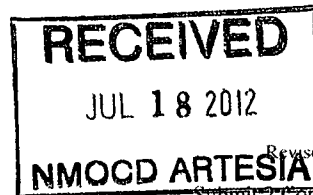


District I  
1625 N French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

NMLB1223742023

#### OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Plains Pipeline, LP 34053	Contact	Jason Henry
Address	2530 Hwy 214 -- Denver City, Tx 79323	Telephone No.	(575) 441-1099
Facility Name	Taylor Poly 4-inch	Facility Type	Pipeline

Surface Owner	BLM	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
H	34	23S	31E					Eddy

Latitude N 32.26083° Longitude W 103.75771°

#### NATURE OF RELEASE

Type of Release	Crude Oil	Volume of Release	37 bbls	Volume Recovered	35 bbls
Source of Release	4-inch poly pipeline was damaged by excavator	Date and Hour of Occurrence	07/14/2012 @ 1400	Date and Hour of Discovery	07/14/2012 @ 1400
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required				
By Whom?	Jason Henry	If YES, To Whom?	Verbal notification to Mike Bratcher on 07/17/2012		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Date and Hour	07/17/2012 @ 1430	
			If YES, Volume Impacting the Watercourse		

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*

A 4-inch poly pipeline was struck by the bucket of an excavator. The free product was recovered with a vacuum truck.

Describe Area Affected and Cleanup Action Taken \*

The released crude pooled in the ditch line of new pipeline that was being installed. The impacted area will be remediated per applicable BLM/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.

#### OIL CONSERVATION DIVISION

Signature:

*Jason Henry*

Printed Name: Jason Henry

Signed By *M. Bratcher*  
Approved by District Supervisor:

Title: Remediation Coordinator

Approval Date: AUG 24 2012

Expiration Date:

E-mail Address: jhenry@paalp.com

Conditions of Approval:

Attached ☐

Date: 07/18/2012

Phone: (575) 441-1099

Remediation per OCD Rules &  
Guidelines. **SUBMIT REMEDIATION  
PROPOSAL NOT LATER THAN:**  
*9/24/2012*

\* Attach Additional Sheets If Necessary

fMLB1223741020

iMLB1223742420

MLB1223742556 (Compliance mod)

pMLB1223742652

2 RA-1259

Page 2 of 60

Incident ID	MLB1223742023
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: Karlanne Hudgens Title: HSE Remediation Specialist II  
Signature: [Signature] Date: 4/10/2023  
email: karlanne.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](mailto:bjarguijo@basinenv.com)**  
Office: (575) 396-2378 Fax: (575) 396-1429



### **REMEDIATION SUMMARY & SITE CLOSURE REQUEST**

**PLAINS PIPELINE, LP  
TAYLOR POLY SUCTION 4-INCH  
Plains SRS #2012-140  
Eddy County, New Mexico  
Unit Letter "H" (SE/NE), Section 34, Township 23 South, Range 31 East  
Latitude 32. 26083° North, Longitude 103.75771° West  
NMOCD Reference #2RP-1259**

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

**September 2012**

---

Ben J. Arguijo  
Project Manager

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## FIGURES

Figure 1 – Site Location Map

Figure 2 – Site & Sample Location Map

## TABLES

Table 1 – Concentrations of Benzene, BTEX, TPH & Chloride in Soil

## APPENDICES

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

Appendix B – Photographs

Appendix C – Laboratory Analytical Reports

## 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 Taylor Poly Suction 4-Inch. The legal description of the release site is Unit Letter "H" (SE/NE), Section 34, Township 23 South, Range 31 East, in Eddy County, New Mexico. The geographic coordinates of the release site are 32.26083° North latitude and 103.75771° West longitude. The property affected by the release is owned by The United States Department of the Interior - Bureau of Land Management (BLM). A "Site Location Map" is provided as Figure 1.

On July 14, 2012, during installation of a new pipeline, the Taylor Poly Suction 4-Inch poly pipeline was struck by an excavator, resulting in a release of crude oil. The release was reported to the New Mexico Oil Conservation Division (NMOCD) Artesia District Office on July 17, 2012. The "Release Notification and Corrective Action" (Form C-141) indicated that approximately thirty-seven barrels (37 bbls) of crude oil was released. During initial response activities, a vacuum truck was utilized to recover approximately thirty-five barrels (35 bbls) of free product, which had pooled in an adjacent, open ditch line.

The Form C-141 is provided as Appendix A. General photographs of the 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 34, Township 23 South, Range 31 East. A depth-to-groundwater reference map utilized by the NMOCD indicates groundwater should be encountered at approximately two hundred and eight-five feet (285') 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 Taylor Poly Suction 4-Inch 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 August 8, 2012, following initial response activities, excavation of impacted soil commenced at the site. A Photo-Ionization Detector (PID) was used to field-screen the horizontal and vertical extent of impacted soil and to guide the excavation. From August 8 through August 16, 2012, approximately seven hundred cubic yards (700 yd<sup>3</sup>) of impacted soil was excavated and stockpiled on-site, pending final disposition.

On August 16, 2012, the stockpiled material was blended on-site with non-impacted soil.

On August 17, 2012, five (5) soil samples (North S.W., South S.W., East S.W., West S.W., and Floor @ 14') were collected from the floor and sidewalls of the excavation and submitted to Xenco Laboratories, Inc., in Odessa, Texas, for analysis of TPH, BTEX, and/or chloride concentrations using EPA Methods SW 846-8015M and SW 846-8021b, respectively. Soil sample Floor @ 14' 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 TPH concentrations ranged from 19.6 mg/Kg in soil sample East S.W. to 150 mg/Kg in soil sample South S.W. BTEX constituent concentrations were less than the appropriate laboratory method detection limit (MDL) in all submitted soil samples. The chloride concentration in soil sample Floor @ 14' was 263 mg/Kg.

Two (2) five-point composite soil samples (Stockpile #1 and Stockpile #2) were collected from the stockpiled material and submitted to the laboratory for analysis of TPH and BTEX concentrations. Laboratory analytical results indicated TPH concentrations ranged from 961 mg/Kg in soil sample Stockpile #2 to 1,050 mg/Kg in soil sample Stockpile #1. Benzene concentrations were less than the laboratory MDL in all submitted soil samples. BTEX concentrations ranged from 0.0823 mg/Kg in soil sample Stockpile #2 to 0.0969 mg/Kg in soil sample Stockpile #1. Soil represented by soil samples Stockpile #1 and Stockpile #2 was deemed suitable for use as backfill material.

Based on laboratory analytical results, from August 20 through August 22, 2012, the excavation was backfilled in eighteen-inch (18") lifts, compacted, and contoured to fit the surrounding topography. Prior to backfilling, final dimensions of the excavation were approximately fifty feet (50') in length, twenty-five feet (25') in width, and ranging in depth from approximately two feet (2') to approximately fourteen feet (14') bgs.

The Taylor Poly Suction 4-Inch release site will be seeded with a BLM-approved seed mixture during the 2012 and 2013 calendar years.

## **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 Taylor Poly Suction 4-Inch excavation were analyzed by an NMOCD-approved laboratory, and concentrations of benzene, BTEX, TPH, and chloride were below the remediation action levels established for the site. Based on these laboratory analytical results, Basin Environmental recommends Plains provide the NMOCD Artesia District Office and the BLM a copy of this *Remediation Summary & Site Closure Request* and request the NMOCD grant site closure to the Taylor Poly Suction 4-Inch 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.

