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

State of New Mexico
Energy Minerals and Natural Resources

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

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

1RP-1927

OPERATOR

☐ Initial Report XX Final Report

Name of Company Plains Marketing, L. P.	Contact Jason Henry
Address 3112 W. US Hwy 82, Lovington, NM 88260	Telephone No. (575) 441-1099
Facility Name CVU 6 Inch	Facility Type 6" Steel Pipeline

Surface Owner New Mexico State Land Office	Mineral Owner	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	31	17S	35E					Lea

Latitude 32°, 47', 36.8" North **Longitude** 103°, 30', 14.1" West.

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 8 barrels	Volume Recovered 0 barrels
Source of Release 6-inch Steel Pipeline	Date and Hour of Occurrence 07/12/2008 @ 1200	Date and Hour of Discovery 07/12/2008 @ 1500
Was Immediate Notice Given? Yes ☐ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes XX☐ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* The initial visual impacted area was approximately 5 feet ong by 8 feet wide. At that time the crude oil release was deemed to be a non-reportable release. Upon further excavation of the release area, it was determined to upgrade the release to a reportable status. The impacted soil was stockpiled on site on a 6-mil poly liner.

Describe Area Affected and Cleanup Action Taken.* The crude oil release site was excavated; the impacted soil placed on a poly-liner adjacent to the excavation, confirmation soil samples were collected from the floor and walls of the excavation. Approximately 264 cubic yards of impacted soil was transported to Sundance Services for disposal and the excavation was backfilled with locally purchased soil.
PLEASE SEE THE ATTACHED BASIN ENVIRONMENTAL SERVICE TECHNOLOGIES SITE CLOSURE REQUEST, DATED January 2009, WITH ATTACHMENTS FOR DETAILS OF REMEDIAL ACTIVITIES CONDUCTED.

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

Signature: Jason Henry	OIL CONSERVATION DIVISION
Printed Name: Jason Henry	Approved by District Supervisor: ENVIRONMENTAL ENGINEER
Title: Remediation Coordinator	Approval Date: 1·29·09 Expiration Date: —
E-mail Address: jmhenry@paalp.com	Conditions of Approval: Attached ☐ 1RP- 1927
Date: January 29, 2009 Phone: (575) 441-1099	

RECEIVED
JAN 29 2009
HOBBSOCD

District I
1625 N. French Dr , Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
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Form C-141
Revised October 10, 2003

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Release Notification and Corrective Action
1RP-1927

OPERATOR

☐ Initial Report XX Final Report

Name of Company Plains Marketing, L. P.	Contact Jason Henry
Address 3112 W. US Hwy 82, Lovington, NM 88260	Telephone No. (575) 441-1099
Facility Name CVU 6 Inch	Facility Type 6" Steel Pipeline

Surface Owner New Mexico State Land Office	Mineral Owner	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	31	17S	35E					Lea

Latitude 32°, 47', 36.8" North **Longitude** 103°, 30', 14.1" West.

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 8 barrels	Volume Recovered 0 barrels
Source of Release 6-inch Steel Pipeline	Date and Hour of Occurrence 07/12/2008 @ 1200	Date and Hour of Discovery 07/12/2008 @ 1500
Was Immediate Notice Given? Yes ☐ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes XX☐ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* The initial visual impacted area was approximately 5 feet ong by 8 feet wide. At that time the crude oil release was deemed to be a non-reportable release. Upon further excavation of the release area, it was determined to upgrade the release to a reportable status. The impacted soil was stockpiled on site on a 6-mil poly liner.

Describe Area Affected and Cleanup Action Taken.* The crude oil release site was excavated; the impacted soil placed on a poly-liner adjacent to the excavation, confirmation soil samples were collected from the floor and walls of the excavation. Approximately 264 cubic yards of impacted soil was transported to Sundance Services for disposal and the excavation was backfilled with locally purchased soil.
PLEASE SEE THE ATTACHED BASIN ENVIRONMENTAL SERVICE TECHNOLOGIES SITE CLOSURE REQUEST, DATED January 2009, WITH ATTACHMENTS FOR DETAILS OF REMEDIAL ACTIVITIES CONDUCTED.

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

Signature: Jason Henry	OIL CONSERVATION DIVISION	
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Title: Remediation Coordinator	Approval Date: 1.29.09	Expiration Date —
E-mail Address: jmhenry@paalp.com	Conditions of Approval:	Attached ☐ 1RP- 1927
Date: January 29, 2009 Phone: (575) 441-1099		

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JAN 29 2009

Basin Environmental Service Technologies, LLC

2800 Plains Highway
P. O. Box 301
Lovington, New Mexico 88260
cjbryant@basin-consulting.com
Office: (505) 396-2378 Fax: (505) 396-1429

Effective Solutions

SITE CLOSURE REQUEST

PLAINS MARKETING, L.P. (231735)
CVU 6-Inch
Lea County, New Mexico
Plains SRS # 2008-186
UNIT E (SW/NW), Section 31, Township 17 South, Range 35 East
Latitude 32° 47' 36.8" North, Longitude 103° 30' 14.1" West
NMOCD Reference # 1RP-1927

Prepared For:

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

Prepared By:
Basin Environmental Service Technologies, LLC

January 2009

JAN 29 2009

JAN 29 2009

Camille J. Bryant

Project Manager

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JAN 29 2009
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TABLE OF CONTENTS

INTRODUCTION AND BACKGROUND INFORMATION

Basin Environmental Service Technologies, LLC (Basin), on behalf of Plains Marketing, L.P. (Plains), has prepared this Site Closure Request for the release site known as the CVU 6 Inch Pipeline (SRS# 2008-186). The site is located in Unit Letter E (SW ¼ NW ¼), Section 31, Township 17 South, Range 35 East, in Lea County, New Mexico. The site is located adjacent to a large Chevron Texaco crude oil and produced water storage facility. The property is owned by the State of New Mexico and administered by the New Mexico State Land Office (SLO). A request for a Right-of-Entry permit was submitted and subsequently approved by the SLO Santa Fe Office (SLO ROE-1725). The site latitude is 32° 47' 36.8" North, and the longitude is 103° 30' 14.1" West. The Site Location and Site and Sample Location Map are provided as Figure 1 and Figure 2, respectively. The Release Notification and Corrective Action (NMOCD Form C-141) indicated approximately eight (8) barrels of crude oil was released from the Plains pipeline and zero (0) barrels were recovered during the initial response activities. The Release Notification and Corrective Action is provided as Appendix C.

