

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Plains Pipeline, LP	Contact	Jason Henry
Address	2530 Hwy 214 - Denver City, Tx 79323	Telephone No.	(575) 441-1099
Facility Name	JRU 7-30 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
G	6	23S	31E					Eddy

Latitude N 32.3350° Longitude W 103.8150°

NATURE OF RELEASE

Type of Release	Crude Oil	Volume of Release	7 bbls	Volume Recovered	5 bbls
Source of Release	Cow broke fitting on LACT unit	Date and Hour of Occurrence	01/13/2012	Date and Hour of Discovery	01/13/2012 @ 0900
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Verbal notification to NMOCD District 2 Office voicemail on 01/13/2012		
By Whom?	Jason Henry	Date and Hour	01/13/2012 @ 1700		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*

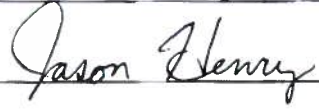
Describe Cause of Problem and Remedial Action Taken.*

Cow broke a chemical injection fitting on a LACT unit which resulted in a release of crude oil.

Describe Area Affected and Cleanup Action Taken.*

The released crude oil stayed on the caliche location. 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: 	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 <input type="checkbox"/>
Date: 01/24/2012	Phone: (575) 441-1099		

* Attach Additional Sheets If Necessary

Incident ID	111131204430922
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 OCD 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: 4/10/23
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
jwlowry@basinenv.com
Office: (575) 396-2378 Fax: (575) 396-1429



REMEDIATION SUMMARY AND SITE CLOSURE REQUEST

**PLAINS PIPELINE, L.P.
James Ranch Unit 7-30 4-Inch (JRU 7-30 4")
Eddy County, New Mexico
Plains SRS # 2012-008
UNIT LTR "G" (SW/NE), Section 6, Township 23 South, Range 31 East
Latitude 32.3350° North, Longitude 103.8150° West
NMOCD Reference # 2RP-1007**

Prepared For:

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

Prepared By:

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

October 2012

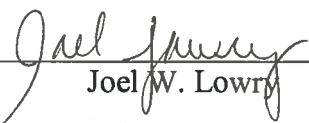

Joel W. Lowry
Project Manager

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

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Appendix C – Analytical Reports

1.0 INTRODUCTION AND BACKGROUND INFORMATION

Basin Environmental Service Technologies, LLC (Basin), on behalf of Plains Pipeline, L.P. (Plains), has prepared this *Remediation Summary and Site Closure* Request for the release site known as James Ranch Unit 7-30 4-Inch (JRU 7-30 4"). The legal description of the release site is Unit Letter "G" (SW/NE), Section 6, Township 23 South, Range 31 East, in Eddy County, New Mexico. The release site GPS coordinates are 32.3350° North and 103.8150° West. The property affected by the release is owned by The United States Department of the Interior - Bureau of Land Management (BLM). Please reference Figure 1 for a "Site Location Map" and Figure 2 for a "Site & Sample Location Map".

On January 13, 2012, Plains discovered a crude oil release had occurred at the JRU 7-30 4" location. The release occurred as a result of a cow breaking a chemical injection fitting on the downstream side of a lease automatic custody transfer (LACT) unit. The release was reported to the New Mexico Oil Conservation Division (NMOCD) Artesia District Office on January 13, 2012. The "Release Notification and Corrective Action" (Form C-141) indicated approximately seven (7) barrels of crude oil was released with approximately five (5) barrels recovered. The release affected approximately two thousand, four hundred square feet (2,400 ft²) of caliche pad. 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 6, 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 eighty feet (280') 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 1,000 feet 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 1,000 feet 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 JRU 7-30 4" 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)
- BTEX – 50 mg/Kg (ppm)
- 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 January 25, 2012, following initial response activities, excavation of the hydrocarbon impacted soil commenced at the site. Excavated soil was stockpiled on-site pending final disposition. A Photo-Ionization Detector (PID) was used to field-screen the horizontal and vertical extent of impacted soil and to guide the excavation.

On January 26, 2012, two (2) soil samples (East Floor and West Floor) were collected from the floor of the excavation at approximately two feet (2') bgs. The soil samples were submitted to Xenco Laboratories, Inc., of Odessa, Texas, for analysis of total petroleum hydrocarbon (TPH) concentrations in accordance with EPA Method SW-846 8015M. Soil sample East floor was also analyzed for concentrations of chloride in accordance with EPA Method 300.1. Table 1 summarizes the "Concentrations of Benzene, BTEX, TPH & Chloride in Soil". Laboratory analytical reports are provided as Appendix C.

Laboratory analytical results indicated TPH concentrations ranged from 228 mg/Kg for soil sample West Floor to 1,740 mg/Kg for soil sample East Floor. Analytical results indicated the chloride concentration in soil sample East Floor was 283 mg/Kg. Review of laboratory analytical results indicated TPH and chloride concentrations were less than the NMOCD regulatory remediation action levels established for the site in each of the submitted soil samples. The hold time was exceeded on soil samples East Floor and West Floor before the laboratory was able to conduct benzene, toluene, ethylbenzene and xylene (BTEX) analysis.

