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-9-12-2850

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	Dublin Station Launcher	Facility Type	Pipeline – Pig Launcher

Surface Owner: Plains Pipeline, L.P.	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
G	12	26S	36E					Lea

Latitude N 32.05795° **Longitude** W 103.21766°

NATURE OF RELEASE

Type of Release: Crude Oil	Volume of Release: 6 bbls	Volume Recovered: 2 bbls
Source of Release: Drain valve on pig launcher did not close completely	Date and Hour of Occurrence: 09/21/2012	Date and Hour of Discovery: 09/21/2012 @ 12:30
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? N/A	
By Whom?	Date and Hour: N/A	
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.*

During the launching of a pig, a drain valve on the barrel of the pig launcher failed to seat completely resulting in a release of crude oil.

Describe Area Affected and Cleanup Action Taken.*

The released crude resulted in a surface stain that measured approximately 5' x 20'. The depth to groundwater in this area is approximately 210' below ground surface. The impacted area will be remediated per applicable NMOCD guidelines.

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:	
Title: Remediation Coordinator	Approval Date:	Expiration Date:
E-mail Address: jhenry@paalp.com	Conditions of Approval:	Attached ☐
Date: 09/26/2012 Phone: (575) 441-1099		

* Attach Additional Sheets If Necessary

State of New Mexico
Oil Conservation Division

Incident ID	nGRL1227128
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Karolanne Hudgens Title: HSE Remediation Specialist II

Signature: [signature] Date: 4/10/2023

email: karolanne.hudgens@plains.com Telephone: 575-200-5517

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Ashley Maxwell Date: 4/14/2023

Printed Name: Ashley Maxwell Title: Environmental Specialist

Basin Environmental Service Technologies, LLC

3100 Plains Highway
P. O. Box 301
Lovington, New Mexico 88260
bjarguijo@basinenv.com
Office: (575) 396-2378 Fax: (575) 396-1429

Effective Solutions

REMEDIATION SUMMARY &

SITE CLOSURE REQUEST

PLAINS PIPELINE, LP
DUBLIN STATION LAUNCHER
Lea County, New Mexico
Unit Letter "G" (SW/NE), Section 12, Township 26 South, Range 36 East
Latitude 32.05795° North, Longitude 103.21766° West
Plains SRS #: 2012-193
NMOCD Reference #: 1RP-9-12-2850

Prepared For:

Plains Pipeline, LP
333 Clay Street, Suite 1600
Houston, Texas 77002

Prepared By:

Basin Environmental Service Technologies, LLC
3100 Plains Highway
Lovington, New Mexico 88260

October 2012

Ben J. Arguijo
Project Manager

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

1.0 INTRODUCTION & BACKGROUND INFORMATION

Basin Environmental Service Technologies, LLC (Basin Environmental), on behalf of Plains Pipeline, LP (Plains), has prepared this *Remediation Summary & Site Closure Request* for the release site known as Dublin Station Launcher. The legal description of the release site is Unit Letter "G" (SW/NE), Section 12, Township 26 South, Range 36 East, in Lea County, New Mexico. The geographic coordinates of the release site are 32.05795° North latitude and 103.21766° West longitude. The property affected by the release is owned by Plains. A "Site Location Map" is provided as Figure 1.

On September 21, 2012, Plains discovered a release had occurred at the Dublin Station Launcher to Jal Eight-inch (8") meter. During the launching of a pig, a drain valve on the barrel of the pig launcher failed to seat completely, resulting in a release of crude oil.

The release was reported to the New Mexico Oil Conservation Division (NMOCD) Hobbs District Office on September 26, 2012. The “Release Notification and Corrective Action” (Form C-141) indicated that approximately six barrels (6 bbls) of crude oil were released. During initial response activities, approximately two barrels (2 bbls) of crude oil were recovered, resulting in a net loss of four barrels (4 bbls). The release affected an area around the launcher measuring approximately one hundred square feet (100 ft^2).

The Form C-141 is provided as Appendix A. General photographs of the release site are provided as Appendix B.

2.0 NMOCD SITE CLASSIFICATION

A search of the New Mexico Water Rights Reporting System (NMWRRS) database maintained by the New Mexico Office of the State Engineer (NMOSE) indicated information was unavailable for Section 12, Township 26 South, Range 36 East. A depth-to-groundwater reference map utilized by the NMOCD indicates groundwater should be encountered at approximately two hundred and ten feet (210') below ground surface (bgs). Based on the NMOCD ranking system, zero (0) points will be assigned to the site as a result of this criterion.

A search of the NMWRRS database indicated there are no water wells within one thousand feet (1,000') of the release. Based on the NMOCD ranking system, zero (0) points will be assigned to the site as a result of this criterion.