On July, 2008, Basin, on behalf of Plains responded to a pipeline release located on the CVU 6-Inch Pipeline. Plains operations personnel mitigated the crude oil release by installing a temporary clamp on the pipeline. The crude oil release was initially deemed non-reportable; however, upon further excavation it was apparent that the release was larger than initially thought and Plains decided to elevate the crude oil release as a reportable quantity. The impacted soil excavated during initial response activities was stockpiled on a 6-mil poly liner adjacent to the excavation. The initial visually stained area covered an area measuring approximately 10 feet long by 6 feet wide.

NMOCD SITE CLASSIFICATION

A search of the New Mexico Office of the State Engineer (NMOSE) water well database indicated depth to groundwater is approximately 106 feet below ground surface (bgs) in the section. The depth to groundwater at the CVU 6-Inch release site results in a score of ten (10) points being assigned to the site, based on the NMOCD depth to groundwater criteria.

The water well database, maintained by the NMOSE indicated there are no water wells 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 within 1,000 feet of the release site. Based on the NMOCD ranking system zero (0) points will be assigned to the site as a result of the criteria.

Based on this data, the site has an NMOCD Ranking Score of ten (10) points. The *NMOCD Guidelines for the Remediation of Leaks, Spills and Releases* (NMOCD, 1993) sets the remediation levels at:

Benzene:	10 mg/Kg (ppm)
BTEX:	50 mg/Kg (ppm)
TPH:	1,000 mg/Kg (ppm)

SUMMARY OF FIELD ACTIVITIES

During July and August 2008, hydrocarbon impacted soil was excavated at the release site. Approximately 264 cubic yards (cy) of impacted soil was stockpiled adjacent to the excavation pending transportation to an NMOCD permitted disposal facility. The final dimensions of the excavation were approximately 31 feet in length and 27 feet in width and approximately 15 feet bgs in depth.

On August 18, 2008, one (1) soil sample (Floor Comp 15') was collected from the floor of the excavation and submitted to the laboratory for analysis. The soil sample was analyzed for concentrations of total petroleum hydrocarbons (TPH) using method SW-8015 modified. A summary of the analytical results are included in Table 1, Soil Chemistry Table. Laboratory results are included in Appendix A and soil sample locations are depicted on Figure 2, Site and Sample Location Map. Photographs of the site are included in Appendix B.

The laboratory analytical result indicated a TPH concentration of 1,091 mg/Kg for soil sample Floor Comp 15'. The TPH concentration exhibited in the Floor Comp. 15' soil sample was above the NMOCD site specific standard at 1,091 mg/Kg, however, soil sample results are within the laboratory margin of error reporting parameters and were approved by the NMOCD Hobbs District Office.

On November 4, 2008, four (4) confirmation soil samples (North SW @ 11', East SW @ 11', South SW @11' and West SW @ 11') were collected from the excavation sidewalls. The soil samples were analyzed for concentrations of benzene, toluene, ethylbenzene and xylene (BTEX) using method EPA 8021b and concentrations of TPH using method SW-8015 modified.

The analytical results indicated benzene concentrations ranged from below the laboratory method detection limit (MDL) for soil samples East SW @ 11', South SW @ 11' and West SW @ 11' to 0.0012 mg/Kg for soil sample North SW @ 11'.

The analytical results indicated TPH concentrations ranged from below the MDL for soil sample East SW @ 11' to 116 mg/Kg for soil sample West SW @ 11'.

On December 4, 2008, the NMOCD Hobbs District Office approved the CVU 6-Inch *Remediation Summary and Site Closure Proposal*, dated November 2008.

Approximately 264 cubic yards (cy) of impacted soil was stockpiled adjacent to the excavation pending transportation to Sundance Services for disposal. The final dimensions of the excavation were approximately 31 feet in width (north to south) and 27 feet in length (west to east) and 15 feet bgs in depth.

Basin transported approximately 264 cy of impacted soil to Sundance Services (NMOCD Permit NM-01-0003) for disposal. The excavation was backfilled with the locally purchased soil and contoured to match the surrounding topography. The site is located on a caliche pad adjacent to a Chevron Texaco facility; therefore no seeding will be conducted.

SITE CLOSURE REQUEST

Based on the analytical results of confirmation soil samples collected from the floor and sidewalls of the excavation, Basin recommends Plains provide the NMOCD Hobbs District Office a copy of this Site Closure Request and request the NMOCD grant site closure to the CVU 6-Inch Pipeline release site.

LIMITATIONS

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

Basin Environmental Service Technologies, LLC has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. Basin Environmental Service Technologies, 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 Service Technologies, LLC has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin Environmental Service Technologies, 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 Marketing, 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 Service Technologies, LLC and/or Plains Marketing, L.P.

DISTRIBUTION:

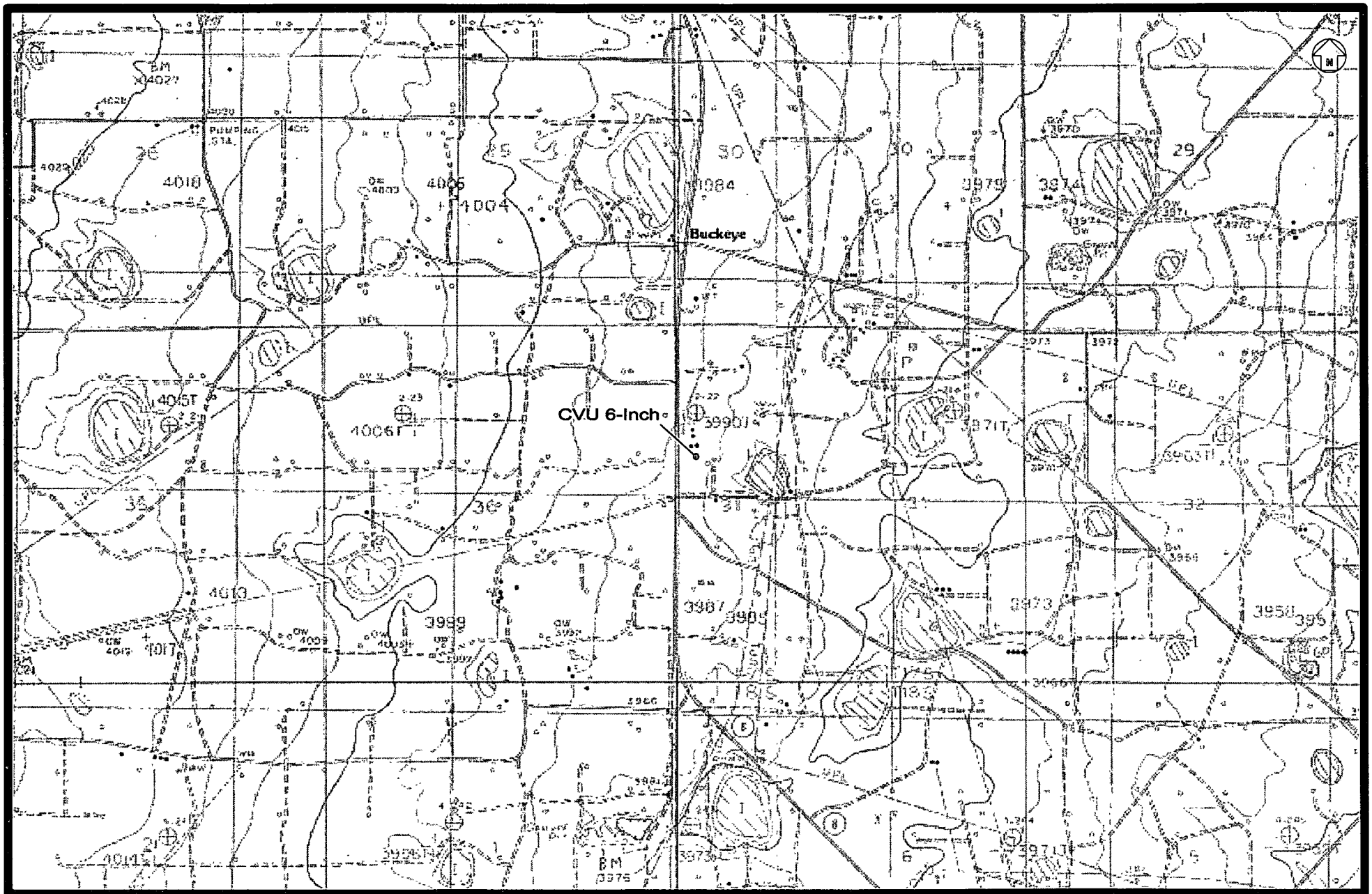
Copy 1: Larry Johnson
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division (District 1)
1625 French Drive
Hobbs, New Mexico 88240
larry.johnson@nm.state.us

Copy 2: Jeff Dann
Plains Marketing, L.P.
333 Clay Street, Suite 1600
Houston, Texas 77002
jpdann@paalp.com

Copy 3: Jason Henry
Plains Marketing, L.P.
2530 State Highway 214
Denver City, Texas 79323
jhenry@paalp.com

Copy 4: Camille Bryant
Basin Environmental Consulting
P.O. Box 381
Lovington, New Mexico 88260
cjbryant@basin-consulting.com

Figures



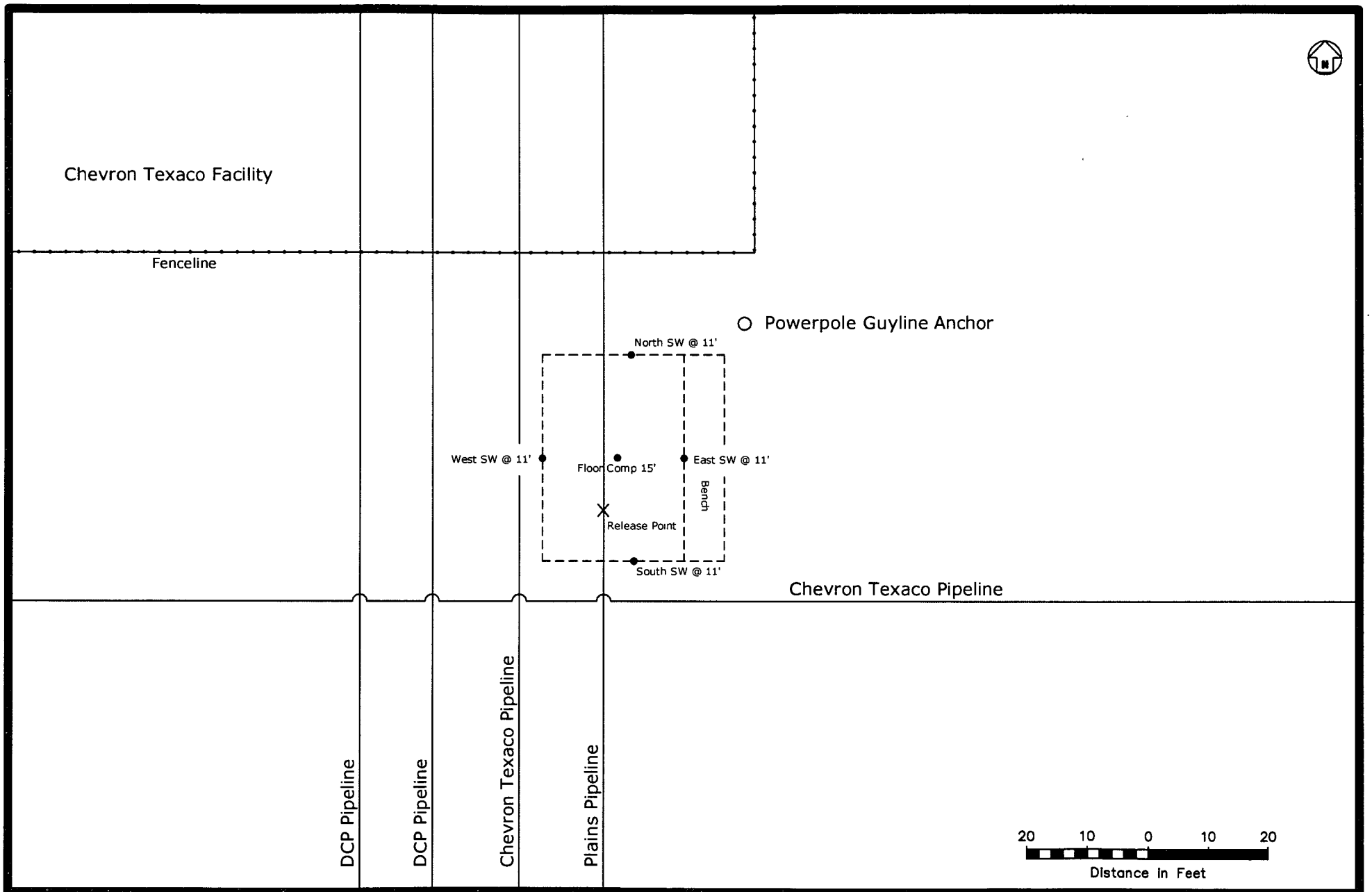
2000 1000 0 1000 2000

Distance in Feet

Figure 1
Site Location Map
CVU 6-Inch
Plains Marketing, L.P.
Lea County, New Mexico
SRS #2008-186
NMOCD # 1RP-1927