On January 26, 2012, approximately forty-eight cubic yards (48 yd³) of impacted material was transported to Lea Station Landfarm, (Discharge Permit #GW-351) for remediation. Prior to backfilling, the final dimensions of the excavation were approximately fifty feet (50') in length, approximately forty-five feet (45') in width and ranged in depth from approximately three inches (3") bgs to two feet (2') bgs. Upon receiving laboratory analytical data from confirmation soil samples, the excavated area was backfilled with locally purchased, non-impacted material and compacted lifts. Areas affected by remediation activities were contoured to fit the needs of the well pad.

On May 22, 2012, one (1) confirmation soil sample (HA1 @ 2') was collected utilizing a hand auger at approximately two feet (2') bgs. The soil sample was submitted to the laboratory for analysis of BTEX and TPH concentrations in accordance with EPA Methods SW-846 8021b and SW-846 8015M, respectively. Laboratory analytical results indicated the concentration of benzene was less than the appropriate laboratory method detection limit (MDL). Analytical results indicated the concentration of total BTEX constituents was 17.2 mg/Kg. Analytical results indicated the concentration of TPH was 3,750 mg/Kg. Review of laboratory analytical results indicated benzene, total BTEX constituent and TPH concentrations were below the NMOCD regulatory remediation action levels established for the site.

4.0 QA/QC PROCEDURES

4.1 Soil Sampling

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

The soil samples were analyzed as follows:

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

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 JRU 7-30 4" excavation were analyzed by an NMOCD-approved laboratory, which determined that concentrations of benzene, BTEX, TPH and chloride were below the regulatory remediation action levels established for the site. Based on these laboratory analytical results, Basin recommends Plains provide the NMOCD Artesia District Office and the BLM Carlsbad District Office a copy of this *Remediation Summary and Site Closure Request* and request the NMOCD grant site closure to the JRU 7-30 4" release site.

6.0 LIMITATIONS

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

Basin Environmental Service Technologies, LLC, has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. Basin Environmental Service Technologies, LLC, has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. Basin Environmental Service Technologies, LLC, has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin Environmental Service Technologies, LLC, also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

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

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
- Copy 2: James Amos
Bureau of Land Management
602 E. Greene Street
Carlsbad, NM 88220
- Copy 3: Jeff Dann
Plains Marketing, L.P.
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 381
Lovington, New Mexico 88260