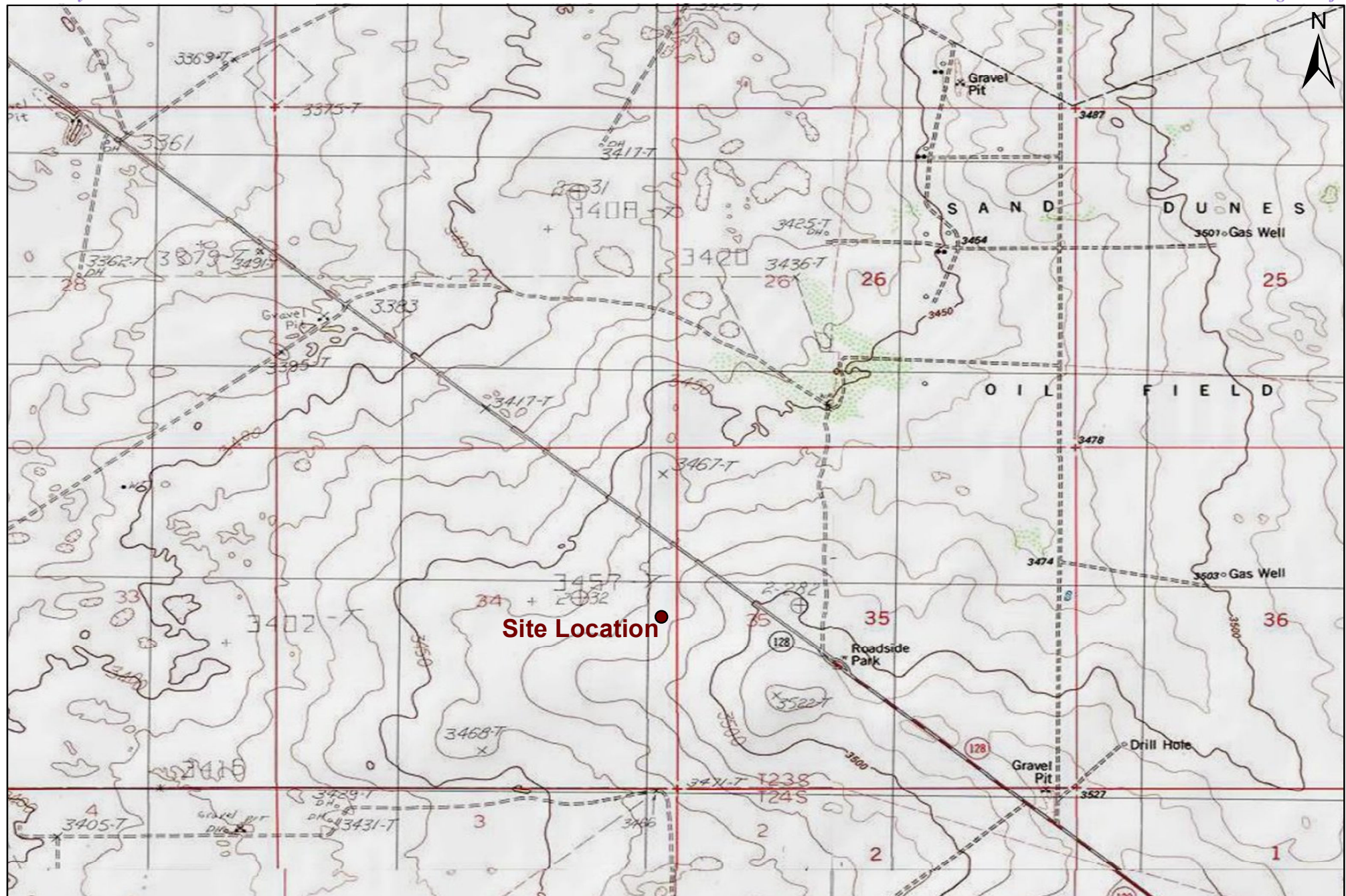
This report has been prepared for the benefit of Plains Pipeline, LP. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of Basin Environmental Service Technologies, LLC, and/or Plains Pipeline, LP.



## 7.0 DISTRIBUTION:

- Copy 1: Mike Bratcher  
New Mexico Energy, Minerals and Natural Resources Department  
Oil Conservation Division (District 2)  
1301 E. Grand Avenue  
Artesia, NM 88210  
mike.bratcher@state.nm.us
- Copy 2: James Amos  
Bureau of Land Management  
602 E. Greene Street  
Carlsbad, NM 88220  
James\_Amos@blm.gov
- Copy 3: Jeff Dann  
Plains Pipeline, LP  
333 Clay Street, Suite 1600  
Houston, Texas 77002  
jpdann@paalp.com
- Copy 4: Jason Henry  
Plains Pipeline, LP  
2530 State Highway 214  
Denver City, Texas 79323  
jhenry@paalp.com
- Copy 5: Basin Environmental Service Technologies, LLC  
P.O. Box 301  
Lovington, New Mexico 88260

# Figures



**Site Location**

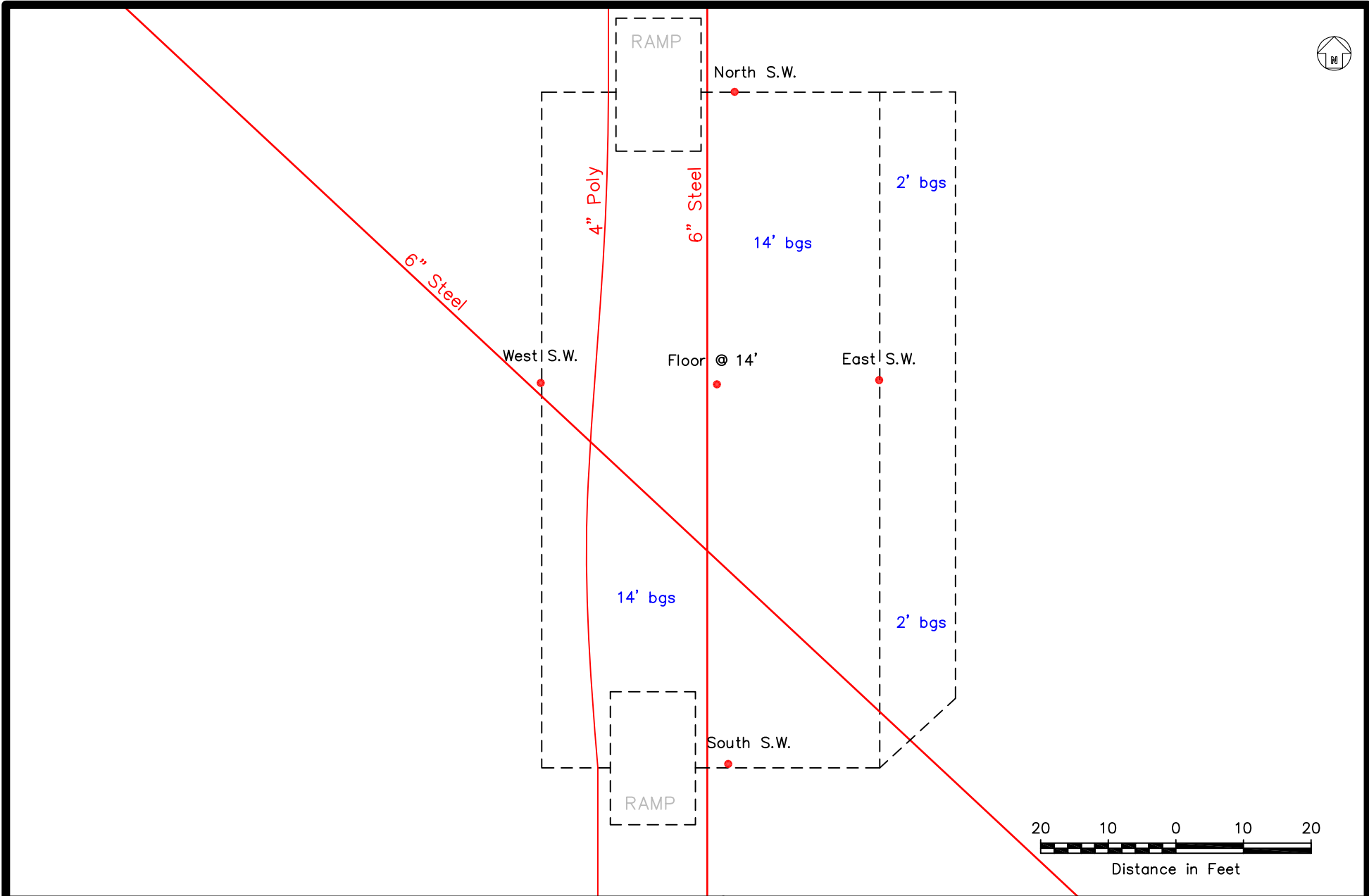
1,000 500 0 1,000 2,000  
Distance in Feet