Basin Environmental Services

Prep By CDS	Checked By. CJB
October 20, 2008	Scale 1"=2000'



Legend:

- Excavation Extents
- Pipeline
- Sample Location
- Fenceline

Figure 2
Site and Sample Location Map
Plains Marketing, L.P.
CVU 6-Inch
Lea County, New Mexico
SRS # 2008-186
NMOCD Ref # 1RP-1927

Basin Environmental Services

Prep By. CDS	Checked By. CJB
November 24, 2008	Scale 1"=20'

Tables

TABLE 1

SOIL CHEMISTRY TABLE

PLAINS MARKETING, L.P.
CVU 6-INCH
LEA COUNTY, NEW MEXICO
SRS: 2008-186
1RP - 1927

SAMPLE LOCATION	SAMPLE DEPTH (below ground surface)	SAMPLE DATE	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-XYLENE (mg/Kg)	O-XYLENE (mg/Kg)	TOTAL BTEX (mg/Kg)	TPH GRO C_6 - C_{12} (mg/Kg)	TPH DRO C_{12} - C_{28} (mg/Kg)	TPH ORO C_{28} - C_{35} (mg/Kg)	
Floor Comp 15'	15 feet	08/18/08	In-Situ	-	-	-	-	-	-	226	865	<86 0	**1,091**
North SW @ 11'	11 feet	11/04/08	In-Situ	<0 0012	<0 0023	0 0012	<0 0023	<0 0012	0 0012	<17 4	17 8	<17 4	17 8
East SW @ 11'	11 feet	11/04/08	In-Situ	<0 0011	<0 0023	<0 0011	<0 0023	<0 0011	<0 0023	<17 2	<17 2	<17 2	<17 2
South SW @ 11'	11 feet	11/04/08	In-Situ	<0 0011	<0 0022	<0 0011	<0 0022	<0 0011	<0 0022	<16 4	52 1	<16 4	52 1
West SW @ 11'	11 feet	11/04/08	In-Situ	<0 0011	<0 0022	<0 0011	<0 0022	<0 0011	<0 0022	<16 6	116	<16 6	116
NMOCD REGULATORY STANDARD				**10**					**50**				**1,000**

Appendices

Appendix A
Laboratory Reports

Analytical Report 310698

for

PLAINS ALL AMERICAN EH&S

Project Manager: Camille Reynolds

CVU 6-Inch

2008-186

25-AUG-08

XENCO Laboratories

ACCREDITED IN ACCORDANCE WITH nelac

E84880

12600 West I-20 East Odessa, Texas 79765

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

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

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

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

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

25-AUG-08

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

Reference: XENCO Report No: **310698**
CVU 6-Inch
Project Address: Lea County, NM

Camille Reynolds:

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 310698. 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. 310698 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

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

Sample Cross Reference 310698

PLAINS ALL AMERICAN EH&S, Midland, TX

CVU 6-Inch

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Floor Comp 15'	S	Aug-18-08 16:05		310698-001

Certificate of Analysis Summary 310698

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: CVU 6-Inch

Project Id: 2008-186
Contact: Camille Reynolds
Project Location: Lea County, NM

Date Received in Lab: Wed Aug-20-08 05:25 pm
Report Date: 25-AUG-08
Project Manager: Brent Barron, II

Analysis Requested							
	Lab Id:	310698-001					
	Field Id:	Floor Comp 15'					
	Depth:						
	Matrix:	SOIL					
	Sampled:	Aug-18-08 16:05					
Percent Moisture	*Extracted:*						
	Analyzed:	Aug-22-08 09:00					
	Units/RL:	%	RL				
Percent Moisture		12.8					
TPH By SW8015 Mod	*Extracted:*	Aug-22-08 10:30					
	Analyzed:	Aug-22-08 12:49					
	Units/RL:	mg/kg	RL				
C6-C12 Gasoline Range Hydrocarbons		226	86.0				
C12-C28 Diesel Range Hydrocarbons		865	86.0				
C28-C35 Oil Range Hydrocarbons		ND	86.0				
Total TPH		1091					

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

Brent Barron
Odessa Laboratory Director

XENCO Laboratories

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(PQL) and above the SQL(MDL).

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

* Outside XENCO'S scope of NELAC Accreditation

Form 2 - Surrogate Recoveries

Project Name: CVU 6-Inch

Work Order #: 310698 **Project ID:** 2008-186

Lab Batch #: 732039 **Sample:** 310698-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	94.4	100	94	70-135	
o-Terphenyl	57.1	50.0	114	70-135	

Lab Batch #: 732039 **Sample:** 310752-002 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.6	100	92	70-135	
o-Terphenyl	51.0	50.0	102	70-135	

Lab Batch #: 732039 **Sample:** 310752-002 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.1	100	86	70-135	
o-Terphenyl	48.4	50.0	97	70-135	

Lab Batch #: 732039 **Sample:** 514434-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.4	100	86	70-135	
o-Terphenyl	47 7	50.0	95	70-135	

Lab Batch #: 732039 **Sample:** 514434-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	85.9	100	86	70-135	
o-Terphenyl	46.8	50.0	94	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: CVU 6-Inch

Work Order #: 310698 **Project ID:** 2008-186

Lab Batch #: 732039 **Sample:** 514434-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.8	100	88	70-135	
o-Terphenyl	48.4	50.0	97	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: CVU 6-Inch

Work Order #: 310698
Project ID: 2008-186
Analyst: IRO
Date Prepared: 08/22/2008
Date Analyzed: 08/22/2008
Lab Batch ID: 732039
Sample: 514434-1-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	839	84	1000	847	85	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	861	86	1000	869	87	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: CVU 6-Inch

Work Order #: 310698 **Project ID:** 2008-186

Lab Batch ID: 732039 **QC- Sample ID:** 310752-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/22/2008 **Date Prepared:** 08/22/2008 **Analyst:** IRO