FIGURES

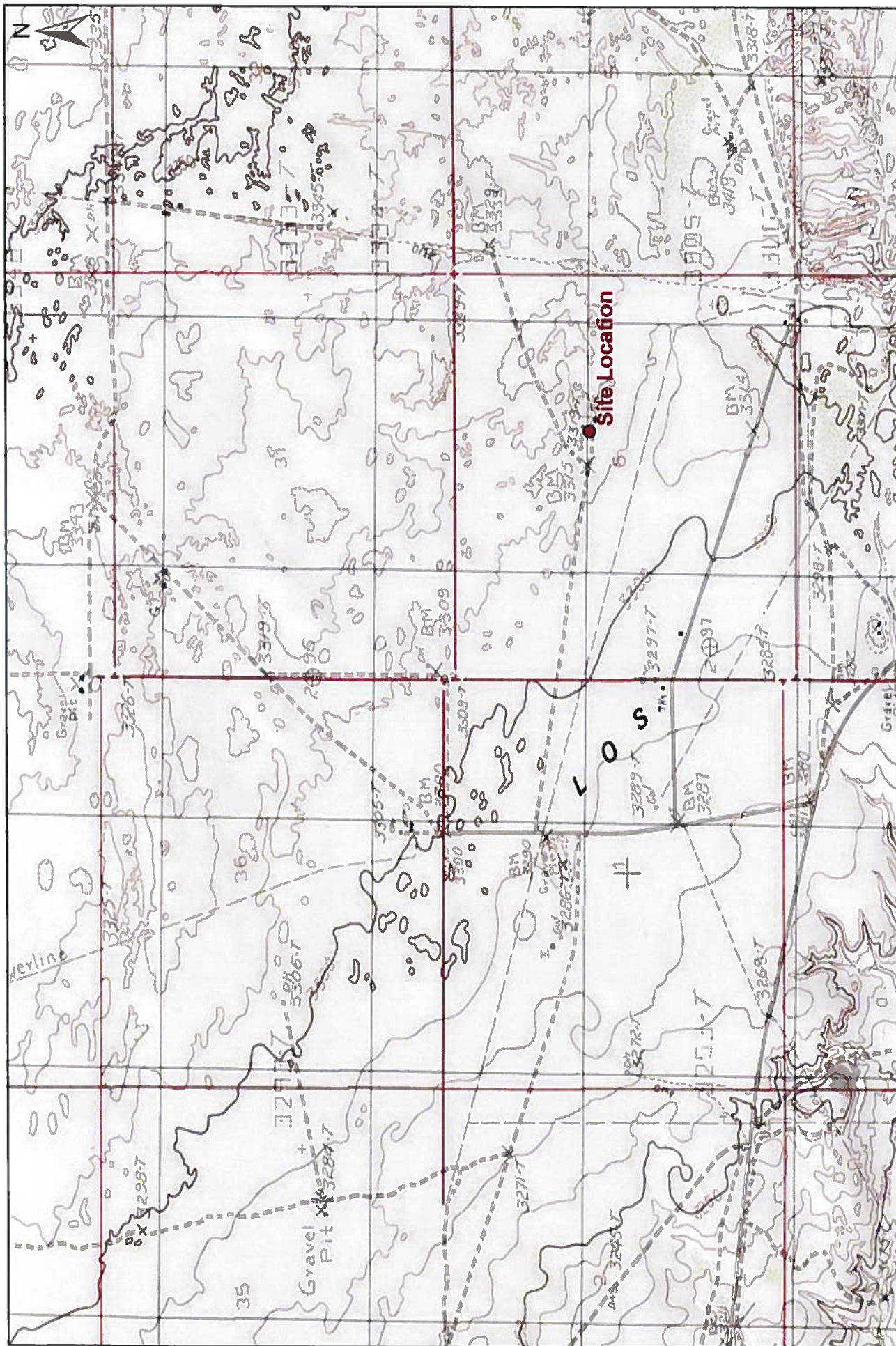


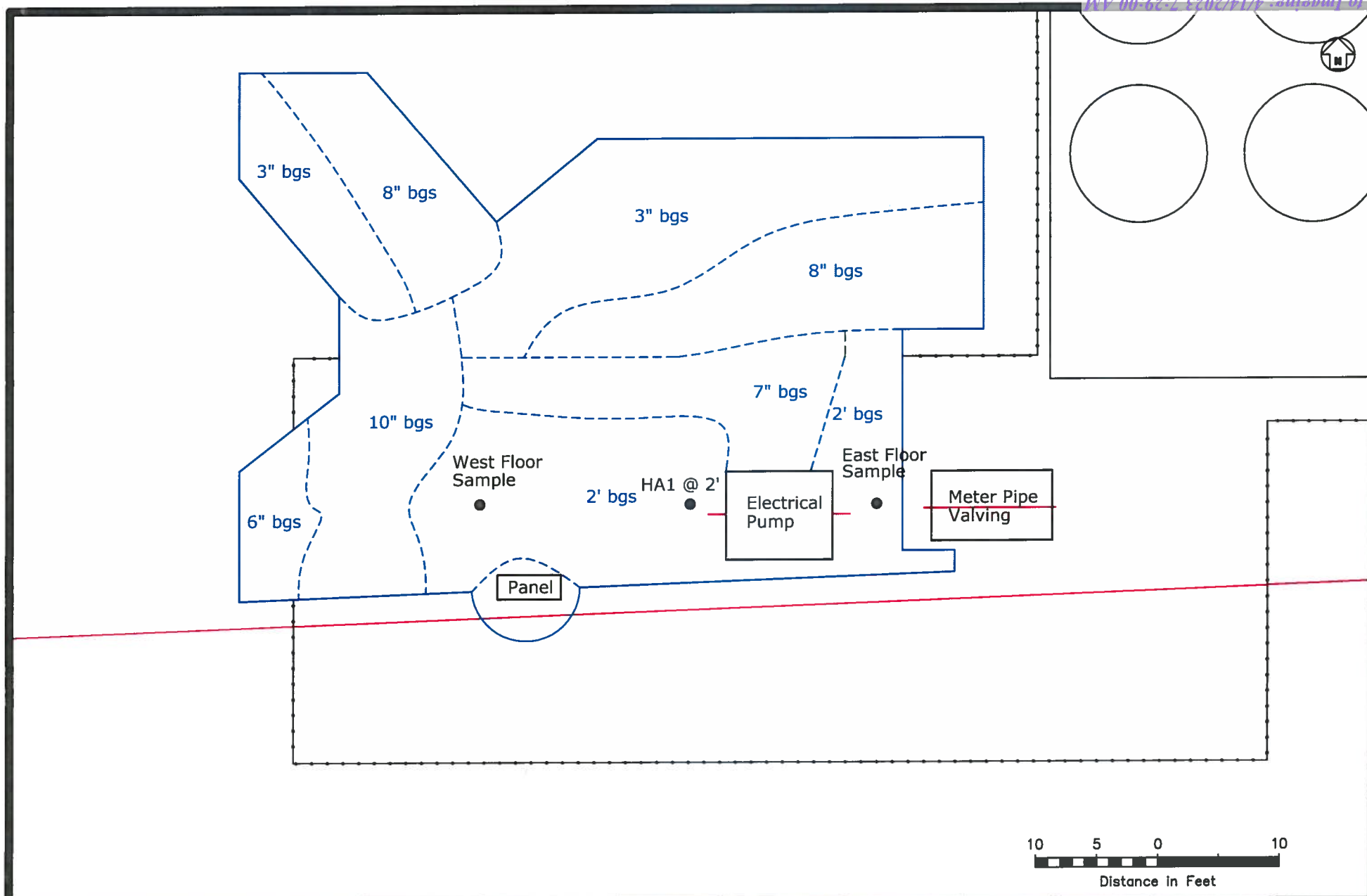
Figure 1
Site Location Map
Plains Pipeline, LP
James Ranch Unit 7-30 4-Inch
Lea County, New Mexico
SRS #: 2012-008

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



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

Drawn By: BJA	Checked By: BRB
May 17, 2012	Scale: 1" = 2000'



Legend:

- Excavation Extents
- - - Grade Change
- - - Fence
- Pipeline
- Sample Location

Figure 2
Site and Sample Location Map
Plains Pipeline, L.P.
James Ranch Unit 7-30 4-inch
Eddy County, New Mexico
SRS #: 2012-008
NMOCD Ref. #: 2RP-1007

Basin Environmental Services

Prep By: JWL	Checked By: BJA
May 15, 2012	Scale 1"=10'

