

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	47.1	50.0	94	70-135	

Lab Batch #: 752052

Sample: 326865-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/10/09 00:01

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	111	100	111	70-135	
o-Terphenyl	50.2	50.0	100	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 #2

Work Orders : 326865,

Project ID: 2009-039

Lab Batch #: 752052

Sample: 326865-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/10/09 00:24

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	111	100	111	70-135	
o-Terphenyl	53.1	50.0	106	70-135	

Lab Batch #: 752052

Sample: 326865-002 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/10/09 06:14

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	126	100	126	70-135	
o-Terphenyl	59.6	50.0	119	70-135	

Lab Batch #: 752052

Sample: 326865-002 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/10/09 06:37

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	127	100	127	70-135	
o-Terphenyl	55.4	50.0	111	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.



BS / BSD Recoveries



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

Work Order #: 326865

Analyst: ASA

Lab Batch ID: 752169

Sample: 526173-1-BKS

Date Prepared: 03/10/2009

Batch #: 1

Project ID: 2009-039

Date Analyzed: 03/11/2009

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Benzene	ND	0.1000	0.0947	95	0.1	0.0968	97	2	70-130	35
	Toluene	ND	0.1000	0.0949	95	0.1	0.0969	97	2	70-130	35
	Ethylbenzene	ND	0.1000	0.0944	94	0.1	0.0961	96	2	71-129	35
	m,p-Xylenes	ND	0.2000	0.2024	101	0.2	0.2059	103	2	70-135	35
	o-Xylene	ND	0.1000	0.1018	102	0.1	0.1044	104	3	71-133	35

Analyst: BHW

Lab Batch ID: 752052

Sample: 526114-1-BKS

Date Prepared: 03/09/2009

Batch #: 1

Date Analyzed: 03/09/2009

Matrix: Solid

Units: mg/kg

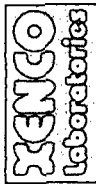
BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY												
TPH By SW8015 Mod		Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
C6-C12 Gasoline Range Hydrocarbons		ND	1000	993	99	1000	986	99	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons		ND	1000	1040	104	1000	1040	104	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 #2

Work Order #: 326865

Lab Batch ID: 752052

Date Analyzed: 03/10/2009

Reporting Units: mg/kg

Project ID: 2009-039

QC- Sample ID: 326865-002 S

Batch #: 1 Matrix: Soil

Date Prepared: 03/09/2009

Analyst: BHW

Reporting Units: mg/kg												
MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY												
TPH By SW8015 Mod		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
C6-C12 Gasoline Range Hydrocarbons		ND	1020	1020	100	1020	1030	101	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons		ND	1020	1100	108	1020	1130	111	3	70-135	35	

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

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

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



Sample Duplicate Recovery



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

Work Order #: 326865

Lab Batch #: 751968

Project ID: 2009-039

Date Analyzed: 03/09/2009

Date Prepared: 03/09/2009

Analyst: BEV

QC- Sample ID: 326864-001 D

Batch #: 1

Matrix: Soil

Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	5.75	6.17	7	20	

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

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST
12600 West 126 East
Odessa, Texas 79765
Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Camille Bryant PAGE 01 OF 01
Company Name: Basin Environmental Services Technologies, LLC
Company Address: 2200 Plains Hwy
City/State/Zip: Livingston, NM 88260
Telephone No: (505) 685-2210 Fax No: (505) 395-1429
Sampler Signature: Camille Bryant e-mail: cbryant@basin-env.com
Project Name: DCP Plant to Lea Station 6-inch #2
Project #: 2009-039
Project Loc: Lee County, NM
PO #: PAA - Jason Henry
Report Format: ☒ Standard ☐ TRRP ☐ NPDES