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

NMOCD guidelines indicate the Dublin Station Launcher release site has an initial ranking score of zero (0) points. The soil remediation levels for a site with a ranking score of zero (0) points are as follows:

- Benzene – 10 mg/Kg (ppm)
- Benzene, ethylbenzene, toluene, and xylenes (BTEX) – 50 mg/Kg (ppm)
- Total petroleum hydrocarbons (TPH) – 5,000 mg/Kg (ppm)

The New Mexico Administrative Code (NMAC) does not currently specify a remediation level for chloride concentrations in soil. Chloride remediation levels are set by the NMOCD on a site-specific basis.

3.0 SUMMARY OF SOIL REMEDIATION ACTIVITIES

On October 3, 2012, following initial response activities, excavation of impacted soil commenced at the site. Olfactory and visual senses and Photo-Ionization Detector (PID) technology were used to determine the horizontal and vertical extent of impacted soil and to guide the excavation. From October 3 through October 5, 2012, impacted soil was excavated, aerated, and stockpiled on-site to facilitate bioremediation.

On October 8, 2012, ten (10) soil samples (North Wall, South Wall #1, South Wall #2, East Wall #1, East Wall #2, West Wall #1, West Wall #2, Floor #1, Floor #2, and Floor #3) were collected from the floor and sidewalls of the excavation and submitted to Xenco Laboratories, Inc., in Odessa, Texas, for analysis of BTEX and/or TPH concentrations using EPA Methods SW 846-8021b and SW 846-8015M, respectively. Soil sample Floor #1 was also analyzed for concentrations of chloride using EPA Method 300.1. Table 1 summarizes the "Concentrations of Benzene, BTEX, TPH & Chloride in Soil". Soil sample locations are depicted in Figure 2, "Site & Sample Location Map". Laboratory analytical reports are provided as Appendix C.

Laboratory analytical results indicated BTEX constituent concentrations were less than the appropriate laboratory method detection limit (MDL) in all submitted soil samples. TPH concentrations ranged from less than the laboratory MDL in soil samples West Wall #2 and Floor #3 to 94.0 mg/Kg in soil sample South Wall #2. The chloride concentration in soil sample Floor #1 was less than the laboratory MDL.

A single composite soil sample (Stockpile) was collected from the stockpiled material and submitted to the laboratory for analysis of BTEX and TPH concentrations. Laboratory analytical results indicated BTEX constituent concentrations were less than the appropriate laboratory MDL, and the TPH concentration was 1,210 mg/Kg. Soil represented by soil sample Stockpile was deemed suitable for use as backfill material.

On October 18, 2012, representatives of Basin Environmental met with a representative of the NMOCD Hobbs District Office to request permission to backfill the Dublin Station Launcher excavation. The request was approved by the NMOCD representative.

Based on laboratory analytical results, and with NMOCD approval, on October 19, 2012, the excavation was backfilled, compacted, and contoured to fit the surrounding topography. Prior to backfilling, final dimensions of the excavation were approximately one hundred and twenty feet (120') in length, varying in width from approximately twenty-two feet (22') to approximately ninety feet (90'), and ranging in depth from approximately six inches (6") to approximately one and one-half feet (1.5') bgs.

4.0 QA/QC PROCEDURES

4.1 Soil Sampling

Soil Samples were delivered to Xenco Laboratories, Inc., in Odessa, Texas, for analysis of BTEX, TPH, and/or chloride concentrations using the methods described below. Soil samples were analyzed for BTEX, TPH, and/or chloride concentrations within fourteen (14) days following the collection date. The soil samples were analyzed as follows:

- BTEX concentrations in accordance with EPA Method SW 846-8021b
- TPH concentrations in accordance with modified EPA Method SW 846-8015M
- Chloride concentrations in accordance with EPA Method 300.1

4.2 Decontamination of Equipment

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

4.3 Laboratory Protocol

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

5.0 SITE CLOSURE REQUEST

Soil samples collected from the floor and sidewalls of the Dublin Station Launcher excavation were analyzed by an NMOCD-approved laboratory, and concentrations of benzene, BTEX, TPH, and chloride were below the regulatory remediation action levels established for the site by the NMOCD. Based on these laboratory analytical results, Basin Environmental recommends Plains provide the NMOCD Hobbs District Office a copy of this *Remediation Summary & Site Closure Request* and request the NMOCD grant site closure to the Dublin Station Launcher release site.

6.0 LIMITATIONS

Basin Environmental Service Technologies, LLC, has prepared this *Remediation Summary & Site Closure Request* to the best of its ability. No other warranty, expressed or implied, is made or intended. Basin Environmental has examined and relied upon documents referenced in the report and on oral statements made by certain individuals. Basin Environmental has not conducted an independent examination of the facts contained in referenced materials and statements. Basin Environmental has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Basin Environmental has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin Environmental 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, LP. 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 Pipeline, LP.