TABLES

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH AND CHLORIDE IN SOIL

PLAINS PIPELINE, L.P.
JAMES RANCH UNIT 7-30 4-Inch
LEA COUNTY, NEW MEXICO
PLAINS SRS #: 2012-008
NMOCD REFERENCE #: 2RP-1007

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030						METHOD: 8015M					TOTAL TPH C ₉ -C ₃₅ (mg/Kg)	E 300 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 ₆ -C ₁₂ (mg/Kg)	DRO C ₁₂ -C ₂₈ (mg/Kg)	ORO C ₂₈ -C ₃₅ (mg/Kg)			
East Floor	2'	1/26/2012	In-Situ	-	-	-	-	-	-	-	229	1,360	152	1,740	283	
West Floor	2'	1/26/2012	In-Situ	-	-	-	-	-	-	-	28.4	143	56.6	228	-	
HA1 @ 2'	2'	5/22/2012	In-Situ	<0.262	<0.262	<0.262	10.2	6.97	17.2	17.2	462	2,940	344	3,750	-	
NMOCD Standard				10						50				5,000		

APPENDICES

APPENDIX A

Release Notification and Corrective Action

(Form C-141)

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Plains Pipeline, LP	Contact	Jason Henry
Address	2530 Hwy 214 - Denver City, Tx 79323	Telephone No.	(575) 441-1099
Facility Name	JRU 7-30 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
G	6	23S	31E					Eddy

Latitude N 32.3350° Longitude W 103.8150°

NATURE OF RELEASE

Type of Release	Crude Oil	Volume of Release	7 bbls	Volume Recovered	5 bbls
Source of Release	Cow broke fitting on LACT unit	Date and Hour of Occurrence	01/13/2012	Date and Hour of Discovery	01/13/2012 @ 0900
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Verbal notification to NMOCD District 2 Office voicemail on 01/13/2012		
By Whom?	Jason Henry	Date and Hour	01/13/2012 @ 1700		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*

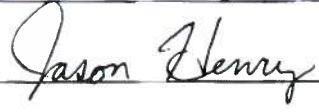
Describe Cause of Problem and Remedial Action Taken.*

Cow broke a chemical injection fitting on a LACT unit which resulted in a release of crude oil.

Describe Area Affected and Cleanup Action Taken.*

The released crude oil stayed on the caliche location. 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: 	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 <input type="checkbox"/>
Date: 01/24/2012	Phone: (575) 441-1099		

* Attach Additional Sheets If Necessary

APPENDIX B

Photographs



Excavation and Sample Locations at JRU 7-30 4" Release Site (Looking East)



Excavation and Sample Locations at JRU 7-30 4" Release Site (Looking East)



Excavation and Sample Locations at JRU 7-30 4" Release Site (Looking South)



Backfill at the JRU 7-30 4" Release Site(Looking East)



Backfill at the JRU 7-30 4" Release Site (Looking East)



JRU 7-30 4" Release Site Post Remediation (Looking East)

APPENDIX C

Laboratory Analytical Reports

Analytical Report 435866
for
PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

JRU 7-30 4-Inch

2012-008

03-FEB-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)

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AAL11), West Virginia (362), Kentucky (85)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)

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)



03-FEB-12

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

Reference: XENCO Report No: **435866**
JRU 7-30 4-Inch
Project Address: Eddy Co., NM

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 435866. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 435866 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Brent Barron II

Odessa Laboratory Manager

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

Certified and approved by numerous States and Agencies.

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

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



Sample Cross Reference 435866



PLAINS ALL AMERICAN EH&S, Midland, TX
JRU 7-30 4-Inch

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
East Floor	S	01-26-12 15:40	2 - 2 ft	435866-001
West Floor	S	01-26-12 15:50	2 - 2 ft	435866-002



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

Project Name: JRU 7-30 4-Inch



Project ID: 2012-008
Work Order Number: 435866

Report Date: 03-FEB-12
Date Received: 01/27/2012

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 435866

PLAINS ALL AMERICAN EH&S, Midland, TX

Project Name: JRU 7-30 4-Inch

Project Id: 2012-008
Contact: Jason Henry
Project Location: Eddy Co., NM

Date Received in Lab: Fri Jan-27-12 01:00 pm
Report Date: 03-FEB-12
Project Manager: Brent Barron II

Analysis Requested	Lab Id:	435866-001	435866-002		
	Field Id:	East Floor	West Floor		
	Depth:	2-2 ft	2-2 ft		
	Matrix:	SOIL	SOIL		
	Sampled:	Jan-26-12 15:40	Jan-26-12 15:50		
Inorganic Anions In Soil by E300	Extracted:				
	Analyzed:	Jan-31-12 13:07			
	Units/RL:	mg/kg RL			
Chloride		283			
		10.5			
Percent Moisture	Extracted:				
	Analyzed:	Jan-27-12 15:10	Jan-27-12 15:10		
	Units/RL:	% RL	% RL		
Percent Moisture		4.60	3.64	1.00	
TPH by SW8015 Mod	Extracted:	Jan-31-12 14:30	Jan-31-12 14:30		
	Analyzed:	Feb-01-12 12:49	Feb-01-12 13:14		
	Units/RL:	mg/kg RL	mg/kg RL		
C6-C12 Gasoline Range Hydrocarbons		229	28.4	15.6	
C12-C28 Diesel Range Hydrocarbons		1360	143	15.6	
C28-C35 Oil Range Hydrocarbons		152	56.6	15.6	
Total TPH		1740	228	15.6	

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

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Brent Barron II
Odessa Laboratory 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 **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation
- DL** Method Detection Limit
- NC** Non-Calculable
- + Outside XENCO's scope of NELAC Accreditation. ^ NELAC or State program does not offer Accreditation at this time.