LAB # (Lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Time of Day	Preservation & # of Containers	Matrix	Analysis	Remarks
01	WSW @ 14.5'			3/5/2009	1400		1	Soil	X	
02	ESW @ 14.5'			3/5/2009	1405		1	Soil	X	
03	ESW @ 14.5'			3/5/2009	1410		1	Soil	X	
04	NSW @ 14.5'			3/5/2009	1415		1	Soil	X	
05	Stockpile Baseline			3/5/2009	1420		1	Soil	X	

Special Instructions:

Requested by: Camille Bryant Date: 3/6/09 Time: 1420
 Recieved by: Camille Bryant Date: 3/6/09 Time: 1717
 Reported by: Camille Bryant Date: 3/6/09 Time: 1717

Temperature Upon Receipt: 5.5 °C

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

Client: Basin Env. Plains
Date/ Time: 3.6.09 17:17
Lab ID #: 376865
Initials: al

Sample Receipt Checklist

				Client Initials
#1	Temperature of container/ cooler?	<input checked="" type="checkbox"/> Yes	No	55 °C
#2	Shipping container in good condition?	<input checked="" type="checkbox"/> Yes	No	
#3	Custody Seals intact on shipping container/ cooler?	<input checked="" type="checkbox"/> Yes	No	Not Present
#4	Custody Seals intact on sample bottles/ container?	<input checked="" type="checkbox"/> Yes	No	Not Present
#5	Chain of Custody present?	<input checked="" type="checkbox"/> Yes	No	
#6	Sample instructions complete of Chain of Custody?	<input checked="" type="checkbox"/> Yes	No	
#7	Chain of Custody signed when relinquished/ received?	<input checked="" type="checkbox"/> Yes	No	
#8	Chain of Custody agrees with sample label(s)?	<input checked="" type="checkbox"/> Yes	No	ID written on Cont./ Lid
#9	Container label(s) legible and intact?	<input checked="" type="checkbox"/> Yes	No	Not Applicable
#10	Sample matrix/ properties agree with Chain of Custody?	<input checked="" type="checkbox"/> Yes	No	
#11	Containers supplied by ELDT?	<input checked="" type="checkbox"/> Yes	No	
#12	Samples in proper container/ bottle?	<input checked="" type="checkbox"/> Yes	No	See Below
#13	Samples properly preserved?	<input checked="" type="checkbox"/> Yes	No	See Below
#14	Sample bottles intact?	<input checked="" type="checkbox"/> Yes	No	
#15	Preservations documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	No	
#16	Containers documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	No	
#17	Sufficient sample amount for indicated test(s)?	<input checked="" type="checkbox"/> Yes	No	See Below
#18	All samples received within sufficient hold time?	<input checked="" type="checkbox"/> Yes	No	See Below
#19	Subcontract of sample(s)?	<input checked="" type="checkbox"/> Yes	No	Not Applicable
#20	VOC samples have zero headspace?	<input checked="" type="checkbox"/> Yes	No	Not Applicable

Variance Documentation

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

Regarding: _____

Corrective Action Taken:

Check all that Apply:

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

Andrea Lam

From: "Curt D. Stanley" <cstanley@basinenv.com>
To: "Andrea Lam" <andrea.lam@xenco.com>
Sent: Friday, March 13, 2009 10:54 AM
Subject: Re: WO 326865

Confirmed

326865-02 should read SSW @ 14.5'

Thank you,

Curt Stanley
Basin

----- Original Message -----

From: Andrea Lam
To: Curt Stanley
Sent: Friday, March 13, 2009 9:09 AM
Subject: WO 326865

Curt- Please respond to this email confirming our phone call that lab 1d -02 should be SSW' @ 14.5' not ESW' @ 14.5' as listed on the COC.