Reporting Units: mg/kg

TPH By SW8015 Mod Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	1040	897	86	1040	852	82	5	70-135	35	
C12-C28 Diesel Range Hydrocarbons	52.1	1040	966	88	1040	908	82	7	70-135	35	

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

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

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

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

Sample Duplicate Recovery

Project Name: CVU 6-Inch

Work Order #: 310698

Lab Batch #: 731837 **Project ID:** 2008-186

Date Analyzed: 08/22/2008 **Date Prepared:** 08/22/2008 **Analyst:** MOV

QC- Sample ID: 310679-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	3.64	2.83	25	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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Curt Stanley — PAGE 01 OF 01 — Project Name: CVU 6-inch

Company Name: Basin Environmental Service Technologies, LLC — Project #: 2008-186

Company Address: 2890 Plains Hwy — Project Loc: Lea County, NM

City/State/Zip: Lovington, NM 88260 — PO #: PAA - C.J Bryant

Telephone No: (575) 441-2244 — Fax No: (505) 396-1429 — Report Format: [X] Standard [ ] TRRP [ ] NPDES

Sampler Signature: C.T. Stanley / Bobby Blackwood — e-mail: cstanley@basinenv.com

(lab use only)
ORDER # 310618

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl (VOA X 2)	H2SO4	NaOH	Na2S2O3	None (PAH)	Other (Specify)	Matrix: DW – Drinking Water SL – Sludge	GW – Groundwater S – Soil/Solid	NP – Non-Potable Specify Other	Analyze For: TPH 418.1 / 8015M	TPH TX 1005	TX 1006	Cations (Ca Mg Na K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	NORM	PAH	EPA Paint Filter Test	Chlorides E 300	RUSH TAT (Pre Schedule) 24, 48, 72 hrs	Standard TAT
01	Floor Comp 15'			8/18/2008	1605		1	X								Soil			X																X

Special Instructions:

Laboratory Comments:
Sample Containers Intact? (Y) N
VOCs Free of Headspace? (Y) N
Labels on container(s) (Y) N
Custody seals on container(s) (Y) N
Custody seals on cooler(s) (Y) N (N/A)
Sample Hand Delivered by Sampler/Client Rep ? Y N
by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt 4.0 °C

Relinquished by	Date	Time	Received by	Date	Time
C.T. Stanley	8/20/08	1725			
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by	Date	Time	Received by ELOT	Date	Time
			Jessica Kramer	08.20.08	1725

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client Plains /Basin

Date/ Time Oct 20 08 08:17:25

Lab ID # 310698

Initials JMF

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	4.0 °C	
#2	Shipping container in good condition?	Yes	No	(N/A)	
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present (N/A)	
#4	Custody Seals intact on sample bottles/ container? (Lab)	(Yes)	No	Not Present	
#5	Chain of Custody present?	(Yes)	No		
#6	Sample instructions complete of Chain of Custody?	(Yes)	No		
#7	Chain of Custody signed when relinquished/ received?	(Yes)	No		
#8	Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont / Lid	
#9	Container label(s) legible and intact?	(Yes)	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		
#11	Containers supplied by ELOT?	(Yes)	No		
#12	Samples in proper container/ bottle?	(Yes)	No	See Below	
#13	Samples properly preserved?	(Yes)	No	See Below	
#14	Sample bottles intact?	(Yes)	No		
#15	Preservations documented on Chain of Custody?	(Yes)	No		
#16	Containers documented on Chain of Custody?	(Yes)	No		
#17	Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18	All samples received within sufficient hold time?	(Yes)	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	(Not Applicable)	
#20	VOC samples have zero headspace?	(Yes)	No	Not Applicable	

Variance Documentation

Contact _____ Contacted by _____ Date/ Time _____

Regarding _____

Corrective Action Taken

Check all that Apply.

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

Analytical Report 316749

for

PLAINS ALL AMERICAN EH&S

Project Manager: Daniel Bryant

CVU 6"

2008-186

10-NOV-08

E84880

12600 West I-20 East Odessa, Texas 79765

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

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

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

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

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

10-NOV-08

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

Reference: XENCO Report No: **316749**
CVU 6"
Project Address: Lea County, NM

Daniel Bryant:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 316749. 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. 316749 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

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

Sample Cross Reference 316749

PLAINS ALL AMERICAN EH&S, Midland, TX

CVU 6"

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
North SW @ 11'	S	Nov-04-08 13:00		316749-001
East SW @ 11'	S	Nov-04-08 13:10		316749-002
South SW @ 11'	S	Nov-04-08 13:20		316749-003
West SW @ 11'	S	Nov-04-08 13:30		316749-004

Certificate of Analysis Summary 316749

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: CVU 6"

Project Id: 2008-186
Contact: Daniel Bryant
Project Location: Lea County, NM

Date Received in Lab: Wed Nov-05-08 03:37 pm
Report Date: 10-NOV-08
Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	316749-001		316749-002		316749-003		316749-004					
	Field Id:	North SW @ 11'		East SW @ 11'		South SW @ 11'		West SW @ 11'					
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Nov-04-08 13 00		Nov-04-08 13 10		Nov-04-08 13 20		Nov-04-08 13 30					
BTEX by EPA 8021B	*Extracted:*	Nov-06-08 14 00		Nov-06-08 14 00		Nov-06-08 14 00		Nov-06-08 14 00					
	Analyzed:	Nov-07-08 10 47		Nov-07-08 11 09		Nov-07-08 12 16		Nov-07-08 12 38					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		ND	0 0012	ND	0 0011	ND	0 0011	ND	0.0011				
Toluene		ND	0 0023	ND	0 0023	ND	0 0022	ND	0 0022				
Ethylbenzene		0 0012	0 0012	ND	0 0011	ND	0 0011	ND	0 0011				
m,p-Xylenes		ND	0 0023	ND	0 0023	ND	0 0022	ND	0 0022				
o-Xylene		ND	0 0012	ND	0 0011	ND	0 0011	ND	0 0011				
Total Xylenes		ND		ND		ND		ND					
Total BTEX		0 0012		ND		ND		ND					
Percent Moisture	*Extracted:*												
	Analyzed:	Nov-05-08 17 00		Nov-05-08 17 00		Nov-05-08 17 00		Nov-05-08 17 00					
	Units/RL:	%	RL	%	RL	%	RL	%	RL				
Percent Moisture		13 75	1 00	12 67	1 00	8 26	1 00	9 58	1 00				
TPH by SW8015 Mod	*Extracted:*	Nov-06-08 16 00		Nov-06-08 16 00		Nov-06-08 16 00		Nov-06-08 16 00					
	Analyzed:	Nov-07-08 23 52		Nov-07-08 00 18		Nov-07-08 00 44		Nov-08-08 01 10					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
C6-C12 Gasoline Range Hydrocarbons		ND	17 4	ND	17 2	ND	16 4	ND	16 6				
C12-C28 Diesel Range Hydrocarbons		17 8	17 4	ND	17 2	52 1	16 4	116	16 6				
C28-C35 Oil Range Hydrocarbons		ND	17 4	ND	17 2	ND	16 4	ND	16 6				
Total TPH		17 8		ND		52 1		116					

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

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

Brent Barron
Odessa Laboratory Director

XENCO Laboratories

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(PQL) and above the SQL(MDL).