**Figure 1**  
**Site Location Map**  
**Plains Pipeline, LP**  
**Taylor Poly Suction 4-Inch**  
**Eddy County, New Mexico**  
**SRS #: 2012-140**  
**NMOCD Ref. #: 2RP-1259**



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

Drawn By: BJA	Checked By: BRB
September 13, 2012	Scale: 1" = 2000'



<b>Legend</b>	
● Sample Location	— Pipeline
--- Excavation Extent	

<b>Figure 2</b>	
Site & Sample Location Map	
Plains Pipeline, LP	
Taylor Poly Suction 4-Inch	
NMOCD Ref #2RP-1259	
Eddy County, New Mexico	

<b>Basin Environmental Service Technologies, LLC</b>	
Prep By: JWL	Checked By: BJA
August 21, 2012	Scale 1" = 20'

# Tables

TABLE 1

## CONCENTRATIONS OF BENZENE, BTEX, TPH &amp; CHLORIDE IN SOIL

PLAINS PIPELINE, LP  
TAYLOR POLY SUCTION 4-INCH  
EDDY COUNTY, NEW MEXICO  
PLAINS SRS #: 2012-140  
NMOCD REFERENCE #: 2RP-1259

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030							METHOD: 8015M			TOTAL TPH C <sub>6</sub> -C <sub>35</sub> (mg/Kg)	300.1 CHLORIDE (mg/Kg)
				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 <sub>6</sub> -C <sub>12</sub> (mg/Kg)	DRO C <sub>12</sub> -C <sub>28</sub> (mg/Kg)	ORO C <sub>28</sub> -C <sub>35</sub> (mg/Kg)		
North S.W.	13'	8/17/2012	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<0.0022	<16.5	49.2	<16.5	49.2	-
South S.W.	13'	8/17/2012	In-Situ	<0.0011	<0.0022	<0.0011	<0.0022	<0.0011	<0.0022	<0.0022	<16.3	150	<16.3	150	-
East S.W.	13'	8/17/2012	In-Situ	<0.0011	<0.0021	<0.0011	<0.0021	<0.0011	<0.0021	<0.0021	<16.0	19.6	<16.0	19.6	-
West S.W.	13'	8/17/2012	In-Situ	<0.0011	<0.0021	<0.0011	<0.0021	<0.0011	<0.0021	<0.0021	<15.9	31.6	<15.9	31.6	-
Floor @ 14'	14'	8/17/2012	In-Situ	<0.0011	<0.0023	<0.0011	<0.0023	<0.0011	<0.0023	<0.0023	<16.9	31.7	<16.9	31.7	263
Stockpile #1	N/A	8/17/2012	Stockpiled	<0.0010	0.0062	0.0138	0.0429	0.0340	0.0769	0.0969	74.9	863	117	1,050	-
Stockpile #2	N/A	8/17/2012	Stockpiled	<0.0010	0.0061	0.0118	0.0355	0.0289	0.0644	0.0823	63.7	795	102	961	-
NMOCD Standard				10						50				5,000	

- = Not analyzed.



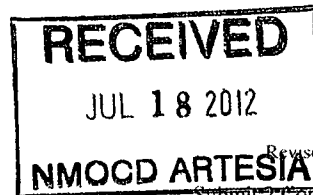
# Appendices

# **Appendix C**

## **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

NMLB1223742023

#### OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Plains Pipeline, LP 34053	Contact	Jason Henry
Address	2530 Hwy 214 -- Denver City, Tx 79323	Telephone No.	(575) 441-1099
Facility Name	Taylor Poly 4-inch	Facility Type	Pipeline

Surface Owner	BLM	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
H	34	23S	31E					Eddy

Latitude N 32.26083° Longitude W 103.75771°

#### NATURE OF RELEASE

Type of Release	Crude Oil	Volume of Release	37 bbls	Volume Recovered	35 bbls
Source of Release	4-inch poly pipeline was damaged by excavator	Date and Hour of Occurrence	07/14/2012 @ 1400	Date and Hour of Discovery	07/14/2012 @ 1400
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required				
By Whom?	Jason Henry	If YES, To Whom?	Verbal notification to Mike Bratcher on 07/17/2012		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Date and Hour	07/17/2012 @ 1430	
			If YES, Volume Impacting the Watercourse		

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*

A 4-inch poly pipeline was struck by the bucket of an excavator. The free product was recovered with a vacuum truck.

Describe Area Affected and Cleanup Action Taken \*

The released crude pooled in the ditch line of new pipeline that was being installed. The impacted area will be remediated per applicable BLM/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:	OIL CONSERVATION DIVISION	
Printed Name:	Signed By <u>Mike Bratcher</u>	
Title:	Remediation Coordinator	Approved by District Supervisor:
E-mail Address:	jhenry@paalp.com	Approval Date: <b>AUG 24 2012</b> Expiration Date:
Date:	07/18/2012	Conditions of Approval:
Phone:	(575) 441-1099	Attached <input type="checkbox"/>

Remediation per OCD Rules & Guidelines. **SUBMIT REMEDIATION PROPOSAL NOT LATER THAN:**

9/24/2012

2 RA-1259

\* Attach Additional Sheets If Necessary

fMLB1223741020

iMLB1223742420

MLB1223742556 (Compliance mod)

pMLB1223742652

# **Appendix D**

# **Photographs**





Taylor Poly Suction 4-Inch - Release Site (Looking North)



Taylor Poly Suction 4-Inch - Release Site





Taylor Poly Suction 4-Inch - Release Site (Looking North-northeast)



Taylor Poly Suction 4-Inch - Excavation (Looking North-northeast)





Taylor Poly Suction 4-Inch - Excavation (Looking Northeast)



Taylor Poly Suction 4-Inch - Excavation Floor  
(Looking North; Sample Locations Flagged in Orange)





Taylor Poly Suction 4-Inch - Excavation (During Backfill; Looking Northeast)



Taylor Poly Suction 4-Inch - Excavation (Following Backfill; Looking North)

# **Appendix E**

## **Laboratory Analytical Reports**

# **Analytical Report 447653**

**for**

## **PLAINS ALL AMERICAN EH&S**

**Project Manager: Ben Arguijo**  
**Taylor Poly Suction 4" (SRS 2012-140)**

**20-AUG-12**

Collected By: Client



**Celebrating 20 Years of commitment to excellence in Environmental Testing Services**



**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)



20-AUG-12

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

Reference: XENCO Report No: **447653**  
**Taylor Poly Suction 4" (SRS 2012-140)**  
Project Address: Eddy 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 447653. 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. 447653 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 447653****PLAINS ALL AMERICAN EH&S, Midland, TX**