*Thank You,
Andrea Lam
Sample Receiving / Project Assistant*

*Environmental Lab of Texas
A Xenco Company
12600 W I-20 E
Odessa, TX 79765
432-563-1800*

3/13/2009

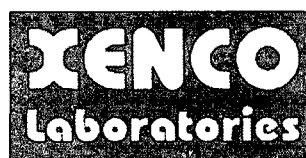
Analytical Report 330357
for
PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

DCP Plant to Lea Station 6" # 2

2009-039

22-APR-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

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



22-APR-09

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

Reference: XENCO Report No: **330357**
DCP Plant to Lea Station 6" # 2
Project Address: Lea County, NM

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 330357. 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. 330357 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

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Sample Cross Reference 330357



PLAINS ALL AMERICAN EH&S, Midland, TX

DCP Plant to Lea Station 6" # 2

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SB-1 @ 10'	S	Apr-15-09 10:00		330357-001
SB-1 @ 20'	S	Apr-15-09 10:20		330357-002
SB-1 @ 30'	S	Apr-15-09 10:40		330357-003
SB-1 @ 40'	S	Apr-15-09 11:00		330357-004
SB-1 @ 50'	S	Apr-15-09 11:30		330357-005
SB-1 @ 60'	S	Apr-15-09 11:50		330357-006



Certificate of Analysis Summary 330357
PLAINS ALL AMERICAN EH&S, Midland, TX



Project Id: 2009-039

Contact: Jason Henry

Project Location: Lea County, NM

Date Received in Lab: Fri Apr-17-09 08:07 am

Report Date: 22-APR-09

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	Field Id:	Depth:	Matrix:	Sampled:	330357-001	330357-002	330357-003	330357-004	330357-005	330357-006
	SB-1 @ 10'	SB-1 @ 20'	SB-1 @ 30'	SB-1 @ 40'	SB-1 @ 50'	SB-1 @ 60'	SB-1 @ 70'	SB-1 @ 80'	SB-1 @ 90'	SB-1 @ 100'	SB-1 @ 110'
BTEX by EPA 8021B	Extracted:	Apr-20-09 00:00	Apr-21-09 10:00	Apr-22-09 10:00	Apr-23-09 10:00	Apr-24-09 10:00	Apr-25-09 10:00	Apr-26-09 10:00	Apr-27-09 10:00	Apr-28-09 10:00	Apr-29-09 10:00
	Analyzed:	Apr-21-09 07:40	Apr-22-09 09:36	Apr-23-09 10:38	Apr-24-09 11:00	Apr-25-09 11:30	Apr-26-09 12:00	Apr-27-09 12:30	Apr-28-09 13:00	Apr-29-09 13:30	Apr-30-09 14:00
	Units/RL:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	Benzene	ND 0.0517	ND 0.0050	ND 0.0561	ND 0.0052	ND 0.0561	ND 0.0052	ND 0.0561	ND 0.0052	ND 0.0561	ND 0.0052
	Toluene	0.7010 0.1033	ND 0.0101	ND 0.1121	ND 0.0103	ND 0.1121	ND 0.0103	ND 0.1121	ND 0.0103	ND 0.1121	ND 0.0103
Percent Moisture	Extracted:	Apr-17-09 17:00	Apr-17-09 17:00	Apr-17-09 17:00	Apr-17-09 17:00	Apr-17-09 17:00	Apr-17-09 17:00	Apr-17-09 17:00	Apr-17-09 17:00	Apr-17-09 17:00	Apr-17-09 17:00
	Analyzed:	Apr-19-09 14:00	Apr-19-09 14:00	Apr-19-09 14:00	Apr-19-09 14:00	Apr-19-09 14:00	Apr-19-09 14:00	Apr-19-09 14:00	Apr-19-09 14:00	Apr-19-09 14:00	Apr-19-09 14:00
	Units/RL:	%	%	%	%	%	%	%	%	%	%
	Benzene	3.21 1.00	1.87 1.00	10.83 1.00	3.16 1.00	10.83 1.00	3.16 1.00	10.83 1.00	3.16 1.00	10.83 1.00	3.16 1.00
	Toluene	ND 0.0517	ND 0.0050	ND 0.0561	ND 0.0052	ND 0.0561	ND 0.0052	ND 0.0561	ND 0.0052	ND 0.0561	ND 0.0052
TPH By SW8015 Mod	Extracted:	Apr-17-09 17:00	Apr-17-09 17:00	Apr-17-09 17:00	Apr-17-09 17:00	Apr-17-09 17:00	Apr-17-09 17:00	Apr-17-09 17:00	Apr-17-09 17:00	Apr-17-09 17:00	Apr-17-09 17:00
	Analyzed:	Apr-19-09 14:00	Apr-19-09 14:00	Apr-19-09 14:00	Apr-19-09 14:00	Apr-19-09 14:00	Apr-19-09 14:00	Apr-19-09 14:00	Apr-19-09 14:00	Apr-19-09 14:00	Apr-19-09 14:00
	Units/RL:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	Benzene	725 155	338 15.3	596 84.1	50.6 15.5	596 84.1	50.6 15.5	596 84.1	50.6 15.5	596 84.1	50.6 15.5
	Toluene	504 155	558 15.3	647 84.1	332 15.5	647 84.1	332 15.5	647 84.1	332 15.5	647 84.1	332 15.5
Total TPH	Extracted:	Apr-17-09 17:00	Apr-17-09 17:00	Apr-17-09 17:00	Apr-17-09 17:00	Apr-17-09 17:00	Apr-17-09 17:00	Apr-17-09 17:00	Apr-17-09 17:00	Apr-17-09 17:00	Apr-17-09 17:00
	Analyzed:	Apr-19-09 14:00	Apr-19-09 14:00	Apr-19-09 14:00	Apr-19-09 14:00	Apr-19-09 14:00	Apr-19-09 14:00	Apr-19-09 14:00	Apr-19-09 14:00	Apr-19-09 14:00	Apr-19-09 14:00
	Units/RL:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	Benzene	ND 0.0517	ND 0.0050	ND 0.0561	ND 0.0052	ND 0.0561	ND 0.0052	ND 0.0561	ND 0.0052	ND 0.0561	ND 0.0052
	Toluene	8.012 0.0517	0.6718 0.0050	3.6259 0.0561	0.0025 0.0011	3.6259 0.0561	0.0025 0.0011	3.6259 0.0561	0.0025 0.0011	3.6259 0.0561	0.0025 0.0011

