



APPROVED

By Olivia Yu at 11:47 am, Apr 03, 2018

REMEDIATION SUMMARY AND RISK-BASED SITE CLOSURE REQUEST

**ALPHA GATHERING A-2 MAIN
UNIT LETTER "P", SECTION 28, TOWNSHIP 22 SOUTH, RANGE 34 EAST
EDDY COUNTY, NEW MEXICO**

SRS No: 2017-146
NMOCD Reference No.: 1RP-4813

Prepared for:

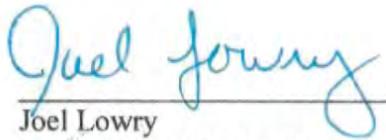
Plains Pipeline, L.P.
505 North Big Spring, Suite 600
Midland, Texas 79701

NMOCD grants closure to remediated areas for 1RP-4813. Due to the remaining in-situ section indicated on Figure 2, 1RP-4813 will remain open until site retrofit or time of abandonment.

Prepared by:

TRC Environmental Corporation
10 Desta Drive, Suite 150E
Midland, Texas 79705

March 2018


Joel Lowry
Senior Project Manager


Curt Stanley
Senior Project Manager

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1.0 INTRODUCTION AND BACKGROUND

On behalf of Plains Pipeline, L.P. (Plains), TRC Environmental Corporation (TRC) has prepared this Remediation Summary and Risk-Based Site Closure Request for the crude oil release site known as Alpha Gathering A-2 Main. The Release Site is located approximately nineteen (19) miles southwest of Eunice in Lea County, New Mexico, in Unit Letter "P", Section 28, Township 22 South, Range 34 East. The GPS coordinates for the site are N 32.355942° and W 103.468296°. The affected property is owned by the State of New Mexico and administered by the New Mexico State Land Office (NMSLO). A Site Location Map and Site & Sample Location Map depicting the soil sample locations are provided as Figures 1 and 2, respectively.

On September 8, 2017, a release was discovered on the LACT Unit at COG Operating's Smalls Federal #001H production facility. The release was attributed to the top plate on a PD pump coming loose, resulting in a release of approximately twelve (12) barrels (bbls) of crude oil. During initial response activities, approximately ten (10) bbls of crude oil were recovered and saturated soils were excavated by hand and stockpiled on-site atop a polyurethane liner. The release affected an area on the caliche well pad measuring approximately 1,500 sq. ft.; the majority of the release was confined in the earthen containment.

2.0 NMOCD SITE CLASSIFICATION

A groundwater database maintained by The New Mexico Office of the State Engineer (NMOSE) did not identify any registered water wells in Section 28, Township 22 South, Range 34 East. A reference map utilized by the NMOCD Hobbs District Office indicates groundwater should be encountered at approximately one hundred twenty-five (125) feet below ground surface (bgs). Based on the NMOCD site classification system, zero (0) points will be assigned to the subject area ranking as a result of this criterion.

No water wells were observed within one-thousand (1,000) feet of the Release Site. Based on the NMOCD site classification system, zero (0) points will be assigned to the subject area ranking as a result of this criterion.

No surface water was observed within one-thousand (1,000) feet of the release. Based on the NMOCD site classification system, zero (0) points will be assigned to the subject area ranking as a result of this criterion.

The NMOCD guidelines indicate the Alpha Gathering A-2 Main Release Site has a ranking score of zero (0). Soil remediation levels for a site with a ranking score of zero (0) points are as follows:

- Benzene – 10 mg/kg (ppm)
- Benzene, toluene, ethylbenzene, and xylenes (BTEX) – 50 mg/kg (ppm)
- Total Petroleum Hydrocarbons (TPH) – 5,000 mg/kg (ppm)

3.0 SUMMARY OF FIELD ACTIVITIES

On September 14, 2017, excavation activities commenced at the Release Site. The floor and sidewalls of the excavated area were advanced to the maximum extent practicable, or until field observations suggested impacted soil affected above the NMOCD RRAL for TPH and BTEX had been excavated. Excavated soil was stockpiled on-site, atop an impermeable liner pending final disposition. Impacted soil beneath the LACT units and adjacent to the associated high-pressure pipelines was excavated to the maximum extent practicable. Further excavation was limited in an effort to ensure the LACT units' integrity and mitigate safety concerns associated with the high-pressure pipelines.

On September 21, 2017, impacted soil remaining in-situ beneath the LACT units and adjacent to the associated high-pressure pipelines was treated with a Microblaze® solution in an effort to enhance bioremediation.