7.0 DISTRIBUTION:

Copy 1: Geoffrey Leking
New Mexico Oil Conservation Division
1625 N. French Drive
Hobbs, New Mexico 88240
GeoffreyR.Leking@state.nm.us

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

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

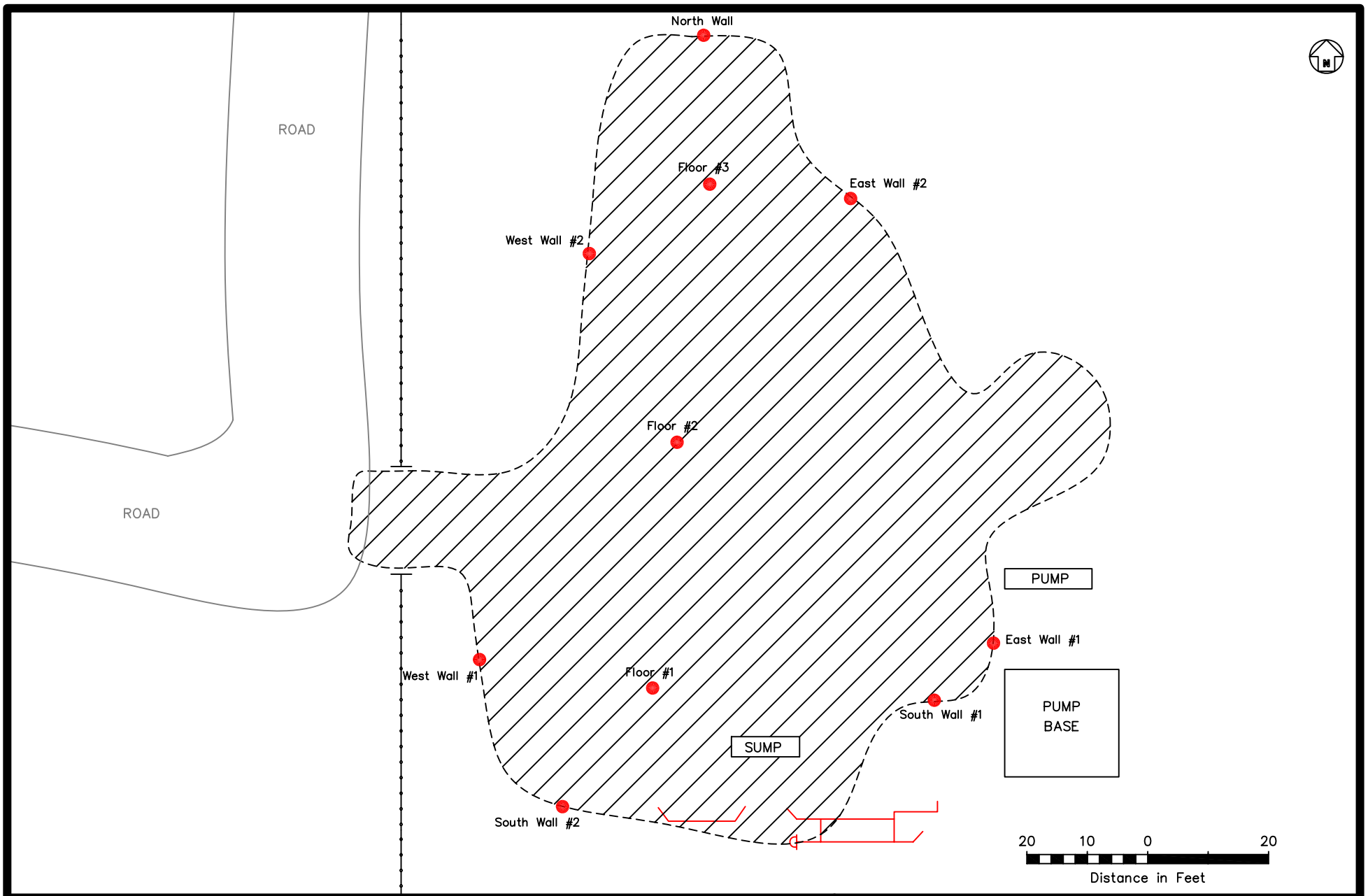
Copy 4: Basin Environmental Service Technologies, LLC
P.O. Box 301
Lovington, New Mexico 88260

Figures

Figure 1
Site Location Map
Plains Pipeline, LP
Dublin Station Launcher
Lea County, New Mexico
Plains Ref. #: 2012-193
NMOCD Ref. #: 1RP-9-12-2850