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

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Brent Barron

Odessa Laboratory Director



Flagging Criteria



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

* Outside XENCO's scope of NELAC Accreditation.

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5757 NW 158th St, Miami Lakes, FL 33014
12600 West I-20 East, Odessa, TX 79765
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(214) 902 0300	(214) 351-9139
(210) 509-3334	(210) 509-3335
(813) 620-2000	(813) 620-2033
(305) 823-8500	(305) 823-8555
(432) 563-1800	(432) 563-1713
(361) 884-0371	(361) 884-9116



Form 2 - Surrogate Recoveries

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

Work Orders : 330357,

Project ID: 2009-039

Lab Batch #: 756442

Sample: 528575-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 04/21/09 02:13

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0275	0.0300	92	80-120	
4-Bromofluorobenzene	0.0285	0.0300	95	80-120	

Lab Batch #: 756442

Sample: 528575-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 04/21/09 02:34

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0274	0.0300	91	80-120	
4-Bromofluorobenzene	0.0285	0.0300	95	80-120	

Lab Batch #: 756442

Sample: 528575-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 04/21/09 03:14

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0245	0.0300	82	80-120	
4-Bromofluorobenzene	0.0277	0.0300	92	80-120	

Lab Batch #: 756442

Sample: 330357-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/21/09 04:57

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0218	0.0300	73	80-120	*
4-Bromofluorobenzene	0.0273	0.0300	91	80-120	

Lab Batch #: 756442

Sample: 330357-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/21/09 07:40

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0205	0.0300	68	80-120	*
4-Bromofluorobenzene	0.0435	0.0300	145	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.