Taylor Poly Suction 4" (SRS 2012-140)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
East S.W.	S	08-16-12 13:00	ft	447653-001
West S.W.	S	08-16-12 13:10	ft	447653-002
North S.W.	S	08-16-12 13:20	ft	447653-003
South S.W.	S	08-16-12 13:30	ft	447653-004
Floor @ 14'	S	08-16-12 13:40	ft	447653-005
Stockpile #1	S	08-16-12 14:00	ft	447653-006
Stockpile #2	S	08-16-12 14:10	ft	447653-007





## CASE NARRATIVE

*Client Name: PLAINS ALL AMERICAN EH&S*

*Project Name: Taylor Poly Suction 4" (SRS 2012-140)*



*Project ID:*  
*Work Order Number: 447653*

*Report Date: 20-AUG-12*  
*Date Received: 08/17/2012*

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***Sample receipt non conformances and comments:***

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***Sample receipt non conformances and comments per sample:***

None

***Analytical non conformances and comments:***

*Batch: LBA-894668 BTEX by EPA 8021B*  
*SW8021BM*

*Batch 894668, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data confirmed by re-analysis*  
*Samples affected are: 447653-007,447653-006.*

*Batch: LBA-894679 Inorganic Anions by EPA 300/300.1*  
*E300*

*Batch 894679, Chloride recovered below QC limits in the Matrix Spike.*  
*Samples affected are: 447653-005.*  
*The Laboratory Control Sample for Chloride is within laboratory Control Limits*



## Hits Summary

447653



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

Taylor Poly Suction 4" (SRS 2012-140)

Sample Id: <b>East S.W.</b>		Matrix: <b>Soil</b>		% Moisture:		
Lab Sample Id: <b>447653-001</b>		Date Collected: <b>Aug-16-12 13:00</b>		Basis: <b>Wet Weight</b>		
		Date Received: <b>Aug-17-12 11:50</b>				
<b>Analytical Method: Percent Moisture</b>						
Seq Number: 894683						
<b>Parameter</b>	<b>Cas Number</b>	<b>Result</b>	<b>Units</b>	<b>Analysis Date</b>	<b>Flag</b>	<b>Dil</b>
Percent Moisture	TMOIST	6.20	%	08/17/12 13:00		1

Project: Midland Odessa Standard List of prices



## Hits Summary

447653



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

Taylor Poly Suction 4" (SRS 2012-140)

Sample Id: <b>East S.W.</b>		Matrix: <b>Soil</b>		% Moisture: <b>6.2</b>		
Lab Sample Id: <b>447653-001</b>		Date Collected: <b>Aug-16-12 13:00</b>		Basis: <b>Dry Weight</b>		
		Date Received: <b>Aug-17-12 11:50</b>				
<b>Analytical Method: TPH By SW8015 Mod</b>				Prep Method: TX1005P		
Seq Number: 894671				Date Prep: Aug-17-12 13:30		
<b>Parameter</b>	<b>Cas Number</b>	<b>Result</b>	<b>Units</b>	<b>Analysis Date</b>	<b>Flag</b>	<b>Dil</b>
C12-C28 Diesel Range Hydrocarbons	PHCG1028	19.6	mg/kg	08/17/12 13:54		1
Total TPH	PHC635	19.6	mg/kg	08/17/12 13:54		1

Project: Midland Odessa Standard List of prices



## Hits Summary

447653



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

Taylor Poly Suction 4" (SRS 2012-140)

Sample Id: <b>West S.W.</b>		Matrix: <b>Soil</b>		% Moisture:		
Lab Sample Id: <b>447653-002</b>		Date Collected: <b>Aug-16-12 13:10</b>		Basis: <b>Wet Weight</b>		
		Date Received: <b>Aug-17-12 11:50</b>				
<b>Analytical Method: Percent Moisture</b>						
Seq Number: 894683						
<b>Parameter</b>	<b>Cas Number</b>	<b>Result</b>	<b>Units</b>	<b>Analysis Date</b>	<b>Flag</b>	<b>Dil</b>
Percent Moisture	TMOIST	5.62	%	08/17/12 13:00		1

Project: Midland Odessa Standard List of prices



## Hits Summary

447653



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

Taylor Poly Suction 4" (SRS 2012-140)

Sample Id: <b>West S.W.</b>		Matrix: <b>Soil</b>		% Moisture: <b>5.62</b>		
Lab Sample Id: <b>447653-002</b>		Date Collected: <b>Aug-16-12 13:10</b>		Basis: <b>Dry Weight</b>		
		Date Received: <b>Aug-17-12 11:50</b>				
<b>Analytical Method: TPH By SW8015 Mod</b>				Prep Method: TX1005P		
Seq Number: 894671				Date Prep: Aug-17-12 13:30		
<b>Parameter</b>	<b>Cas Number</b>	<b>Result</b>	<b>Units</b>	<b>Analysis Date</b>	<b>Flag</b>	<b>Dil</b>
C12-C28 Diesel Range Hydrocarbons	PHCG1028	31.6	mg/kg	08/17/12 14:19		1
Total TPH	PHC635	31.6	mg/kg	08/17/12 14:19		1

Project: Midland Odessa Standard List of prices



## Hits Summary

447653



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

Taylor Poly Suction 4" (SRS 2012-140)

Sample Id: <b>North S.W.</b>		Matrix: <b>Soil</b>		% Moisture:		
Lab Sample Id: <b>447653-003</b>		Date Collected: <b>Aug-16-12 13:20</b>		Basis: <b>Wet Weight</b>		
		Date Received: <b>Aug-17-12 11:50</b>				
<b>Analytical Method: Percent Moisture</b>						
Seq Number: 894683						
<b>Parameter</b>	<b>Cas Number</b>	<b>Result</b>	<b>Units</b>	<b>Analysis Date</b>	<b>Flag</b>	<b>Dil</b>
Percent Moisture	TMOIST	9.35	%	08/17/12 13:00		1

Project: Midland Odessa Standard List of prices





## Hits Summary

447653



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

Taylor Poly Suction 4" (SRS 2012-140)

Sample Id: <b>North S.W.</b>		Matrix: <b>Soil</b>		% Moisture: <b>9.35</b>		
Lab Sample Id: <b>447653-003</b>		Date Collected: <b>Aug-16-12 13:20</b>		Basis: <b>Dry Weight</b>		
		Date Received: <b>Aug-17-12 11:50</b>				
<b>Analytical Method: TPH By SW8015 Mod</b>				Prep Method: TX1005P		
Seq Number: 894671				Date Prep: Aug-17-12 13:30		
<b>Parameter</b>	<b>Cas Number</b>	<b>Result</b>	<b>Units</b>	<b>Analysis Date</b>	<b>Flag</b>	<b>Dil</b>
C12-C28 Diesel Range Hydrocarbons	PHCG1028	49.2	mg/kg	08/17/12 14:44		1
Total TPH	PHC635	49.2	mg/kg	08/17/12 14:44		1

Project: Midland Odessa Standard List of prices



## Hits Summary

447653



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

Taylor Poly Suction 4" (SRS 2012-140)

Sample Id: <b>South S.W.</b>		Matrix: <b>Soil</b>		% Moisture:		
Lab Sample Id: <b>447653-004</b>		Date Collected: <b>Aug-16-12 13:30</b>		Basis: <b>Wet Weight</b>		
		Date Received: <b>Aug-17-12 11:50</b>				
<b>Analytical Method: Percent Moisture</b>						
Seq Number: 894683						
<b>Parameter</b>	<b>Cas Number</b>	<b>Result</b>	<b>Units</b>	<b>Analysis Date</b>	<b>Flag</b>	<b>Dil</b>
Percent Moisture	TMOIST	7.98	%	08/17/12 13:00		1