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 5757 NW 158th St, Miami Lakes, FL 33014
 12600 West I-20 East, Odessa, TX 79765
 6017 Financial Drive, Norcross, GA 30071
 3725 E. Atlanta Ave, Phoenix, AZ 85040

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(813) 620-2000	(813) 620-2033
(305) 823-8500	(305) 823-8555
(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	



Form 2 - Surrogate Recoveries

Project Name: JRU 7-30 4-Inch

Work Orders : 435866,

Project ID: 2012-008

Lab Batch #: 880362

Sample: 435866-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 02/01/12 12:49

SURROGATE RECOVERY STUDY					
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	99.8	100	100	70-135	
o-Terphenyl	49.0	50.1	98	70-135	

Lab Batch #: 880362

Sample: 435866-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 02/01/12 13:14

SURROGATE RECOVERY STUDY					
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	96.4	99.9	96	70-135	
o-Terphenyl	48.8	50.0	98	70-135	

Lab Batch #: 880362

Sample: 617299-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 02/01/12 09:48

SURROGATE RECOVERY STUDY					
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	106	100	106	70-135	
o-Terphenyl	60.0	50.0	120	70-135	

Lab Batch #: 880362

Sample: 617299-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 02/01/12 08:56

SURROGATE RECOVERY STUDY					
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	112	100	112	70-135	
o-Terphenyl	53.0	50.0	106	70-135	

Lab Batch #: 880362

Sample: 617299-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 02/01/12 09:22

SURROGATE RECOVERY STUDY					
TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	109	100	109	70-135	
o-Terphenyl	51.1	50.0	102	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: JRU 7-30 4-Inch

Work Orders : 435866,

Project ID: 2012-008

Lab Batch #: 880362

Sample: 435918-002 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 02/01/12 19:42

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	99.6	109	70-135	
o-Terphenyl	47.1	49.8	95	70-135	

Lab Batch #: 880362

Sample: 435918-002 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 02/01/12 20:10

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	122	99.6	122	70-135	
o-Terphenyl	54.7	49.8	110	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.



Project Name: JRU 7-30 4-Inch

Work Order #: 435866

Analyst: BRB

Lab Batch ID: 880191

Sample: 880191-1-BKS

Units: mg/kg

Date Prepared: 01/31/2012

Batch #: 1

Project ID: 2012-008

Date Analyzed: 01/31/2012

Matrix: Solid

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
Units: mg/kg											
Inorganic Anions In Soil by E300	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											
Chloride	<1.00	20.0	21.1	106	20.0	20.5	103	3	75-125	20	

Date Prepared: 01/31/2012

Batch #: 1

Date Analyzed: 02/01/2012

Matrix: Solid

Analyst: ASA

Lab Batch ID: 880362

Sample: 617299-1-BKS

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
Units: mg/kg											
Analytes	TPH by SW8015 Mod										
	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.0	1000	824	82	1000	798	80	3	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	980	98	1000	983	98	0	70-135	35	

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

**Form 3 - MS Recoveries****Project Name: JRU 7-30 4-Inch****Work Order #: 435866****Lab Batch #: 880191****Date Analyzed: 01/31/2012****Date Prepared: 01/31/2012****Project ID: 2012-008****Analyst: BRB****QC- Sample ID: 435521-001 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	198	228	451	111	75-125	

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: JRU 7-30 4-Inch

Work Order #: 435866

Project ID: 2012-008

Lab Batch ID: 880362

QC- Sample ID: 435918-002 S

Batch #: 1 Matrix: Soil

Date Analyzed: 02/01/2012

Date Prepared: 01/31/2012

Analyst: ASA

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	<16.7	1110	894	81	1110	1000	90	11	70-135	35	
C12-C28 Diesel Range Hydrocarbons	153	1110	1080	84	1110	1190	93	10	70-135	35	

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

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

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

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

ApplicableN = See Narrative, EQL = Estimated Quantitation Limit



Sample Duplicate Recovery



Project Name: JRU 7-30 4-Inch

Work Order #: 435866

Lab Batch #: 880191

Project ID: 2012-008

Date Analyzed: 01/31/2012 13:07

Date Prepared: 01/31/2012

Analyst: BRB

QC- Sample ID: 435521-001 D

Batch #: 1

Matrix: Soil

Reporting Units: mg/kg

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Inorganic Anions In Soil by E300	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Chloride	198	199	1	20	

Lab Batch #: 880001

Date Analyzed: 01/27/2012 10:30

Date Prepared: 01/27/2012

Analyst: BRB

QC- Sample ID: 435802-001 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	<1.00	<1.00	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
 Atlanta, Boca Raton, Corpus Christi, Dallas
 Houston, Miami, Odessa, Philadelphia
 Phoenix, San Antonio, Tampa

Document Title: Sample Receipt Checklist
 Document No.: SYS-SRC
 Revision/Date: No. 01, 5/27/2010
 Effective Date: 6/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

Client: Basin / Plains
 Date/Time: 1-27-12 13:00
 Lab ID #: 4358100
 Initials: AE