Form 2 - Surrogate Recoveries

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

Work Orders : 330357,

Project ID: 2009-039

Lab Batch #: 756442

Sample: 330355-027 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/21/09 10:25

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0241	0.0300	80	80-120	
4-Bromofluorobenzene	0.0291	0.0300	97	80-120	

Lab Batch #: 756442

Sample: 330355-027 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/21/09 10:45

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0252	0.0300	84	80-120	
4-Bromofluorobenzene	0.0311	0.0300	104	80-120	

Lab Batch #: 756632

Sample: 528674-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 04/21/09 11:49

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0267	0.0300	89	80-120	
4-Bromofluorobenzene	0.0322	0.0300	107	80-120	

Lab Batch #: 756632

Sample: 528674-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 04/21/09 12:10

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0269	0.0300	90	80-120	
4-Bromofluorobenzene	0.0329	0.0300	110	80-120	

Lab Batch #: 756632

Sample: 528674-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 04/21/09 12:51

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0235	0.0300	78	80-120	**
4-Bromofluorobenzene	0.0308	0.0300	103	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.



Form 2 - Surrogate Recoveries

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

Work Orders : 330357,

Project ID: 2009-039

Lab Batch #: 756632

Sample: 330357-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/22/09 09:36

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0200	0.0300	67	80-120	**
4-Bromofluorobenzene	0.0847	0.0300	282	80-120	**

Lab Batch #: 756632

Sample: 330357-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/22/09 09:56

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0209	0.0300	70	80-120	**
4-Bromofluorobenzene	0.0438	0.0300	146	80-120	**

Lab Batch #: 756632

Sample: 330357-006 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/22/09 10:17

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0206	0.0300	69	80-120	**
4-Bromofluorobenzene	0.0595	0.0300	198	80-120	**

Lab Batch #: 756632

Sample: 330357-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/22/09 10:58

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0199	0.0300	66	80-120	**
4-Bromofluorobenzene	0.0657	0.0300	219	80-120	**

Lab Batch #: 756632

Sample: 330466-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/22/09 11:18

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0237	0.0300	79	80-120	*
4-Bromofluorobenzene	0.0503	0.0300	168	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.



Form 2 - Surrogate Recoveries

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

Work Orders : 330357,

Project ID: 2009-039

Lab Batch #: 756632

Sample: 330466-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/22/09 11:39

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0236	0.0300	79	80-120	**
4-Bromofluorobenzene	0.0499	0.0300	166	80-120	**

Lab Batch #: 756285

Sample: 8406396-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 04/19/09 15:42

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	108	100	108	70-135	
o-Terphenyl	50.3	50.0	101	70-135	

Lab Batch #: 756285

Sample: 8406396-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 04/19/09 16:07

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	111	100	111	70-135	
o-Terphenyl	52.0	50.0	104	70-135	

Lab Batch #: 756285

Sample: 8406396-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 04/19/09 16:32

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	96.7	100	97	70-135	
o-Terphenyl	56.5	50.0	113	70-135	

Lab Batch #: 756285

Sample: 330357-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/19/09 21:34

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	93.9	100	94	70-135	
o-Terphenyl	52.1	50.0	104	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" # 2

Work Orders : 330357,

Project ID: 2009-039

Lab Batch #: 756285

Sample: 330357-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/19/09 21:59

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	100	102	70-135	
o-Terphenyl	54.9	50.0	110	70-135	

Lab Batch #: 756285

Sample: 330357-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/19/09 22:24

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	99.6	100	100	70-135	
o-Terphenyl	53.6	50.0	107	70-135	

Lab Batch #: 756285

Sample: 330357-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/19/09 22:49

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.0	100	98	70-135	
o-Terphenyl	54.3	50.0	109	70-135	

Lab Batch #: 756285

Sample: 330357-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/19/09 23:14

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	99.3	100	99	70-135	
o-Terphenyl	57.0	50.0	114	70-135	

Lab Batch #: 756285

Sample: 330357-006 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/19/09 23:38