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

* Outside XENCO'S scope of NELAC Accreditation

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: CVU 6"

Work Orders : 316749, **Project ID:** 2008-186

Lab Batch #: 739696 **Sample:** 316749-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0380	0.0300	127	80-120	**
4-Bromofluorobenzene	0.0405	0.0300	135	80-120	**

Lab Batch #: 739696 **Sample:** 316749-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0345	0.0300	115	80-120	
4-Bromofluorobenzene	0.0434	0.0300	145	80-120	**

Lab Batch #: 739696 **Sample:** 316749-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0347	0.0300	116	80-120	
4-Bromofluorobenzene	0.0362	0.0300	121	80-120	**

Lab Batch #: 739696 **Sample:** 316749-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0339	0.0300	113	80-120	
4-Bromofluorobenzene	0.0368	0.0300	123	80-120	**

Lab Batch #: 739696 **Sample:** 316749-004 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0335	0.0300	112	80-120	
4-Bromofluorobenzene	0.0470	0.0300	157	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: CVU 6"

Work Orders : 316749, **Project ID:** 2008-186

Lab Batch #: 739696 **Sample:** 316749-004 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0331	0.0300	110	80-120	
4-Bromofluorobenzene	0.0442	0.0300	147	80-120	**

Lab Batch #: 739696 **Sample:** 518960-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0281	0.0300	94	80-120	
4-Bromofluorobenzene	0.0333	0.0300	111	80-120	

Lab Batch #: 739696 **Sample:** 518960-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0338	0.0300	113	80-120	
4-Bromofluorobenzene	0.0233	0.0300	78	80-120	**

Lab Batch #: 739696 **Sample:** 518960-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY 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	0.0333	0.0300	111	80-120	

Lab Batch #: 739652 **Sample:** 316749-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.5	100	92	70-135	
o-Terphenyl	47.8	50.0	96	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: CVU 6"

Work Orders : 316749, **Project ID:** 2008-186

Lab Batch #: 739652 **Sample:** 316749-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	100	101	70-135	
o-Terphenyl	51.1	50.0	102	70-135	

Lab Batch #: 739652 **Sample:** 316749-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	100	104	70-135	
o-Terphenyl	57.6	50.0	115	70-135	

Lab Batch #: 739652 **Sample:** 316749-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.9	100	87	70-135	
o-Terphenyl	45.6	50.0	91	70-135	

Lab Batch #: 739652 **Sample:** 316749-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.6	100	88	70-135	
o-Terphenyl	46.5	50.0	93	70-135	

Lab Batch #: 739652 **Sample:** 316749-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.7	100	85	70-135	
o-Terphenyl	45.9	50.0	92	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.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: CVU 6"

Work Orders : 316749, **Project ID:** 2008-186

Lab Batch #: 739652 **Sample:** 518938-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	100	101	70-135	
o-Terphenyl	56.6	50.0	113	70-135	

Lab Batch #: 739652 **Sample:** 518938-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.7	100	94	70-135	
o-Terphenyl	50.6	50.0	101	70-135	

Lab Batch #: 739652 **Sample:** 518938-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	100	104	70-135	
o-Terphenyl	57.6	50.0	115	70-135	

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BSD Recoveries

Project Name: CVU 6"

Work Order #: 316749 **Project ID:** 2008-186

Analyst: ASA **Date Prepared:** 11/06/2008 **Date Analyzed:** 11/06/2008

Lab Batch ID: 739696 **Sample:** 518960-1-BKS **Batch #:** 1 **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	0.0949	95	0.1	0 0923	92	3	70-130	35	
Toluene	ND	0.1000	0.1029	103	0.1	0 1002	100	3	70-130	35	
Ethylbenzene	ND	0.1000	0.1070	107	0.1	0 1040	104	3	71-129	35	
m,p-Xylenes	ND	0.2000	0.2430	122	0.2	0.2359	118	3	70-135	35	
o-Xylene	ND	0.1000	0.1127	113	0.1	0.1094	109	3	71-133	35	

Analyst: ASA **Date Prepared:** 11/06/2008 **Date Analyzed:** 11/07/2008

Lab Batch ID: 739652 **Sample:** 518938-1-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	835	84	1000	859	86	3	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	915	92	1000	941	94	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: CVU 6"

Work Order # : 316749 **Project ID:** 2008-186

Lab Batch ID: 739696 **QC- Sample ID:** 316749-004 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/07/2008 **Date Prepared:** 11/06/2008 **Analyst:** ASA

Reporting Units: mg/kg

BTEX by EPA 8021B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1106	0.0217	20	0.1106	0.0224	20	0	70-130	35	X
Toluene	ND	0.1106	0.0335	30	0.1106	0.0331	30	0	70-130	35	X
Ethylbenzene	ND	0.1106	0.0370	33	0 1106	0.0390	35	6	71-129	35	X
m,p-Xylenes	ND	0.2212	0.0874	40	0 2212	0.0867	39	3	70-135	35	X
o-Xylene	ND	0.1106	0.0520	47	0.1106	0.0509	46	2	71-133	35	X

Lab Batch ID: 739652 **QC- Sample ID:** 316749-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/08/2008 **Date Prepared:** 11/06/2008 **Analyst:** ASA

Reporting Units: mg/kg

TPH by SW8015 Mod Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	1160	951	82	1160	953	82	0	70-135	35	
C12-C28 Diesel Range Hydrocarbons	17.8	1160	1060	90	1160	1050	89	1	70-135	35	

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

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

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

Sample Duplicate Recovery

Project Name: CVU 6"

Work Order #: 316749

Lab Batch #: 739336 **Project ID:** 2008-186

Date Analyzed: 11/05/2008 **Date Prepared:** 11/05/2008 **Analyst:** BEV

QC- Sample ID: 316686-033 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	3.80	3.48	9	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 I-20 East
Odessa, Texas 79765