Project: Midland Odessa Standard List of prices



## Hits Summary

447653



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

Taylor Poly Suction 4" (SRS 2012-140)

Sample Id: <b>South S.W.</b>		Matrix: <b>Soil</b>		% Moisture: <b>7.98</b>		
Lab Sample Id: <b>447653-004</b>		Date Collected: <b>Aug-16-12 13:30</b>		Basis: <b>Dry Weight</b>		
		Date Received: <b>Aug-17-12 11:50</b>				
<b>Analytical Method: TPH By SW8015 Mod</b>				Prep Method: TX1005P		
Seq Number: 894671				Date Prep: Aug-17-12 13:30		
<b>Parameter</b>	<b>Cas Number</b>	<b>Result</b>	<b>Units</b>	<b>Analysis Date</b>	<b>Flag</b>	<b>Dil</b>
C12-C28 Diesel Range Hydrocarbons	PHCG1028	150	mg/kg	08/17/12 15:10		1
Total TPH	PHC635	150	mg/kg	08/17/12 15:10		1

Project: Midland Odessa Standard List of prices



## Hits Summary

447653



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

Taylor Poly Suction 4" (SRS 2012-140)

Sample Id: <b>Floor @ 14'</b>		Matrix: <b>Soil</b>		% Moisture: <b>11.5</b>		
Lab Sample Id: <b>447653-005</b>		Date Collected: <b>Aug-16-12 13:40</b>		Basis: <b>Dry Weight</b>		
		Date Received: <b>Aug-17-12 11:50</b>				
<b>Analytical Method: Inorganic Anions by EPA 300/300.1</b>				Prep Method: E300P		
Seq Number: 894679				Date Prep: Aug-18-12 09:00		
<b>Parameter</b>	<b>Cas Number</b>	<b>Result</b>	<b>Units</b>	<b>Analysis Date</b>	<b>Flag</b>	<b>Dil</b>
Chloride	16887-00-6	263	mg/kg	08/18/12 11:27		1

Project: Midland Odessa Standard List of prices



## Hits Summary

447653



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

Taylor Poly Suction 4" (SRS 2012-140)

Sample Id: <b>Floor @ 14'</b>		Matrix: <b>Soil</b>		% Moisture:		
Lab Sample Id: <b>447653-005</b>		Date Collected: <b>Aug-16-12 13:40</b>		Basis: <b>Wet Weight</b>		
		Date Received: <b>Aug-17-12 11:50</b>				
<b>Analytical Method: Percent Moisture</b>						
Seq Number: 894683						
Parameter	Cas Number	Result	Units	Analysis Date	Flag	Dil
Percent Moisture	TMOIST	11.5	%	08/17/12 13:00		1

Project: Midland Odessa Standard List of prices



## Hits Summary

447653



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

Taylor Poly Suction 4" (SRS 2012-140)

Sample Id: <b>Floor @ 14'</b>		Matrix: <b>Soil</b>		% Moisture: <b>11.5</b>		
Lab Sample Id: <b>447653-005</b>		Date Collected: <b>Aug-16-12 13:40</b>		Basis: <b>Dry Weight</b>		
		Date Received: <b>Aug-17-12 11:50</b>				
<b>Analytical Method: TPH By SW8015 Mod</b>				Prep Method: TX1005P		
Seq Number: 894671				Date Prep: Aug-17-12 13:30		
<b>Parameter</b>	<b>Cas Number</b>	<b>Result</b>	<b>Units</b>	<b>Analysis Date</b>	<b>Flag</b>	<b>Dil</b>
C12-C28 Diesel Range Hydrocarbons	PHCG1028	31.7	mg/kg	08/17/12 15:35		1
Total TPH	PHC635	31.7	mg/kg	08/17/12 15:35		1

Project: Midland Odessa Standard List of prices



## Hits Summary

447653



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

Taylor Poly Suction 4" (SRS 2012-140)

Sample Id: <b>Stockpile #1</b>		Matrix: <b>Soil</b>		% Moisture: <b>2.05</b>		
Lab Sample Id: <b>447653-006</b>		Date Collected: <b>Aug-16-12 14:00</b>		Basis: <b>Dry Weight</b>		
		Date Received: <b>Aug-17-12 11:50</b>				
<b>Analytical Method: BTEX by EPA 8021B</b>				Prep Method: SW5030B		
Seq Number: 894668				Date Prep: Aug-17-12 12:30		
<b>Parameter</b>	<b>Cas Number</b>	<b>Result</b>	<b>Units</b>	<b>Analysis Date</b>	<b>Flag</b>	<b>Dil</b>
Toluene	108-88-3	0.00616	mg/kg	08/17/12 14:12		1
Ethylbenzene	100-41-4	0.0138	mg/kg	08/17/12 14:12		1
m_p-Xylenes	179601-23-1	0.0429	mg/kg	08/17/12 14:12		1
o-Xylene	95-47-6	0.0340	mg/kg	08/17/12 14:12		1
Total Xylenes	1330-20-7	0.0769	mg/kg	08/17/12 14:12		1
Total BTEX		0.0969	mg/kg	08/17/12 14:12		1

Project: Midland Odessa Standard List of prices





## Hits Summary

447653



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

Taylor Poly Suction 4" (SRS 2012-140)

Sample Id: <b>Stockpile #1</b>		Matrix: <b>Soil</b>		% Moisture:		
Lab Sample Id: <b>447653-006</b>		Date Collected: <b>Aug-16-12 14:00</b>		Basis: <b>Wet Weight</b>		
		Date Received: <b>Aug-17-12 11:50</b>				
<b>Analytical Method: Percent Moisture</b>						
Seq Number: 894683						
<b>Parameter</b>	<b>Cas Number</b>	<b>Result</b>	<b>Units</b>	<b>Analysis Date</b>	<b>Flag</b>	<b>Dil</b>
Percent Moisture	TMOIST	2.05	%	08/17/12 13:00		1

Project: Midland Odessa Standard List of prices



## Hits Summary

447653



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

Taylor Poly Suction 4" (SRS 2012-140)

Sample Id: <b>Stockpile #1</b>		Matrix: <b>Soil</b>		% Moisture: <b>2.05</b>		
Lab Sample Id: <b>447653-006</b>		Date Collected: <b>Aug-16-12 14:00</b>		Basis: <b>Dry Weight</b>		
		Date Received: <b>Aug-17-12 11:50</b>				
<b>Analytical Method: TPH By SW8015 Mod</b>				Prep Method: TX1005P		
Seq Number: 894671				Date Prep: Aug-17-12 13:30		
<b>Parameter</b>	<b>Cas Number</b>	<b>Result</b>	<b>Units</b>	<b>Analysis Date</b>	<b>Flag</b>	<b>Dil</b>
C6-C12 Gasoline Range Hydrocarbons	PHC612	74.9	mg/kg	08/17/12 16:01		1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	863	mg/kg	08/17/12 16:01		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	117	mg/kg	08/17/12 16:01		1
Total TPH	PHC635	1050	mg/kg	08/17/12 16:01		1

Project: Midland Odessa Standard List of prices



## Hits Summary

447653



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

Taylor Poly Suction 4" (SRS 2012-140)