Basin Environmental Service Technologies, LLC
3100 Plains Hwy.
Lovington, NM 88260

Drawn By: BJA	Checked By: BRB
September 28, 2012	Scale: 1" = 2000'



Legend:

- Excavation Extents
- Fence
- Pipeline
- Sample Location
- Initial Release

Figure 2
Site and Sample Location Map
Plains Pipeline, L.P.
Dublin Station Launcher
Lea County, New Mexico
SRS #: 2012-193
NMOCD Ref # 1RP-9-12-2850

Basin Environmental Services

Prep By: JWL	Checked By: BJA
October 24, 2012	Scale 1"=20'

Tables

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL

PLAINS PIPELINE, LP
DUBLIN STATION LAUNCHER
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2012-193
NMOCD REFERENCE #: 1RP-9-12-2850

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030							METHOD: 8015M			TOTAL TPH C_6-C_{35} (mg/Kg)	300.1
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	M.P. -XYLENES (mg/Kg)	O-XYLENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C_6-C_{12} (mg/Kg)	DRO C_{12}-C_{28} (mg/Kg)	ORO C_{28}-C_{35} (mg/Kg)		CHLORIDE (mg/Kg)
North Wall #1	Surface	10/8/2012	In-Situ	-	-	-	-	-	-	-	<16.0	27.4	<16.0	27.4	-
South Wall #1	1'	10/8/2012	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<0.0022	16.6	41	<16.0	57.6	-
South Wall #2	1'	10/8/2012	In-Situ	-	-	-	-	-	-	-	<16.3	94.0	<16.3	94.0	-
East Wall #1	1'	10/8/2012	In-Situ	-	-	-	-	-	-	-	<15.5	30.8	<15.5	30.8	-
East Wall #2	0.5'	10/8/2012	In-Situ	-	-	-	-	-	-	-	<16.6	18.3	<16.6	18.3	-
West Wall #1	0.5'	10/8/2012	In-Situ	-	-	-	-	-	-	-	<16.3	17.5	<16.3	17.5	-
West Wall #2	0.5'	10/8/2012	In-Situ	-	-	-	-	-	-	-	<17.5	<17.5	<17.5	<17.5	-
Floor #1	1.5'	10/8/2012	In-Situ	<0.0010	<0.0020	<0.0010	<0.0020	<0.0010	<0.0020	<0.0020	15.9	55.70	<16.0	71.6	<1.03
Floor #2	0.5'	10/8/2012	In-Situ	-	-	-	-	-	-	-	<16.0	40.3	<16.0	40.3	-
Floor #3	0.5'	10/8/2012	In-Situ	-	-	-	-	-	-	-	<17.3	<17.3	<17.3	<17.3	-
Stockpile	N/A	10/8/2012	Stockpiled	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<0.0022	154	1,020	40.7	1,210	-
NMOCD Regulatory Standard				**10**						**50**				**5,000**	

- = Not analyzed.

Appendices

Appendix A

Release Notification &

Corrective Action (Form C-141)

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-9-12-2850

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	Dublin Station Launcher	Facility Type	Pipeline – Pig Launcher

Surface Owner: Plains Pipeline, L.P.	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
G	12	26S	36E					Lea

Latitude N 32.05795° **Longitude** W 103.21766°

NATURE OF RELEASE

Type of Release: Crude Oil	Volume of Release: 6 bbls	Volume Recovered: 2 bbls
Source of Release: Drain valve on pig launcher did not close completely	Date and Hour of Occurrence: 09/21/2012	Date and Hour of Discovery: 09/21/2012 @ 12:30
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? N/A	
By Whom?	Date and Hour: N/A	
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.*

During the launching of a pig, a drain valve on the barrel of the pig launcher failed to seat completely resulting in a release of crude oil.

Describe Area Affected and Cleanup Action Taken.*

The released crude resulted in a surface stain that measured approximately 5' x 20'. The depth to groundwater in this area is approximately 210' below ground surface. The impacted area will be remediated per applicable NMOCD guidelines.