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	100	100	100	70-135	
o-Terphenyl	56.6	50.0	113	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" # 2

Work Orders : 330357,

Project ID: 2009-039

Lab Batch #: 756285

Sample: 330355-030 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/20/09 01:43

SURROGATE RECOVERY 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	52.3	50.0	105	70-135	

Lab Batch #: 756285

Sample: 330355-030 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 04/20/09 02:09

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	118	100	118	70-135	
o-Terphenyl	54.6	50.0	109	70-135	

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

*** Poor recoveries due to dilution

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

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



BS / BSD Recoveries



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

Work Order #: 330357

Analyst: ASA

Lab Batch ID: 756442

Sample: 528575-1-BKS

Date Prepared: 04/20/2009

Batch #: 1

Project ID: 2009-039

Date Analyzed: 04/21/2009

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY													
Units: mg/kg													
Analytes	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]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Benzene		ND	0.1000	0.0811	81	0.1	0.0811	81	0	70-130	35	
	Toluene		ND	0.1000	0.0769	77	0.1	0.0767	77	0	70-130	35	
	Ethylbenzene		ND	0.1000	0.0804	80	0.1	0.0805	81	0	71-129	35	
	m,p-Xylenes		ND	0.2000	0.1661	83	0.2	0.1661	83	0	70-135	35	
	o-Xylene		ND	0.1000	0.0795	80	0.1	0.0796	80	0	71-133	35	

Analyst: ASA

Lab Batch ID: 756632

Sample: 528674-1-BKS

Date Prepared: 04/21/2009

Batch #: 1

Date Analyzed: 04/21/2009

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY												
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]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Benzene		ND	0.1000	0.0846	85	0.1	0.0873	87	3	70-130	35	
Toluene		ND	0.1000	0.0801	80	0.1	0.0833	83	4	70-130	35	
Ethylbenzene		ND	0.1000	0.0845	85	0.1	0.0878	88	4	71-129	35	
m,p-Xylenes		ND	0.2000	0.1755	88	0.2	0.1818	91	4	70-135	35	
o-Xylene		ND	0.1000	0.0835	84	0.1	0.0858	86	3	71-133	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



BS / BSD Recoveries



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

Work Order #: 330357

Analyst: BHW

Lab Batch ID: 756285

Sample: 8406396-1-BKS

Date Prepared: 04/19/2009

Batch #: 1

Project ID: 2009-039

Date Analyzed: 04/19/2009

Matrix: Solid

Units: mg/kg

TPH By SW8015 Mod

Analytes

C6-C12 Gasoline Range Hydrocarbons

C12-C28 Diesel Range Hydrocarbons

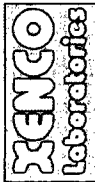
BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY												
Units: mg/kg												
Analytes	TPH By SW8015 Mod	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	C6-C12 Gasoline Range Hydrocarbons	ND	1000	1040	104	1000	1070	107	3	70-135	35	
	C12-C28 Diesel Range Hydrocarbons	ND	1000	1020	102	1000	1050	105	3	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" # 2

Work Order #: 330357

Lab Batch ID: 756442

Date Analyzed: 04/21/2009

Reporting Units: mg/kg

Project ID: 2009-039

QC- Sample ID: 330355-027 S

Batch #: 1

Matrix: Soil

Date Prepared: 04/20/2009

Analyst: ASA

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
BTEX by EPA 8021B											
Benzene	ND	0.1293	0.0819	63	0.1293	0.0867	67	6	70-130	35	X
Toluene	ND	0.1293	0.0752	58	0.1293	0.0790	61	5	70-130	35	X
Ethylbenzene	ND	0.1293	0.0778	60	0.1293	0.0835	65	7	71-129	35	X
m,p-Xylenes	ND	0.2587	0.1172	45	0.2587	0.1201	46	2	70-135	35	X
o-Xylene	ND	0.1293	0.0767	59	0.1293	0.0814	63	6	71-133	35	X