Sample Id: <b>Stockpile #2</b>		Matrix: <b>Soil</b>		% Moisture: <b>2.64</b>		
Lab Sample Id: <b>447653-007</b>		Date Collected: <b>Aug-16-12 14:10</b>		Basis: <b>Dry Weight</b>		
		Date Received: <b>Aug-17-12 11:50</b>				
<b>Analytical Method: BTEX by EPA 8021B</b>				Prep Method: SW5030B		
Seq Number: 894668				Date Prep: Aug-17-12 12:30		
<b>Parameter</b>	<b>Cas Number</b>	<b>Result</b>	<b>Units</b>	<b>Analysis Date</b>	<b>Flag</b>	<b>Dil</b>
Toluene	108-88-3	0.00605	mg/kg	08/17/12 14:27		1
Ethylbenzene	100-41-4	0.0118	mg/kg	08/17/12 14:27		1
m_p-Xylenes	179601-23-1	0.0355	mg/kg	08/17/12 14:27		1
o-Xylene	95-47-6	0.0289	mg/kg	08/17/12 14:27		1
Total Xylenes	1330-20-7	0.0644	mg/kg	08/17/12 14:27		1
Total BTEX		0.0823	mg/kg	08/17/12 14:27		1

Project: Midland Odessa Standard List of prices



## Hits Summary

447653



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

Taylor Poly Suction 4" (SRS 2012-140)

Sample Id: <b>Stockpile #2</b>		Matrix: <b>Soil</b>		% Moisture:		
Lab Sample Id: <b>447653-007</b>		Date Collected: <b>Aug-16-12 14:10</b>		Basis: <b>Wet Weight</b>		
		Date Received: <b>Aug-17-12 11:50</b>				
<b>Analytical Method: Percent Moisture</b>						
Seq Number: 894683						
<b>Parameter</b>	<b>Cas Number</b>	<b>Result</b>	<b>Units</b>	<b>Analysis Date</b>	<b>Flag</b>	<b>Dil</b>
Percent Moisture	TMOIST	2.64	%	08/17/12 13:00		1

Project: Midland Odessa Standard List of prices



## Hits Summary

447653



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

Taylor Poly Suction 4" (SRS 2012-140)

Sample Id: <b>Stockpile #2</b>		Matrix: <b>Soil</b>		% Moisture: <b>2.64</b>		
Lab Sample Id: <b>447653-007</b>		Date Collected: <b>Aug-16-12 14:10</b>		Basis: <b>Dry Weight</b>		
		Date Received: <b>Aug-17-12 11:50</b>				
<b>Analytical Method: TPH By SW8015 Mod</b>				Prep Method: TX1005P		
Seq Number: 894671				Date Prep: Aug-17-12 13:30		
Parameter	Cas Number	Result	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	63.7	mg/kg	08/17/12 16:26		1
C12-C28 Diesel Range Hydrocarbons	PHCG1028	795	mg/kg	08/17/12 16:26		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	102	mg/kg	08/17/12 16:26		1
Total TPH	PHC635	961	mg/kg	08/17/12 16:26		1

Project: Midland Odessa Standard List of prices



# Certificate of Analysis Summary 447653

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Taylor Poly Suction 4" (SRS 2012-140)



Project Id:

Contact: Ben Arguijo

Project Location: Eddy County, NM

Date Received in Lab: Fri Aug-17-12 11:50 am

Report Date: 20-AUG-12

Project Manager: Nicholas Straccione

<i>Analysis Requested</i>	<i>Lab Id:</i>	447653-001	447653-002	447653-003	447653-004	447653-005	447653-006
	<i>Field Id:</i>	East S.W.	West S.W.	North S.W.	South S.W.	Floor @ 14'	Stockpile #1
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Aug-16-12 13:00	Aug-16-12 13:10	Aug-16-12 13:20	Aug-16-12 13:30	Aug-16-12 13:40	Aug-16-12 14:00
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	Aug-17-12 12:30	Aug-17-12 12:30	Aug-17-12 12:30	Aug-17-12 12:30	Aug-17-12 12:30	Aug-17-12 12:30
	<i>Analyzed:</i>	Aug-17-12 12:58	Aug-17-12 13:12	Aug-17-12 13:27	Aug-17-12 13:42	Aug-17-12 13:57	Aug-17-12 14:12
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		ND 0.00106	ND 0.00106	ND 0.00110	ND 0.00109	ND 0.00113	ND 0.00102
Toluene		ND 0.00212	ND 0.00212	ND 0.00220	ND 0.00217	ND 0.00226	0.00616 0.00204
Ethylbenzene		ND 0.00106	ND 0.00106	ND 0.00110	ND 0.00109	ND 0.00113	0.0138 0.00102
m_p-Xylenes		ND 0.00212	ND 0.00212	ND 0.00220	ND 0.00217	ND 0.00226	0.0429 0.00204
o-Xylene		ND 0.00106	ND 0.00106	ND 0.00110	ND 0.00109	ND 0.00113	0.0340 0.00102
Total Xylenes		ND 0.00106	ND 0.00106	ND 0.00110	ND 0.00109	ND 0.00113	0.0769 0.00102
Total BTEX		ND 0.00106	ND 0.00106	ND 0.00110	ND 0.00109	ND 0.00113	0.0969 0.00102
<b>Inorganic Anions by EPA 300/300.1 SUB: E871002</b>	<i>Extracted:</i>					Aug-18-12 09:00	
	<i>Analyzed:</i>					Aug-18-12 11:27	
	<i>Units/RL:</i>					mg/kg RL	
Chloride						263 1.13	
<b>Percent Moisture</b>	<i>Extracted:</i>						
	<i>Analyzed:</i>	Aug-17-12 13:00	Aug-17-12 13:00	Aug-17-12 13:00	Aug-17-12 13:00	Aug-17-12 13:00	Aug-17-12 13:00
	<i>Units/RL:</i>	% RL	% RL	% RL	% RL	% RL	% RL
Percent Moisture		6.20 1.00	5.62 1.00	9.35 1.00	7.98 1.00	11.5 1.00	2.05 1.00
<b>TPH By SW8015 Mod</b>	<i>Extracted:</i>	Aug-17-12 13:30	Aug-17-12 13:30	Aug-17-12 13:30	Aug-17-12 13:30	Aug-17-12 13:30	Aug-17-12 13:30
	<i>Analyzed:</i>	Aug-17-12 13:54	Aug-17-12 14:19	Aug-17-12 14:44	Aug-17-12 15:10	Aug-17-12 15:35	Aug-17-12 16:01
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
C6-C12 Gasoline Range Hydrocarbons		ND 16.0	ND 15.9	ND 16.5	ND 16.3	ND 16.9	74.9 15.3
C12-C28 Diesel Range Hydrocarbons		19.6 16.0	31.6 15.9	49.2 16.5	150 16.3	31.7 16.9	863 15.3
C28-C35 Oil Range Hydrocarbons		ND 16.0	ND 15.9	ND 16.5	ND 16.3	ND 16.9	117 15.3
Total TPH		19.6 16.0	31.6 15.9	49.2 16.5	150 16.3	31.7 16.9	1050 15.3

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.  
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Nicholas Straccione  
Project Manager



# Certificate of Analysis Summary 447653

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: Taylor Poly Suction 4" (SRS 2012-140)



Project Id:

Contact: Ben Arguijo

Project Location: Eddy County, NM

Date Received in Lab: Fri Aug-17-12 11:50 am

Report Date: 20-AUG-12

Project Manager: Nicholas Straccione

<b>Analysis Requested</b>	<b>Lab Id:</b>	447653-007					
	<b>Field Id:</b>	Stockpile #2					
	<b>Depth:</b>						
	<b>Matrix:</b>	SOIL					
	<b>Sampled:</b>	Aug-16-12 14:10					
<b>BTEX by EPA 8021B</b>	<b>Extracted:</b>	Aug-17-12 12:30					
	<b>Analyzed:</b>	Aug-17-12 14:27					
	<b>Units/RL:</b>	mg/kg RL					
Benzene		ND 0.00102					
Toluene		0.00605 0.00204					
Ethylbenzene		0.0118 0.00102					
m_p-Xylenes		0.0355 0.00204					
o-Xylene		0.0289 0.00102					
Total Xylenes		0.0644 0.00102					
Total BTEX		0.0823 0.00102					
<b>Percent Moisture</b>	<b>Extracted:</b>	Aug-17-12 13:00					
	<b>Analyzed:</b>						
	<b>Units/RL:</b>	% RL					
Percent Moisture		2.64 1.00					
<b>TPH By SW8015 Mod</b>	<b>Extracted:</b>	Aug-17-12 13:30					
	<b>Analyzed:</b>	Aug-17-12 16:26					
	<b>Units/RL:</b>	mg/kg RL					
C6-C12 Gasoline Range Hydrocarbons		63.7 15.4					
C12-C28 Diesel Range Hydrocarbons		795 15.4					
C28-C35 Oil Range Hydrocarbons		102 15.4					
Total TPH		961 15.4					

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Nicholas Straccione  
Project Manager





## 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 quantitation 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      **SQL** 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

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(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	



# Form 2 - Surrogate Recoveries

Project Name: Taylor Poly Suction 4" (SRS 2012-140)

Work Orders : 447653,

Project ID:

Lab Batch #: 894668

Sample: 447653-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 08/17/12 12:58

## SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0240	0.0300	80	80-120	
4-Bromofluorobenzene	0.0275	0.0300	92	80-120	

Lab Batch #: 894668

Sample: 447653-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 08/17/12 13:12

## SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0246	0.0300	82	80-120	
4-Bromofluorobenzene	0.0278	0.0300	93	80-120	

Lab Batch #: 894668

Sample: 447653-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 08/17/12 13:27

## SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0250	0.0300	83	80-120	
4-Bromofluorobenzene	0.0295	0.0300	98	80-120	

Lab Batch #: 894668

Sample: 447653-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 08/17/12 13:42

## SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0258	0.0300	86	80-120	
4-Bromofluorobenzene	0.0290	0.0300	97	80-120	

Lab Batch #: 894671

Sample: 447653-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 08/17/12 13:54

## SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	92.2	100	92	70-135	
o-Terphenyl	47.0	50.0	94	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: Taylor Poly Suction 4" (SRS 2012-140)

Work Orders : 447653,

Project ID:

Lab Batch #: 894668

Sample: 447653-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 08/17/12 13:57

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0249	0.0300	83	80-120	
4-Bromofluorobenzene	0.0283	0.0300	94	80-120	

Lab Batch #: 894668

Sample: 447653-006 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 08/17/12 14:12

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0154	0.0300	51	80-120	**
4-Bromofluorobenzene	0.0313	0.0300	104	80-120	

Lab Batch #: 894671

Sample: 447653-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 08/17/12 14:19

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.3	99.8	89	70-135	
o-Terphenyl	43.5	49.9	87	70-135	

Lab Batch #: 894668

Sample: 447653-007 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 08/17/12 14:27

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0150	0.0300	50	80-120	**
4-Bromofluorobenzene	0.0296	0.0300	99	80-120	

Lab Batch #: 894671

Sample: 447653-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 08/17/12 14:44

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.9	99.7	92	70-135	
o-Terphenyl	47.0	49.9	94	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: Taylor Poly Suction 4" (SRS 2012-140)

Work Orders : 447653,

Project ID:

Lab Batch #: 894671

Sample: 447653-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg      Date Analyzed: 08/17/12 15:10		SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1-Chlorooctane		94.7	99.8	95	70-135
o-Terphenyl		48.1	49.9	96	70-135

Lab Batch #: 894671

Sample: 447653-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg      Date Analyzed: 08/17/12 15:35		SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1-Chlorooctane		91.1	99.7	91	70-135
o-Terphenyl		46.7	49.9	94	70-135

Lab Batch #: 894671

Sample: 447653-006 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg      Date Analyzed: 08/17/12 16:01		SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1-Chlorooctane		90.1	100	90	70-135
o-Terphenyl		47.6	50.0	95	70-135

Lab Batch #: 894671

Sample: 447653-007 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg      Date Analyzed: 08/17/12 16:26		SURROGATE RECOVERY STUDY			
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1-Chlorooctane		90.6	100	91	70-135
o-Terphenyl		47.7	50.0	95	70-135

Lab Batch #: 894668

Sample: 626067-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg      Date Analyzed: 08/17/12 12:43		SURROGATE RECOVERY STUDY			
BTEX by EPA 8021B		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
Analytes					
1,4-Difluorobenzene		0.0256	0.0300	85	80-120
4-Bromofluorobenzene		0.0305	0.0300	102	80-120

\* Surrogate outside of Laboratory QC limits

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

\*\*\* Poor recoveries due to dilution

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

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



## Form 2 - Surrogate Recoveries

Project Name: Taylor Poly Suction 4" (SRS 2012-140)

Work Orders : 447653,

Project ID:

Lab Batch #: 894671

Sample: 626068-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 08/17/12 13:28

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.9	100	87	70-135	
o-Terphenyl	44.7	50.0	89	70-135	

Lab Batch #: 894671

Sample: 626068-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 08/17/12 12:37

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	100	100	100	70-135	
o-Terphenyl	42.1	50.0	84	70-135	

Lab Batch #: 894668

Sample: 626067-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 08/17/12 16:10

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0348	0.0300	116	80-120	

Lab Batch #: 894671

Sample: 626068-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 08/17/12 13:02

### SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.4	99.9	98	70-135	
o-Terphenyl	41.3	50.0	83	70-135	

Lab Batch #: 894668

Sample: 626067-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 08/17/12 15:27

### SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0288	0.0300	96	80-120	
4-Bromofluorobenzene	0.0345	0.0300	115	80-120	

\* Surrogate outside of Laboratory QC limits

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

\*\*\* Poor recoveries due to dilution

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

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



**Form 2 - Surrogate Recoveries****Project Name: Taylor Poly Suction 4" (SRS 2012-140)****Work Orders :** 447653,**Project ID:****Lab Batch #:** 894668**Sample:** 447653-001 S / MS**Batch:** 1 **Matrix:** Soil**Units:** mg/kg**Date Analyzed:** 08/17/12 14:57**SURROGATE RECOVERY STUDY**

<b>BTEX by EPA 8021B</b>	<b>Amount Found [A]</b>	<b>True Amount [B]</b>	<b>Recovery %R [D]</b>	<b>Control Limits %R</b>	<b>Flags</b>
<b>Analytes</b>					
1,4-Difluorobenzene	0.0292	0.0300	97	80-120	
4-Bromofluorobenzene	0.0330	0.0300	110	80-120	

**Lab Batch #:** 894671**Sample:** 447653-001 S / MS**Batch:** 1 **Matrix:** Soil**Units:** mg/kg**Date Analyzed:** 08/17/12 16:52**SURROGATE RECOVERY STUDY**

<b>TPH By SW8015 Mod</b>	<b>Amount Found [A]</b>	<b>True Amount [B]</b>	<b>Recovery %R [D]</b>	<b>Control Limits %R</b>	<b>Flags</b>
<b>Analytes</b>					
1-Chlorooctane	105	100	105	70-135	
o-Terphenyl	45.5	50.0	91	70-135	