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:	
Title: Remediation Coordinator	Approval Date:	Expiration Date:
E-mail Address: jhenry@paalp.com	Conditions of Approval:	Attached ☐
Date: 09/26/2012 Phone: (575) 441-1099		

* Attach Additional Sheets If Necessary

Appendix B

Photographs

Dublin Station Launcher - Release Site

Dublin Station Launcher - Release Site

Dublin Station Launcher - Release Site

Dublin Station Launcher - Excavation

Dublin Station Launcher - Excavation

Dublin Station Launcher - Excavation

Dublin Station Launcher - Excavation, Following Backfill

Dublin Station Launcher - Excavation, Following Backfill

Appendix C

Laboratory Analytical Reports

Analytical Report 450391

for

PLAINS ALL AMERICAN EH&S

Project Manager: Ben Arguijo

Dublin Station Launcher

2012-193

15-OCT-12

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Lakeland: Florida (E84098)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

15-OCT-12

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

Reference: XENCO Report No: **450391**
Dublin Station Launcher
Project Address: Lea County, NM

Ben Arguijo:

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 450391. 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. The uncertainty of measurement associated with the results of analysis reported is available upon request. 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. 450391 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,

Nicholas Straccione
Project 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 - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America

Sample Cross Reference 450391

PLAINS ALL AMERICAN EH&S, Midland, TX

Dublin Station Launcher

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
South Wall #1	S	10-08-12 09:30	1 ft	450391-001
South Wall #2	S	10-08-12 09:35	1 ft	450391-002
West Wall #1	S	10-08-12 09:37	0.5 ft	450391-003
South Wall #2	S	10-08-12 09:37	0.5 ft	450391-004
North Wall	S	10-08-12 09:45	0.0 ft	450391-005
East Wall #1	S	10-08-12 09:48	1 ft	450391-006
South Wall #2	S	10-08-12 09:50	0.5 ft	450391-007
Floor #1	S	10-08-12 09:55	1.5 ft	450391-008
Floor #2	S	10-08-12 10:00	0.5 ft	450391-009
Floor #3	S	10-08-12 10:03	0.5 ft	450391-010
Stockpile	S	10-08-12 10:05		450391-011

CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

Project Name: Dublin Station Launcher

Project ID:	*2012-193*	*Report Date:*	*15-OCT-12*
Work Order Number:	*450391*	*Date Received:*	*10/08/2012*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 450391

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Dublin Station Launcher

Project Id: 2012-193
Contact: Ben Arguijo
Project Location: Lea County, NM

Date Received in Lab: Mon Oct-08-12 02:08 pm
Report Date: 15-OCT-12
Project Manager: Nicholas Straccione

Analysis Requested													
	Lab Id:	450391-001		450391-002		450391-003		450391-004		450391-005		450391-006	
	Field Id:	South Wall #1		South Wall #2		West Wall #1		South Wall #2		North Wall		East Wall #1	
	Depth:	1- ft		1- ft		0.5- ft		0.5- ft		0.0- ft		1- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-08-12 09:30		Oct-08-12 09:35		Oct-08-12 09:37		Oct-08-12 09:37		Oct-08-12 09:45		Oct-08-12 09:48	
TPH By SW8015 Mod	**Extracted:**	Oct-12-12 15:30		Oct-12-12 15:30		Oct-12-12 15:30		Oct-12-12 15:30		Oct-12-12 15:30		Oct-12-12 15:30	
	Analyzed:	Oct-12-12 21:54		Oct-12-12 22:27		Oct-12-12 22:59		Oct-12-12 23:28		Oct-12-12 23:58		Oct-13-12 00:27	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		16.6	16.0	ND	16.3	ND	16.3	ND	17.5	ND	16.0	ND	15.5
C12-C28 Diesel Range Hydrocarbons		41.0	16.0	94.0	16.3	17.5	16.3	ND	17.5	27.4	16.0	30.8	15.5
C28-C35 Oil Range Hydrocarbons		ND	16.0	ND	16.3	ND	16.3	ND	17.5	ND	16.0	ND	15.5
Total TPH		57.6	16.0	94.0	16.3	17.5	16.3	ND	17.5	27.4	16.0	30.8	15.5

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Nicholas Straccione
Project Manager

Certificate of Analysis Summary 450391

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Dublin Station Launcher

Project Id: 2012-193
Contact: Ben Arguijo
Project Location: Lea County, NM

Date Received in Lab: Mon Oct-08-12 02:08 pm
Report Date: 15-OCT-12
Project Manager: Nicholas Straccione

Analysis Requested													
	Lab Id:	450391-001		450391-002		450391-003		450391-004		450391-005		450391-006	
	Field Id:	South Wall #1		South Wall #2		West Wall #1		South Wall #2		North Wall		East Wall #1	
	Depth:	1- ft		1- ft		0.5- ft		0.5- ft		0.0- ft		1- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-08-12 09:30		Oct-08-12 09:35		Oct-08-12 09:37		Oct-08-12 09:37		Oct-08-12 09:45		Oct-08-12 09:48	
Percent Moisture	***Extracted:***												
	Analyzed:	Oct-09-12 11:00		Oct-09-12 11:00		Oct-09-12 11:00		Oct-09-12 11:00		Oct-09-12 11:00		Oct-09-12 11:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		6.19	1.00	8.28	1.00	8.20	1.00	14.6	1.00	6.25	1.00	3.35	1.00