Sample Receipt Checklist

1. Samples on ice?	Blue	<u>Water</u>	No	
2. Shipping container in good condition?	<u>Yes</u>	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	<u>Yes</u>	No	N/A	
4. Chain of Custody present?	<u>Yes</u>	No		
5. Sample Instructions complete on chain of custody?	<u>Yes</u>	No		
6. Any missing / extra samples?	Yes	<u>No</u>		
7. Chain of custody signed when relinquished / received?	<u>Yes</u>	No		
8. Chain of custody agrees with sample label(s)?	<u>Yes</u>	No		
9. Container labels legible and intact?	<u>Yes</u>	No		
10. Sample matrix / properties agree with chain of custody?	<u>Yes</u>	No		
11. Samples in proper container / bottle?	<u>Yes</u>	No		
12. Samples properly preserved?	<u>Yes</u>	No	N/A	
13. Sample container intact?	<u>Yes</u>	No		
14. Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No		
15. All samples received within sufficient hold time?	<u>Yes</u>	No		
16. Subcontract of sample(s)?	Yes	No	<u>N/A</u>	
17. VOC sample have zero head space?	<u>Yes</u>	No	N/A	
18. Cooler 1 No.	Cooler 2 No.	Cooler 3 No.	Cooler 4 No.	Cooler 5 No.
lbs <u>5.0</u> °C	lbs °C	lbs °C	lbs °C	lbs °C

Nonconformance Documentation

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

Regarding: _____

Corrective Action Taken: _____

Check all that apply: ☐ Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.
☐ Initial and Backup Temperature confirm out of temperature conditions
☐ Client understands and would like to proceed with analysis

Analytical Report 442918
for
PLAINS ALL AMERICAN EH&S

Project Manager: Jason Henry

JRU 7-30 4-Inch

2012-008

01-JUN-12

Collected By: Client



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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)



01-JUN-12

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

Reference: XENCO Report No: **442918**
JRU 7-30 4-Inch
Project Address: Eddy Co, NM

Jason Henry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 442918. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 442918 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

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Sample Cross Reference 442918



PLAINS ALL AMERICAN EH&S, Midland, TX
JRUI 7-30 4-Inch

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
HA1 @ 2'	S	05-22-12 08:00		442918-001



CASE NARRATIVE

Client Name: PLAINS ALL AMERICAN EH&S

Project Name: JRU 7-30 4-Inch



Project ID: 2012-008

Work Order Number: 442918

Report Date: 01-JUN-12

Date Received: 05/23/2012

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Project Id: 2012-008
 Contact: Jason Henry
 Project Location: Eddy Co, NM

Project Name: JRU 7-30 4-Inch

Date Received in Lab: Wed May-23-12 09:20 am
 Report Date: 01-JUN-12
 Project Manager: Nicholas Straccione

Analysis Requested		Lab Id:	442918-001				
	Field Id:	HA1 @ 2'					
	Depth:						
	Matrix:	Soil					
	Sampled:	May-22-12 08:00					
BTEX by SW 8260B SUB: TX104704215	Extracted:	May-30-12 15:14					
	Analyzed:	May-30-12 19:21					
	Units/RL:	mg/kg RL					
		ND 0.262					
		ND 0.262					
Benzene		ND 0.262					
Toluene		ND 0.262					
Ethylbenzene		ND 0.262					
m,p-Xylenes		10.2 0.524					
o-Xylene		6.97 0.262					
Total BTEX		17.2 0.262					
Total Xylenes		17.2 0.262					
Percent Moisture							
	Extracted:						
	Analyzed:	May-30-12 15:30					
	Units/RL:	% RL					
Percent Moisture		5.71					
TPH by SW8015 Mod							
	Extracted:	May-30-12 14:15					
	Analyzed:	May-31-12 01:58					
	Units/RL:	mg/kg RL					
C6-C12 Gasoline Range Hydrocarbons		462 15.9					
C12-C28 Diesel Range Hydrocarbons		2940 15.9					
C28-C35 Oil Range Hydrocarbons		344 15.9					
Total TPH		3750 15.9					

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

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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 **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

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(770) 449-8800	(770) 449-5477
(602) 437-0330	



Form 2 - Surrogate Recoveries

Project Name: JRU 7-30 4-Inch

Work Orders : 442918,

Project ID: 2012-008

Lab Batch #: 888928

Sample: 442918-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/30/12 19:21

SURROGATE RECOVERY STUDY

BTEX by SW 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Bromofluorobenzene	0.0575	0.0500	115	58-152	
Dibromofluoromethane	0.0525	0.0500	105	74-126	
1,2-Dichloroethane-D4	0.0580	0.0500	116	80-120	
Toluene-D8	0.0598	0.0500	120	73-132	

Lab Batch #: 888971

Sample: 442918-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/31/12 01:58

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	118	99.9	118	70-135	
o-Terphenyl	66.6	50.0	133	70-135	

Lab Batch #: 888928

Sample: 622488-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 05/30/12 12:58

SURROGATE RECOVERY STUDY

BTEX by SW 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Bromofluorobenzene	0.0493	0.0500	99	58-152	
Dibromofluoromethane	0.0502	0.0500	100	74-126	
1,2-Dichloroethane-D4	0.0504	0.0500	101	80-120	
Toluene-D8	0.0539	0.0500	108	73-132	

Lab Batch #: 888971

Sample: 622512-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 05/31/12 00:08

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	103	100	103	70-135	
o-Terphenyl	54.1	50.0	108	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: JRU 7-30 4-Inch

Work Orders : 442918,

Project ID: 2012-008

Lab Batch #: 888928

Sample: 622488-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 05/30/12 11:51