Lab Batch ID: 756632

Date Analyzed: 04/22/2009

Reporting Units: mg/kg

QC- Sample ID: 330466-001 S

Batch #: 1

Matrix: Soil

Date Prepared: 04/21/2009

Analyst: ASA

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
BTEX by EPA 8021B											
Benzene	ND	0.1126	0.0617	55	0.1126	0.0627	56	2	70-130	35	X
Toluene	ND	0.1126	0.0598	53	0.1126	0.0612	54	2	70-130	35	X
Ethylbenzene	ND	0.1126	0.0652	58	0.1126	0.0662	59	2	71-129	35	X
m,p-Xylenes	ND	0.2252	0.1341	60	0.2252	0.1364	61	2	70-135	35	X
o-Xylene	ND	0.1126	0.0587	52	0.1126	0.0604	54	3	71-133	35	X

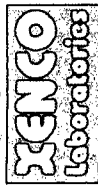
Matrix Spike Percent Recovery $[D] = 100 \times (C-A)/B$

Relative Percent Difference $RPD = 200 \times (C-F)/(C+F)$

ND = Not Detected, I = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not

Applicable N = See Narrative, EQL = Estimated Quantitation Limit

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



Form 3 - MS / MSD Recoveries

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



Work Order # : 330357

Lab Batch ID: 756285

Date Analyzed: 04/20/2009

Reporting Units: mg/kg

Project ID: 2009-039

QC- Sample ID: 330355-030 S

Batch #: 1 Matrix: Soil

Date Prepared: 04/19/2009

Analyst: BHW

Reporting Units: mg/kg											
MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY 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
	ND	1180	1360	115	1180	1410	119	4	70-135	35	
	C6-C12 Gasoline Range Hydrocarbons										
	C12-C28 Diesel Range Hydrocarbons	ND	1180	1330	113	1180	1380	117	4	70-135	35

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

Relative Percent Difference $RPD = 200 \times (C-F)/(C+F)$

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

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



Sample Duplicate Recovery



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

Work Order #: 330357

Lab Batch #: 756187

Project ID: 2009-039

Date Analyzed: 04/17/2009

Date Prepared: 04/17/2009

Analyst: BEV

QC- Sample ID: 330355-021 D

Batch #: 1

Matrix: Soil

Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOVERY

Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	7.90	7.38	7	20	

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

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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST
12600 West I-20 East Phone: 432-563-1800
Odessa, Texas 79765 Fax: 432-563-1713

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

Project #: 2009-039

Project #: 2009-039

Project Loc: Lea County, NM

PO #: PAA - J. Henry

Fax No: (575) 396-1429

Print Format: ☒ Standard

Sampler Signature: 

cdstanley@basin-consulting.com

257

[illegible]

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

Client: Plains Basin
Date/ Time: 04-17-09 09:00
Lab ID #: 330357
Initials: JMF

Sample Receipt Checklist

				Client Initials
#1 Temperature of container/ cooler?	(Yes)	No	2.5 °C	
#2 Shipping container in good condition?	(Yes)	No		
#3 Custody Seals Intact on shipping container/ cooler?	Yes	No	(Not Present)	
#4 Custody Seals Intact on sample bottles/ container? / <u>1 cap!</u>	(Yes)	No	Not Present	
#5 Chain of Custody present?	(Yes)	No		
#6 Sample instructions complete of Chain of Custody?	(Yes)	No		
#7 Chain of Custody signed when relinquished/ received?	(Yes)	No		
#8 Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont./ Lid	
#9 Container label(s) legible and intact?	(Yes)	No	Not Applicable	
#10 Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		
#11 Containers supplied by ELOT?	(Yes)	No		
#12 Samples in proper container/ bottle?	(Yes)	No	See Below	
#13 Samples properly preserved?	(Yes)	No	See Below	
#14 Sample bottles intact?	(Yes)	No		
#15 Preservations documented on Chain of Custody?	(Yes)	No		
#16 Containers documented on Chain of Custody?	(Yes)	No		
#17 Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18 All samples received within sufficient hold time?	(Yes)	No	See Below	
#19 Subcontract of sample(s)?	Yes	No	(Not Applicable)	
#20 VOC samples have zero headspace?	(Yes)	No	Not Applicable	