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Nicholas Straccione
Project Manager

Certificate of Analysis Summary 450391

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Dublin Station Launcher

Project Id: 2012-193
Contact: Ben Arguijo
Project Location: Lea County, NM

Date Received in Lab: Mon Oct-08-12 02:08 pm
Report Date: 15-OCT-12
Project Manager: Nicholas Straccione

Analysis Requested											
	Lab Id:	450391-007		450391-008		450391-009		450391-010		450391-011	
	Field Id:	South Wall #2		Floor #1		Floor #2		Floor #3		Stockpile	
	Depth:	0.5- ft		1.5- ft		0.5- ft		0.5- ft			
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-08-12 09:50		Oct-08-12 09:55		Oct-08-12 10:00		Oct-08-12 10:03		Oct-08-12 10:05	
Inorganic Anions by EPA 300/300.1 SUB: TX104704215	Extracted:			Oct-12-12 11:07							
	Analyzed:			Oct-12-12 11:07							
	Units/RL:			mg/kg	RL						
Chloride				ND	1.03						
TPH By SW8015 Mod	Extracted:	Oct-12-12 15:30		Oct-12-12 15:30		Oct-12-12 15:30		Oct-12-12 15:30		Oct-12-12 15:30	
	Analyzed:	Oct-13-12 01:00		Oct-13-12 01:34		Oct-13-12 02:04		Oct-13-12 02:33		Oct-13-12 03:38	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	16.6	15.9	15.4	ND	16.0	ND	17.3	154	16.0
C12-C28 Diesel Range Hydrocarbons		18.3	16.6	55.7	15.4	40.3	16.0	ND	17.3	1020	16.0
C28-C35 Oil Range Hydrocarbons		ND	16.6	ND	15.4	ND	16.0	ND	17.3	40.7	16.0
Total TPH		18.3	16.6	71.6	15.4	40.3	16.0	ND	17.3	1210	16.0

Nicholas Straccione
Project Manager

Certificate of Analysis Summary 450391

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Dublin Station Launcher

Project Id: 2012-193
Contact: Ben Arguijo
Project Location: Lea County, NM

Date Received in Lab: Mon Oct-08-12 02:08 pm
Report Date: 15-OCT-12
Project Manager: Nicholas Straccione

Analysis Requested											
	Lab Id:	450391-007		450391-008		450391-009		450391-010		450391-011	
	Field Id:	South Wall #2		Floor #1		Floor #2		Floor #3		Stockpile	
	Depth:	0.5- ft		1.5- ft		0.5- ft		0.5- ft			
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-08-12 09:50		Oct-08-12 09:55		Oct-08-12 10:00		Oct-08-12 10:03		Oct-08-12 10:05	
Percent Moisture	*Extracted:*										
	Analyzed:	Oct-09-12 11:00		Oct-09-12 11:00		Oct-09-12 11:00		Oct-09-12 11:00		Oct-09-12 11:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		10.1	1.00	2.94	1.00	6.67	1.00	13.5	1.00	6.11	1.00

Nicholas Straccione
Project Manager

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 affect the recovery of the spike concentration. This condition could also affect 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 quantiation limit and above the detection limit.

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.

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - San Antonio - Atlanta - Midland/Odessa - Tampa/Lakeland - Phoenix - Latin America

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4143 Greenbriar Dr, Stafford, TX 77477	(281) 240-4200	(281) 240-4280
9701 Harry Hines Blvd , Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
2505 North Falkenburg Rd, Tampa, FL 33619	(813) 620-2000	(813) 620-2033
12600 West I-20 East, Odessa, TX 79765	(432) 563-1800	(432) 563-1713
6017 Financial Drive, Norcross, GA 30071	(770) 449-8800	(770) 449-5477
3725 E. Atlanta Ave, Phoenix, AZ 85040	(602) 437-0330	

Form 2 - Surrogate Recoveries

Project Name: Dublin Station Launcher

Work Orders : 450391,

Project ID: 2012-193

Lab Batch #: 898698 **Sample:** 450391-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/12/12 21:54

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.9	100	89	70-135	
o-Terphenyl	42.8	50.0	86	70-135	

Lab Batch #: 898698 **Sample:** 450391-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/12/12 22:27

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	85.1	99.9	85	70-135	
o-Terphenyl	41.7	50.0	83	70-135	

Lab Batch #: 898698 **Sample:** 450391-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/12/12 22:59

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.2	100	89	70-135	
o-Terphenyl	43.8	50.0	88	70-135	

Lab Batch #: 898698 **Sample:** 450391-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/12/12 23:28