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

Project Manager: Camille Bryant PAGE 01 OF 01

Project Name: CVU 6"

Company Name: Basin Environmental Service Technologies, LLC

Project #: 2008-186

Company Address: P O Box 301

Project Loc: Lea County, NM

City/State/Zip: Lovington, NM 88260

PO #: PAA - D. M. Bryant

Telephone No: (575) 605-7210

Fax No.: (575) 396-1429

Report Format: [X] Standard [ ] TRRP [ ] NPDES

Sampler Signature: [signature] for CJB

e-mail: cjbryant@basin-consulting.com

(lab use only)

ORDER #: 316749

Analyze For: TCLP: / TOTAL: X (BTEX)

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix (DW = Drinking Water, SL = Sludge, GW = Groundwater, S = Soil/Solid, NP = Non Potable, Specify Other)	TPH 418.1 (8015M) 8015B	TPH TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	(BTEX 8021B/5030) or BTEX 8260	RCI	N.O.R.M.				RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	North SW @ 11'			11/4/2008	1300		1	X								SOIL	X								X							X
02	East SW @ 11'			11/4/2008	1310		1	X								SOIL	X								X							X
03	South SW @ 11'			11/4/2008	1320		1	X								SOIL	X								X							X
04	West SW @ 11'			11/4/2008	1330		1	X								SOIL	X								X							X

Special Instructions:

Relinquished by	Date	Time	Received by	Date	Time
[signature]	11/5/08	1537			
			Received by ELOT: [signature]	11-05-08	1537

Laboratory Comments:

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

Temperature Upon Receipt: 1.0 °C

[redacted]

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Basin Env | Plains

Date/ Time: 11.5.08 15:37

Lab ID #: 316749

Initials: aL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	1.0 °C	
#2	Shipping container in good condition?	(Yes)	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	(Not Present)	
#4	Custody Seals intact on sample bottles/ container?	(Yes)	No	Not Present	
#5	Chain of Custody present?	(Yes)	No		
#6	Sample instructions complete of Chain of Custody?	(Yes)	No		
#7	Chain of Custody signed when relinquished/ received?	(Yes)	No		
#8	Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont / Lid	
#9	Container label(s) legible and intact?	(Yes)	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		
#11	Containers supplied by ELOT?	(Yes)	No		
#12	Samples in proper container/ bottle?	(Yes)	No	See Below	
#13	Samples properly preserved?	(Yes)	No	See Below	
#14	Sample bottles intact?	(Yes)	No		
#15	Preservations documented on Chain of Custody?	(Yes)	No		
#16	Containers documented on Chain of Custody?	(Yes)	No		
#17	Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18	All samples received within sufficient hold time?	(Yes)	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	(Not Applicable)	
#20	VOC samples have zero headspace?	(Yes)	No	Not Applicable	

Variance Documentation

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

Regarding: _____

Corrective Action Taken:

_____

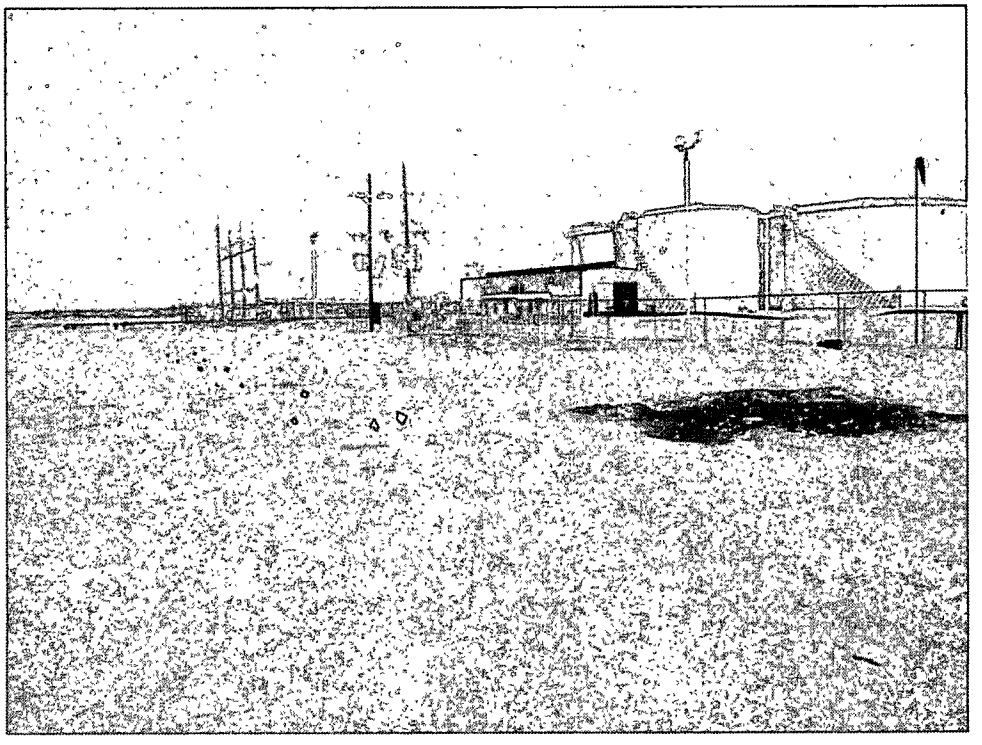
_____

_____

Check all that Apply

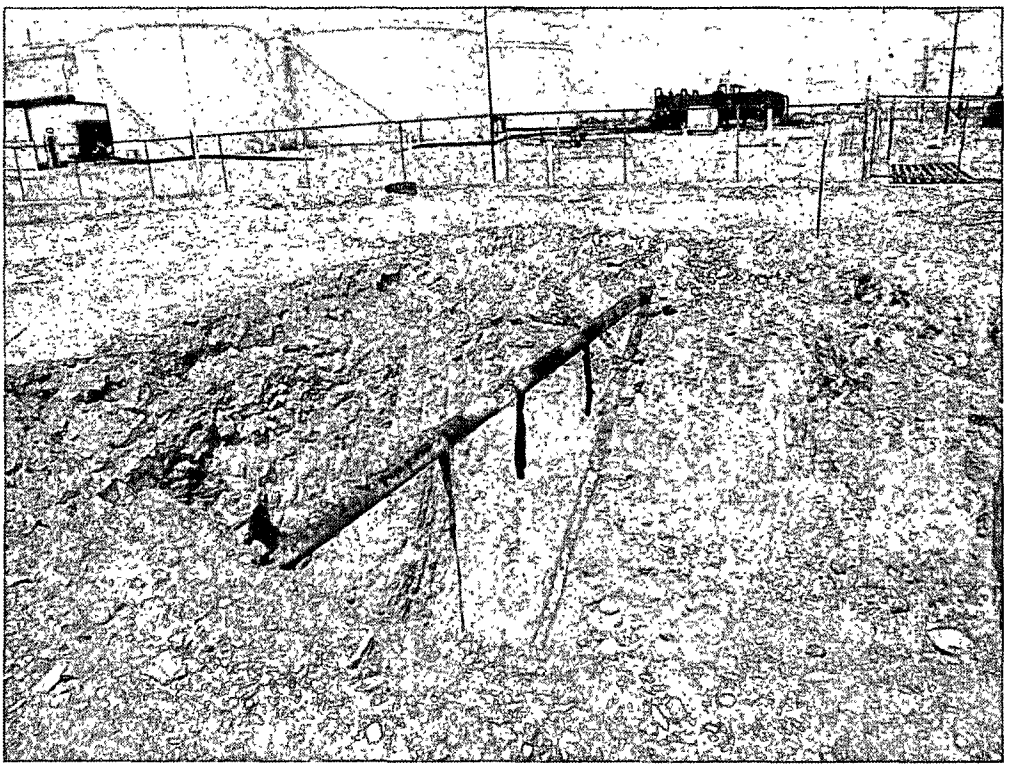
- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

Appendix B
Photographs

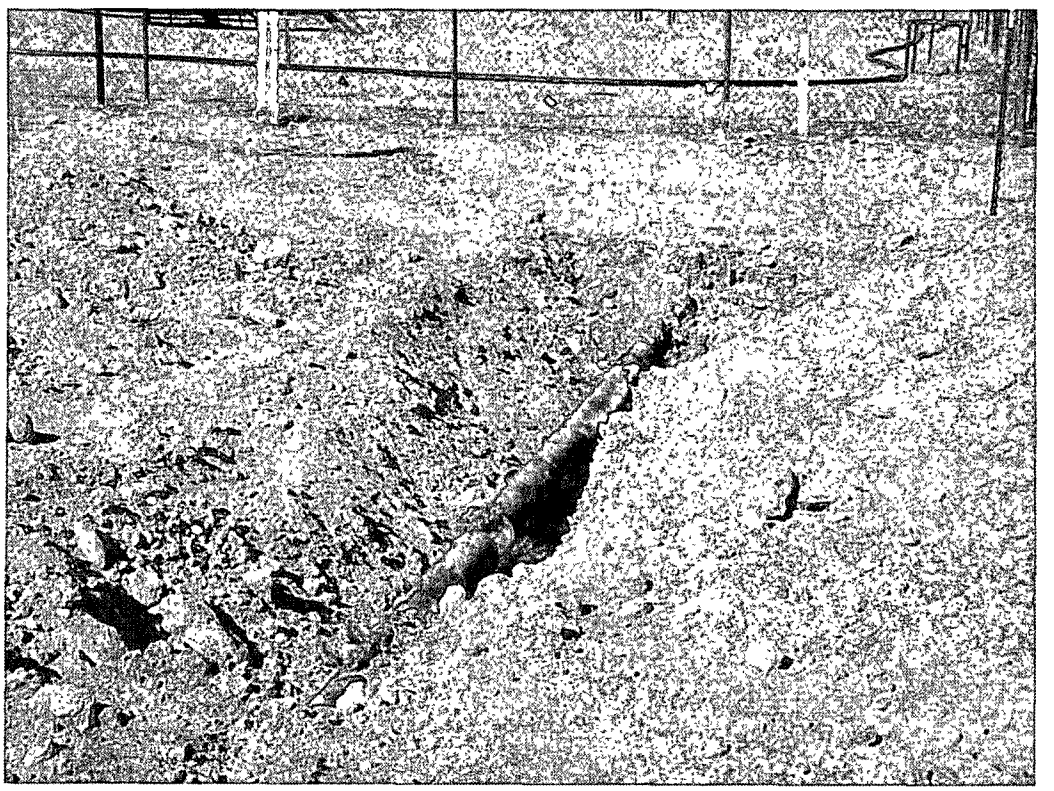


CVU 6-Inch Initial Release

CVU 6-Inch release site facing east



CVU 6-Inch release site facing north



Backfilling activities at the CVU 6-Inch release site

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

strict I
25 N. French Dr , Hobbs, NM 88240
strict II
01 W. Grand Avenue, Artesia, NM 88210
strict III
00 Rio Brazos Road, Aztec, NM 87410
strict IV
20 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

x Initial Report ☐ Final Report

Name of Company Plains Pipeline	Contact Camille Bryant
Address 3112 W. US Hwy 82, Lovington, NM 88260	Telephone No. 505-441-0965
Facility Name CVU 6 Inch	Facility Type 6"Steel Pipeline

Surface Owner SLO	Mineral Owner	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	31	17S	35E					Lea

Latitude 32° 47' 36.8" **Longitude** 103° 30' 14.1"

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 8 barrels	Volume Recovered 0 barrels
Source of Release 6" Steel Pipeline	Date and Hour of Occurrence 07/12/2008 @ 12:00	Date and Hour of Discovery 07/12/2008 @ 15:00
Was Immediate Notice Given? Yes ☐ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour @	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken The initial visual impacted area was approximately 5 feet long by 8 feet wide. At that time the crude oil release was deemed to be a non-reportable release. Upon further excavation of the release area, it was determined to exceed the crude oil release to a reportable status. The impacted soil is being stockpiled on site on a 6-mil poly liner.

RECEIVED
AUG 12 2008
HOBBS OCD

Describe Area Affected and Cleanup Action Taken.* The impacted soil is being excavated and stockpiled on a 6-mil poly liner.

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

Signature: Camille Bryant

Printed Name: Camille Bryant

Title: Remediation Coordinator

E-mail Address: cjbryant@paalp.com

Date: 08/07/2008 Phone:505-441-0965

OIL CONSERVATION DIVISION

Approved by District Supervisor: ENVIRONMENTAL ENGINEER

Approval Date: 8.12.08 Expiration Date: 10.15.08

Conditions of Approval: SUBMIT FINAL C-141

Attached ☐ IRP-1927

Attach Additional Sheets If Necessary