Variance Documentation

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

Regarding: _____

Corrective Action Taken: _____

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

Appendix C

Photographs



DCP Plant to Lea Station 6-Inch #2 release site initial response activities



DCP Plant to Lea Station 6-Inch #2 release site excavation activities



DCP Plant to Lea Station 6-Inch #2 release site excavation



DCP Plant to Lea Station 6-Inch #2 release site excavation

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

Hansen, Edward J., EMNRD

From: Jason Henry [JHenry@paalp.com]
Sent: Thursday, April 16, 2009 2:13 PM
To: Hansen, Edward J., EMNRD
Cc: Johnson, Larry, EMNRD; Jeffrey P Dann
Subject: Plains DCP Plant to Lea Station 6-inch #2 site-groundwater impact
Attachments: DCP #2 Initial C141.pdf

Ed,

As we discussed on the phone, please accept this email as notification of crude oil impacted groundwater at the following Plains Pipeline site:

DCP Plant to Lea Station 6-inch #2 site, 1RP-2136 (copy of Initial C-141 attached)

The groundwater impact was discovered during the process of advancing a soil boring at the site to determine the vertical extent of impacted soil. Upon encountering groundwater, a temporary monitor well was placed in the borehole so that a groundwater sample could be collected. A product thickness of 1.2 feet was detected in the temporary monitor well on 04/16/2009. The temporary monitor well will be removed and a permanent recovery well will be installed in the borehole on 04/17/2009. Additional monitoring wells and/or recovery wells will be installed at the site pending approval from the New Mexico State Land Office.

Plains will submit future correspondence regarding site activities to you and will submit copies of the correspondence to Larry at the District 1 office in Hobbs.

Please let me know if you have any questions or need additional information.

Thank you,
Jason Henry
575-441-1099

This inbound email has been scanned by the MessageLabs Email Security System.

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Plains Pipeline, LP	Contact	Jason Henry
Address	2530 Hwy 214 - Denver City, Tx 79323	Telephone No.	(575) 441-1099
Facility Name	DCP Plant to Lea Station 6-inch #2	Facility Type	Pipeline

Surface Owner	NM SLO	Mineral Owner		Lease No.	23-005-06283
---------------	--------	---------------	--	-----------	--------------

LOCATION OF RELEASE

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

Latitude N 32.5316667° Longitude W 103.2911111°

NATURE OF RELEASE

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

If a Watercourse was Impacted, Describe Fully.*

RECEIVED

MAR 23 2009

HOBBSOCD

Describe Cause of Problem and Remedial Action Taken.*

External corrosion of 6" inch pipeline caused a release of crude oil. A clamp was installed on the pipeline to mitigate the release. Throughput for the subject line is 660 bbls/day and the operating pressure of the pipeline is 45 psi. The depth of the pipeline at the release point is approximately 2' bgs. The H2S concentration in the crude is less than 10 ppm and the gravity of the crude is 65.

Describe Area Affected and Cleanup Action Taken.*

The released crude resulted in a surface stain that measured approximately 10' x 12'. The impacted area will be remediated per applicable guidelines.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOC rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOC marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOC acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

OIL CONSERVATION DIVISION

Signature:

Jason Henry

Printed Name: Jason Henry

Approved by District Supervisor:

Title: Remediation Coordinator

Approval Date:

Expiration Date:

E-mail Address: jhenry@paalp.com

Conditions of Approval:

Attached ☐

Date: 03/23/2009

Phone: (575) 441-1099

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Attach Additional Sheets If Necessary