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	92.3	99.7	93	70-135	
o-Terphenyl	44.0	49.9	88	70-135	

Lab Batch #: 898698 **Sample:** 450391-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/12/12 23:58

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.4	99.8	94	70-135	
o-Terphenyl	43.8	49.9	88	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: Dublin Station Launcher

Work Orders : 450391,

Project ID: 2012-193

Lab Batch #: 898698 **Sample:** 450391-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/13/12 00:27

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.4	99.7	90	70-135	
o-Terphenyl	42.9	49.9	86	70-135	

Lab Batch #: 898698 **Sample:** 450391-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/13/12 01:00

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.1	99.7	90	70-135	
o-Terphenyl	42.6	49.9	85	70-135	

Lab Batch #: 898698 **Sample:** 450391-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/13/12 01:34

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.7	99.6	98	70-135	
o-Terphenyl	45.5	49.8	91	70-135	

Lab Batch #: 898698 **Sample:** 450391-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/13/12 02:04

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.5	99.6	91	70-135	
o-Terphenyl	44.0	49.8	88	70-135	

Lab Batch #: 898698 **Sample:** 450391-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/13/12 02:33

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	94.2	99.7	94	70-135	
o-Terphenyl	44.8	49.9	90	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: Dublin Station Launcher

Work Orders : 450391,

Project ID: 2012-193

Lab Batch #: 898698 **Sample:** 450391-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/13/12 03:38

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.1	99.9	88	70-135	
o-Terphenyl	46.8	50.0	94	70-135	

Lab Batch #: 898698 **Sample:** 628534-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/12/12 21:23

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	94.0	99.8	94	70-135	
o-Terphenyl	46.2	49.9	93	70-135	

Lab Batch #: 898698 **Sample:** 628534-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/12/12 20:25

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	99.8	100	100	70-135	
o-Terphenyl	52.6	50.0	105	70-135	

Lab Batch #: 898698 **Sample:** 628534-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/12/12 20:54

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.3	99.9	98	70-135	
o-Terphenyl	52.8	50.0	106	70-135	

Lab Batch #: 898698 **Sample:** 450417-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/13/12 05:49

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	52.2	50.1	104	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: Dublin Station Launcher

Work Orders : 450391,

Project ID: 2012-193

Lab Batch #: 898698 **Sample:** 450417-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/13/12 06:19

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.1	99.9	98	70-135	
o-Terphenyl	52.2	50.0	104	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: Dublin Station Launcher

Work Order #: 450391 **Project ID:** 2012-193

Analyst: TTE **Date Prepared:** 10/12/2012 **Date Analyzed:** 10/12/2012

Lab Batch ID: 898761 **Sample:** 628577-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 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
Chloride	<1.00	100	98.8	99	100	102	102	3	80-120	20	

Analyst: KEB **Date Prepared:** 10/12/2012 **Date Analyzed:** 10/12/2012

Lab Batch ID: 898698 **Sample:** 628534-1-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	<15.0	1000	1010	101	999	1010	101	0	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	983	98	999	997	100	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 Recoveries

Project Name: Dublin Station Launcher

Work Order #: 450391

Lab Batch #: 898761 **Project ID:** 2012-193

Date Analyzed: 10/12/2012 **Date Prepared:** 10/12/2012 **Analyst:** TTE

QC- Sample ID: 450391-008 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	<1.03	103	106	103	80-120	

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

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: Dublin Station Launcher

Work Order # : 450391 **Project ID:** 2012-193

Lab Batch ID: 898698 **QC- Sample ID:** 450417-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/13/2012 **Date Prepared:** 10/12/2012 **Analyst:** KEB

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	<16.7	1110	1140	103	1110	1120	101	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<16.7	1110	1120	101	1110	1100	99	2	70-135	35	

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

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

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

Hall Environmental Analysis Laboratory

Sample Duplicate Recovery

Project Name: Dublin Station Launcher

Work Order #: 450391

Lab Batch #: 898408 **Project ID:** 2012-193

Date Analyzed: 10/09/2012 11:00 **Date Prepared:** 10/09/2012 **Analyst:** WRU

QC- Sample ID: 450391-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Percent Moisture **Analyte**	**Parent Sample Result [A]**	**Sample Duplicate Result [B]**	**RPD**	**Control Limits %RPD**	**Flag**
Percent Moisture	6.19	5.79	7	15	

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

BRL - Below Reporting Limit

Xenco Laboratories

pg 1

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: Ben J. Arguijo; Joel Lowry
Company Name: Basin Environmental Service Technologies, LLC
Company Address: P.O. Box 301
City/State/Zip: Lovington, NM 88260
Telephone No: (575)396-2378 Fax No: (575) 396-1429
Sampler Signature: Troy Nahn e-mail: pm@basinenv.com