SURROGATE RECOVERY STUDY

BTEX by SW 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Bromofluorobenzene	0.0477	0.0500	95	58-152	
Dibromofluoromethane	0.0477	0.0500	95	74-126	
1,2-Dichloroethane-D4	0.0495	0.0500	99	80-120	
Toluene-D8	0.0532	0.0500	106	73-132	

Lab Batch #: 888971

Sample: 622512-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 05/30/12 23:14

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	100	100	100	70-135	
o-Terphenyl	56.1	50.0	112	70-135	

Lab Batch #: 888971

Sample: 622512-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 05/30/12 23:41

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	113	100	113	70-135	
o-Terphenyl	55.1	50.0	110	70-135	

Lab Batch #: 888928

Sample: 442829-009 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/30/12 14:27

SURROGATE RECOVERY STUDY

BTEX by SW 8260B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
4-Bromofluorobenzene	0.0486	0.0500	97	58-152	
Dibromofluoromethane	0.0462	0.0500	92	74-126	
1,2-Dichloroethane-D4	0.0469	0.0500	94	80-120	
Toluene-D8	0.0555	0.0500	111	73-132	

* 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: JRU 7-30 4-Inch

Work Orders : 442918,

Project ID: 2012-008

Lab Batch #: 888971

Sample: 442989-009 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/31/12 10:49

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	100	109	70-135	
o-Terphenyl	53.9	50.0	108	70-135	

Lab Batch #: 888928

Sample: 442829-009 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/30/12 14:50

SURROGATE RECOVERY STUDY

BTEX by SW 8260B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0490	0.0500	98	58-152	
Dibromofluoromethane	0.0473	0.0500	95	74-126	
1,2-Dichloroethane-D4	0.0469	0.0500	94	80-120	
Toluene-D8	0.0540	0.0500	108	73-132	

Lab Batch #: 888971

Sample: 442989-009 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 05/31/12 11:19

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	100	104	70-135	
o-Terphenyl	52.7	50.0	105	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.



Blank Spike Recovery



Project Name: JRU 7-30 4-Inch

Work Order #: 442918

Project ID:

2012-008

Lab Batch #: 888928

Sample: 622488-1-BKS

Matrix: Solid

Date Analyzed: 05/30/2012

Date Prepared: 05/30/2012

Analyst: BEC

Reporting Units: mg/kg

Batch #: 1

BLANK /BLANK SPIKE RECOVERY STUDY

BTEX by SW 8260B						
Analytes		Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R
Benzene		<0.00100	0.100	0.0744	74	62-132
Toluene		<0.00100	0.100	0.0762	76	66-124
Ethylbenzene		<0.00100	0.100	0.0759	76	71-134
m,p-Xylenes		<0.00200	0.200	0.140	70	69-128
o-Xylene		<0.00100	0.100	0.0741	74	72-131

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

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

BRL - Below Reporting Limit

BS / BSD Recoveries



Project Name: JRU 7-30 4-Inch

Work Order #: 442918

Analyst: ASA

Lab Batch ID: 888971

Sample: 622512-1-BKS

Project ID: 2012-008

Date Analyzed: 05/30/2012

Matrix: Solid

Date Prepared: 05/30/2012

Batch #: 1

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY												
Units: mg/kg												
Analytes	TPH by SW8015 Mod	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
		<15.0	1000	702	70	1000	748	75	6	70-130	35	
		<15.0	1000	854	85	1000	930	93	9	70-130	35	

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

Form 3 - MS / MSD Recoveries



Project Name: JRU 7-30 4-Inch

Project ID: 2012-008

Work Order #: 442918

Lab Batch ID: 888928

Date Analyzed: 05/30/2012

Reporting Units: mg/kg

QC- Sample ID: 442829-009 S

Date Prepared: 05/30/2012

Batch #: 1 Matrix: Soil

Analyst: BEC

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY													
Reporting Units: mg/kg	BTEX by SW 8260B 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	<0.00125	0.125	0.121	97	0.124	0.123	99	2	62-132	25		
	Toluene	<0.00125	0.125	0.127	102	0.124	0.125	101	2	66-124	25		
	Ethylbenzene	<0.00125	0.125	0.126	101	0.124	0.123	99	2	71-134	25		
	m,p-Xylenes	<0.00249	0.249	0.233	94	0.248	0.227	92	3	69-128	25		
	o-Xylene	<0.00125	0.125	0.122	98	0.124	0.119	96	2	72-131	25		

Lab Batch ID: 888971

Date Analyzed: 05/31/2012

QC- Sample ID: 442989-009 S

Date Prepared: 05/30/2012

Batch #: 1 Matrix: Soil

Analyst: ASA

Reporting Units: mg/kg											
TPH by SW8015 Mod Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.7	1050	736	70	1050	731	70	1	70-130	35	
C12-C28 Diesel Range Hydrocarbons	41.8	1050	981	89	1050	961	88	2	70-130	35	

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

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

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

ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

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



Sample Duplicate Recovery



Project Name: JRU 7-30 4-Inch

Work Order #: 442918

Lab Batch #: 888961

Project ID: 2012-008

Date Analyzed: 05/30/2012 15:30

Date Prepared: 05/30/2012

Analyst: WRU

QC- Sample ID: 442989-001 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	1.11	1.11	0	20	