**Lab Batch #:** 894668**Sample:** 447653-001 SD / MSD**Batch:** 1 **Matrix:** Soil**Units:** mg/kg**Date Analyzed:** 08/17/12 15:11**SURROGATE RECOVERY STUDY**

<b>BTEX by EPA 8021B</b>	<b>Amount Found [A]</b>	<b>True Amount [B]</b>	<b>Recovery %R [D]</b>	<b>Control Limits %R</b>	<b>Flags</b>
<b>Analytes</b>					
1,4-Difluorobenzene	0.0295	0.0300	98	80-120	
4-Bromofluorobenzene	0.0343	0.0300	114	80-120	

**Lab Batch #:** 894671**Sample:** 447653-001 SD / MSD**Batch:** 1 **Matrix:** Soil**Units:** mg/kg**Date Analyzed:** 08/17/12 17:18**SURROGATE RECOVERY STUDY**

<b>TPH By SW8015 Mod</b>	<b>Amount Found [A]</b>	<b>True Amount [B]</b>	<b>Recovery %R [D]</b>	<b>Control Limits %R</b>	<b>Flags</b>
<b>Analytes</b>					
1-Chlorooctane	98.4	99.9	98	70-135	
o-Terphenyl	43.2	50.0	86	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: Taylor Poly Suction 4" (SRS 2012-140)**

**Work Order #:** 447653

**Analyst:** KEB

**Date Prepared:** 08/17/2012

**Project ID:**

**Date Analyzed:** 08/17/2012

**Lab Batch ID:** 894668

**Sample:** 626067-1-BKS

**Batch #:** 1

**Matrix:** Solid

**Units:** mg/kg

### BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

<b>BTEX by EPA 8021B</b>	<b>Blank Sample Result [A]</b>	<b>Spike Added [B]</b>	<b>Blank Spike Result [C]</b>	<b>Blank Spike %R [D]</b>	<b>Spike Added [E]</b>	<b>Blank Spike Duplicate Result [F]</b>	<b>Blk. Spk Dup. %R [G]</b>	<b>RPD %</b>	<b>Control Limits %R</b>	<b>Control Limits %RPD</b>	<b>Flag</b>
<b>Analytes</b>											
Benzene	<0.00100	0.100	0.0874	87	0.100	0.0894	89	2	70-130	35	
Toluene	<0.00201	0.100	0.103	103	0.100	0.104	104	1	70-130	35	
Ethylbenzene	<0.00100	0.100	0.101	101	0.100	0.101	101	0	71-129	35	
m_p-Xylenes	<0.00201	0.201	0.222	110	0.200	0.219	110	1	70-135	35	
o-Xylene	<0.00100	0.100	0.121	121	0.100	0.121	121	0	71-133	35	

**Analyst:** TTE

**Date Prepared:** 08/18/2012

**Date Analyzed:** 08/18/2012

**Lab Batch ID:** 894679

**Sample:** 626072-1-BKS

**Batch #:** 1

**Matrix:** Solid

**Units:** mg/kg

### BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

<b>Inorganic Anions by EPA 300/300.1</b>	<b>Blank Sample Result [A]</b>	<b>Spike Added [B]</b>	<b>Blank Spike Result [C]</b>	<b>Blank Spike %R [D]</b>	<b>Spike Added [E]</b>	<b>Blank Spike Duplicate Result [F]</b>	<b>Blk. Spk Dup. %R [G]</b>	<b>RPD %</b>	<b>Control Limits %R</b>	<b>Control Limits %RPD</b>	<b>Flag</b>
<b>Analytes</b>											
Chloride	<1.00	100	98.9	99	100	98.8	99	0	80-120	20	

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

Blank Spike Recovery [D] =  $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] =  $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



## BS / BSD Recoveries



**Project Name: Taylor Poly Suction 4" (SRS 2012-140)**

**Work Order #:** 447653

**Analyst:** KEB

**Date Prepared:** 08/17/2012

**Project ID:**

**Date Analyzed:** 08/17/2012

**Lab Batch ID:** 894671

**Sample:** 626068-1-BKS

**Batch #:** 1

**Matrix:** Solid

**Units:** mg/kg

### BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
C6-C12 Gasoline Range Hydrocarbons	<15.0	1000	794	79	999	792	79	0	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	1060	106	999	1060	106	0	70-135	35	

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

Blank Spike Recovery [D] =  $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] =  $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



# Form 3 - MS Recoveries



Project Name: Taylor Poly Suction 4" (SRS 2012-140)

Work Order #: 447653

Lab Batch #: 894679

Date Analyzed: 08/18/2012

Date Prepared: 08/18/2012

Project ID:

Analyst: TTE

QC- Sample ID: 447654-001 S

Batch #: 1

Matrix: Soil

Reporting Units: mg/kg

## MATRIX / MATRIX SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	15400	10000	22400	70	80-120	X

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

BRL - Below Reporting Limit



# Form 3 - MS / MSD Recoveries



**Project Name: Taylor Poly Suction 4" (SRS 2012-140)**

**Work Order # :** 447653

**Project ID:**

**Lab Batch ID:** 894668

**QC- Sample ID:** 447653-001 S

**Batch #:** 1 **Matrix:** Soil

**Date Analyzed:** 08/17/2012

**Date Prepared:** 08/17/2012

**Analyst:** KEB

**Reporting Units:** mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00107	0.107	0.0762	71	0.106	0.0799	75	5	70-130	35	
Toluene	<0.00213	0.107	0.0894	84	0.106	0.0928	88	4	70-130	35	
Ethylbenzene	<0.00107	0.107	0.0848	79	0.106	0.0879	83	4	71-129	35	
m,p-Xylenes	<0.00213	0.213	0.187	88	0.213	0.193	91	3	70-135	35	
o-Xylene	<0.00107	0.107	0.107	100	0.106	0.108	102	1	71-133	35	

**Lab Batch ID:** 894671

**QC- Sample ID:** 447653-001 S

**Batch #:** 1 **Matrix:** Soil

**Date Analyzed:** 08/17/2012

**Date Prepared:** 08/17/2012

**Analyst:** KEB

**Reporting Units:** mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<16.0	1070	849	79	1070	805	75	5	70-135	35	
C12-C28 Diesel Range Hydrocarbons	19.6	1070	1130	104	1070	1050	96	7	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: Taylor Poly Suction 4" (SRS 2012-140)**

**Work Order #: 447653**

**Lab Batch #: 894683**

**Project ID:**

**Date Analyzed: 08/17/2012 13:00**

**Date Prepared: 08/17/2012**

**Analyst: WRU**

**QC- Sample ID: 447651-001 D**

**Batch #: 1**

**Matrix: Soil**

**Reporting Units: %**

## SAMPLE / SAMPLE DUPLICATE RECOVERY

Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	Dry More	Dry More	0	20	U

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



## Prelogin/Nonconformance Report- Sample Log-In

Client: PLAINS ALL AMERICAN EH&amp;S

Acceptable Temperature Range: 0 - 6 degC

Date/ Time Received: 08/17/2012 11:50:00 AM

Air and Metal samples Acceptable Range: Ambient

Work Order #: 447653

Temperature Measuring device used :

## Sample Receipt Checklist

## Comments

#1 *Temperature of cooler(s)?	3.6
#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/ container?	Yes
#6 *Custody Seals Signed and dated for Containers/coolers	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:

  
Nicholas Straccione

Date: 08/20/2012

Checklist reviewed by:

  
Nicholas Straccione

Date: 08/20/2012



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

CONDITIONS  
  
Action 207758

CONDITIONS

Operator: PLAINS MARKETING L.P. 333 Clay Street Suite 1900 Houston, TX 77002	OGRID: 34053
	Action Number: 207758
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

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