Project Name: Dublin Station Launcher
Project #: 2012-193
Project Loc: Lea, N.M.
PO #:
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only) ORDER #: 450391

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl	H2SO4	NaOH	Na2S2O3	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge	GW=Groundwater S=Soil/Soil	NP=Non-Potable Specify Other	Analyze For: 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 (TCLP: / TOTAL: X)	RCI	N.O.R.M.	CHLORIDES	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
	South Wall #1@ 1ft			10/08/12	0930		1	✓								S			✓													✓
	South Wall #2@ 1ft				0935		1	✓											✓													✓
	West Wall #1 @ 0.5ft				0937		1	✓											✓													✓
	West Wall #2 @ 0.5ft				0941		1	✓											✓													✓
	North Wall @ 0.0ft				0945		1	✓											✓													✓
	East Wall #1@ 1ft				0948		1	✓											✓													✓
	East Wall #2@ 0.5ft				0950		1	✓											✓													✓
	Floor #1@ 1.5ft				0955		1	✓											✓													✓
	Floor #2@ 0.5ft				1000		1	✓											✓													✓
	Floor #3@ 0.5ft				1003		1	✓											✓													✓

Special Instructions:
Hold for BTEX - confer with P.M.

Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by: Troy Nahn	Date 10/08/12	Time 1408	Received by ELOT: Shawn Smith	Date 10/8/12	Time 1408

Laboratory Comments:
Sample Containers Intact? (Y) N
VOCs Free of Headspace? Y (N)
Labels on container(s) (Y) N
Custody seals on container(s) Y (N)
Custody seals on cooler(s) Y (N)
Sample Hand Delivered (Y) N
by Sampler/Client Rep. ? (Y) N
by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt: 2.5 °C

Xenco Laboratories

Pg 2

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: Ben J. Arguijo; Joel Lowry

Company Name: Basin Environmental Service Technologies, LLC

Company Address: P.O. Box 301

City/State/Zip: Lovington, NM 88260

Telephone No: (575)396-2378 Fax No: (575) 396-1429

Sampler Signature: Troy Hahn e-mail: pm@basinenv.com

Project Name: Dublin Station Launcher

Project #: 2012-193

Project Loc: Lea, N.M.

PO #:

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

(lab use only) ORDER #: 450391

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # 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/Soil	NP = Non-Potable Specify Othe	Analyze For: 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	TCLP: / TOTAL: BTEX 8021B/5030 or BTEX 8260 X	RCI	N.O.R.M.	CHLORIDES			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT 4 DAY
	Stockpile			10/08/12	1005		1	✓								S			✓															✓

Special Instructions: Hold for BTEX contact with PM.

Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by: Troy Hahn	Date 10/08/12	Time 1408	Received by ELOT: Shawn Ellsmith	Date 10/8/12	Time 1409

Laboratory Comments:

Sample Containers Intact?	(Y)	N
VOCs Free of Headspace?	Y	(N)
Labels on container(s)	(Y)	N
Custody seals on container(s)	Y	(N)
Custody seals on cooler(s)	(Y)	N
Sample Hand Delivered	(Y)	N
by Sampler/Client Rep. ?	(Y)	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 2.5 °C

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: PLAINS ALL AMERICAN EH&S

Date/ Time Received: 10/08/2012 02:08:00 PM

Work Order #: 450391

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	4.8
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**
#5 Custody Seals intact on sample bottles?	**Yes**
#6 *Custody Seals Signed and dated?	**Yes**
#7 *Chain of Custody present?	**Yes**
#8 Sample instructions complete on Chain of Custody?	**Yes**
#9 Any missing/extra samples?	**No**
#10 Chain of Custody signed when relinquished/ received?	**Yes**
#11 Chain of Custody agrees with sample label(s)?	**Yes**
#12 Container label(s) legible and intact?	**Yes**
#13 Sample matrix/ properties agree with Chain of Custody?	**Yes**
#14 Samples in proper container/ bottle?	**Yes**
#15 Samples properly preserved?	**Yes**
#16 Sample container(s) intact?	**Yes**
#17 Sufficient sample amount for indicated test(s)?	**Yes**
#18 All samples received within hold time?	**Yes**
#19 Subcontract of sample(s)?	**Yes**
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	**Yes**
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	**Yes**
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**Yes**

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:	PH Device/Lot#:

Checklist completed by: _____ Date: _____

Checklist reviewed by: _____ Date: _____

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 207750

CONDITIONS

Operator: PLAINS MARKETING L.P. 333 Clay Street Suite 1900 Houston, TX 77002	OGRID: 34053
	Action Number: 207750
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	None	4/14/2023