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

Xenco Laboratories

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765Phone: 432-563-1800
Fax: 432-563-1713Project Manager: Ben J. ArguiloProject Name: JRU 7-30 4-InchCompany Name: Basin Environmental Service Technologies, LLCProject #: 2012-008Company Address: P. O. Box 301Project Loc: Eddy Co, NMCity/State/Zip: Lovington, NM 88260PO #: PAA - J. HenryTelephone No: (575)396-2378Fax No: (575) 396-1429

Report Format:



Standard



TRRP



NPDES

Sampler Signature: _____

e-mail:

bjarguilo@basinenrv.com

(lab use only)

ORDER #:

442918

LAB # (lab use only)

001

FIELD CODE

HA1 @ 2'

Beginning Depth

Ending Depth

Date Sampled

5/22/2012

Time Sampled

0800

Field Filtered

Total #. of Containers

1

Ice

X

HNO₃

HCl

H₂SO₄

NaOH

Na₂S₂O₃

None

Other (Specify)

DW - Drinking Water SL - Sludge

GW - Groundwater S - Soil/Sol

NP - Non-Potable Specify Other

TPH: 418. 8015M 8015B

TPH: TX 1005 TX 1006

Cations (Ca, Mg, Na, K)

Anions (Cl, SO₄, Alkalinity)

SAR / ESP / CEC

Metals: As Ag Ba Cd Cr Pb Hg Se

Volatiles

Semivolatiles

BTEX 8021B/5030 or BTEX 8260

RCI

N.O.R.M.

Chlorides

RUSH TAT (Pre-Schedule) 24, 48, 72 hrs

Standard TAT 4 DAY

Special Instructions:

Run TPH, hold for BTEX

Relinquished by:

Date

Time

Received by:

Date

Time

Relinquished by:

Date

Time

Received by:

Date

Time

Relinquished by:

Date

Time

Received by:

Date

Time

Laboratory Comments:

Sample Containers Intact?

N

N

N

N

N

N

N

N

N

N

N

N

VOCs Free of Headspace?

N

N

N

N

N

N

N

N

N

N

N

N

Labels on container(s)

N

N

N

N

N

N

N

N

N

N

N

N

Custody seals on container(s)

N

N

N

N

N

N

N

N

N

N

N

N

N

N

Sample Hand Delivered

N

N

N

N

N

N

N

N

N

N

N

N

N

N

by Sampler/Client Rep.?

N

N

N

N

N

N

N

N

N

N

N

N

N

N

Temperature Upon Receipt:

60°C

45°C

N

N

N

N

N

N

N

N

N

N

N

N


XENCO Laboratories

Atlanta, Boca Raton, Corpus Christi, Dallas

Houston, Miami, Odessa, Philadelphia

Phoenix, San Antonio, Tampa

Document Title: Sample Receipt Checklist

Document No.: SYS-SRC

Revision/Date: No. 01, 5/27/2010

Effective Date: 6/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

 Client: Basin Environmental

 Date/Time: 5/25/12 09:20 A.M.

 Lab ID #: 442918

 Initials: [Signature]
Sample Receipt Checklist

1. Samples on ice?	Blue	Water	No	
2. Shipping container in good condition?	Yes	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	Yes	No	N/A	
4. Chain of Custody present?	Yes	No		
5. Sample instructions complete on chain of custody?	Yes	No		
6. Any missing / extra samples?	Yes	No		
7. Chain of custody signed when relinquished / received?	Yes	No		
8. Chain of custody agrees with sample label(s)?	Yes	No		
9. Container labels legible and intact?	Yes	No		
10. Sample matrix / properties agree with chain of custody?	Yes	No		
11. Samples in proper container / bottle?	Yes	No		
12. Samples properly preserved?	Yes	No	N/A	
13. Sample container intact?	Yes	No		
14. Sufficient sample amount for indicated test(s)?	Yes	No		
15. All samples received within sufficient hold time?	Yes	No		
16. Subcontract of sample(s)?	Yes	No	N/A	
17. VOC sample have zero head space?	Yes	No	N/A	
18. Cooler 1 No.	Cooler 2 No.	Cooler 3 No.	Cooler 4 No.	Cooler 5 No.
lbs 4.5 °C	lbs °C	lbs °C	lbs °C	lbs °C

Nonconformance Documentation

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

Regarding: _____

Corrective Action Taken: _____

 Check all that apply: ☐ Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.
☐ Initial and Backup Temperature confirm out of temperature conditions
☐ Client understands and would like to proceed with analysis

4.0 QA/QC PROCEDURES

4.1 Soil Sampling

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

The soil samples were analyzed as follows:

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

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 JRU 7-30 4" excavation were analyzed by an NMOCD-approved laboratory, which determined that concentrations of benzene, BTEX, TPH and chloride were below the regulatory remediation action levels established for the site. Based on these laboratory analytical results, Basin recommends Plains provide the NMOCD Artesia District Office and the BLM Carlsbad District Office a copy of this *Remediation Summary and Site Closure Request* and request the NMOCD grant site closure to the JRU 7-30 4" release site.

Verbal Approval was granted by Mike Bratcher
NMOCD Artesia to leave 283 ppm Cl⁻ in-situ.
on 10/23/12 @ 8:45 am. 1000 ppm Closure.

Joel Jarama

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 207765

CONDITIONS

Operator: PLAINS MARKETING L.P. 333 Clay Street Suite 1900 Houston, TX 77002	OGRID: 34053
	Action Number: 207765
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

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