On November 6, 2017, TRC collected seventeen (17) confirmation soil samples (DS-1 Floor @ 1', DS-1 NSW, DS-1 ESW, DS-1 SSW, DS-1 WSW, DS-2 Floor @ 2', DS-2 ESW, DS-2 SSW, DS-2 WSW, DS-3 Floor @ 18", DS-3 NSW, DS-3 ESW, DS-3 WSW, DS-4 Floor @ 18", DS-4 NSW, DS-4 SSW and DS-4 WSW) from the floor and sidewalls of the excavated area and submitted them to the laboratory for analysis of BTEX and TPH. Laboratory analytical results indicated benzene concentrations were less than the applicable laboratory reporting limit (RL) in each of the submitted soil samples. Analytical results indicated BTEX concentrations range from less than the applicable laboratory RL in soil samples DS-1 Floor @ 1', DS-1 NSW, DS-2 Floor @ 2', DS-4 NSW and DS-4 SSW to 5.671 mg/kg in soil sample DS-3 ESW. TPH concentrations ranged from less than the applicable laboratory RL in soil samples DS-1 Floor @ 1', DS-1 NSW, DS-2 SSW, DS-3 WSW, DS-4 NSW, DS-4 SSW and DS-4 WSW to 3,284 mg/kg in soil sample DS-3 NSW. Benzene, BTEX and TPH concentrations were below the NMOCD RRAL in each of the submitted soil samples. Soil samples DS-1 Floor @ 1', DS-2 Floor @ 2', DS-3 Floor @ 18" and DS-4 Floor @ 18" were also analyzed for concentrations of chloride, which were determined to be 219 mg/kg, 891 mg/kg, 52.1 mg/kg and <25.0 mg/kg, respectively. Chloride concentrations were below the NMOCD RRAL in each of the submitted soil samples, with the exception of DS-2 Floor @ 2', which exhibited a chloride concentration of 891 mg/kg. Based on the negative correlation between TPH and chloride concentrations and the absence of produced water in Plains' crude oil, Plains maintains the detected chloride exceedance is not related to the subject release.

In addition, one (1) soil sample (HP In-Situ) was collected from the impacted soil between the two (2) high-pressure pipelines from an area inferred to be the most heavily impacted. The collected soil sample was submitted to the laboratory for analysis of TPH concentrations, which were determined to be 11,820 mg/kg. Plains maintains additional excavation in the area of the high-pressure pipelines poses a safety risk and may destabilize the LACT units.

On November 27, 2017, TRC submitted a *Remediation Summary and Permission to Backfill Request*, on behalf of Plains, summarizing field activities conducted to date and detailing laboratory analytical results from confirmation soil samples. The *Remediation Summary and Permission to Backfill Request* was subsequently approved on the condition that the area

represented by soil sample DS-2 Floor @ 2' be delineated to less than 600 mg/kg for chloride and that the area adjacent to the high-pressure pipelines that underwent the MicroBlaze® treatment be resampled for concentrations of TPH.

On December 6, 2017, in accordance with the NMOCD, TRC collected one (1) soil sample (DS-2 @ 6' from the area characterized by soil sample DS-2 Floor @ 2' and submitted the soil sample to the laboratory for analysis of chloride concentrations, which were determined to be 30.6 mg/kg. Based on laboratory analytical results, soil was not affected above the NMOCD RRAL for chloride beyond six (6) ft. bgs in the area characterized by sample point DS-2.

As per the NMOCD, TRC collected two (2) soil samples (12/6 HP In-Situ and HP In-Situ @ 3') from adjacent to the high-pressure pipelines in the area characterized by the MicroBlaze® treated soil remaining in-situ. The collected soil samples were submitted to the laboratory for analysis of TPH concentrations. Laboratory analytical results indicated that soil sample 12/6 HP In-Situ exhibited a TPH concentration of 11,142 mg/kg and that soil sample HP In-Situ @ 3' exhibited a TPH concentration of less than the laboratory RL. Based on laboratory analytical results, impacted soil remaining in-situ adjacent to the high-pressure pipelines was not affected above the NMOCD RRAL beyond three (3) ft. bgs.

On December 26, 2017, upon receiving laboratory analytical results, TRC submitted an updated *Remediation Summary and Permission to Backfill Request* to the NMOCD and NMSLO requesting permission to backfill the excavated area with non-impacted material; the request was subsequently approved.

Upon receiving NMOCD and NMSLO permission, the excavated area was backfilled with locally sourced, non-impacted material. Excavation backfill was compacted and contoured to meet the needs of the facility. Prior to backfilling, the final dimensions of the excavated area were approximately one hundred (100) ft. in length, five (5) to thirty (30) ft in width, and one (1) to two (2) ft. in depth.

Between December 29, 2017, and January 3, 2018, approximately one hundred (100) cubic yards (cy) of impacted soil was transported to Sundance Services, Inc. (NMOCD Permit No. 01-0003) for disposal.

4.0 SITE CLOSURE REQUEST

TRC recommends Plains provide the NMOCD and the NMSLO a copy of this Remediation Summary and Risk-Based Site Closure Request and request the NMOCD and the NMSLO grant site closure status to the Alpha Gathering A-2 Main.

5.0 LIMITATIONS

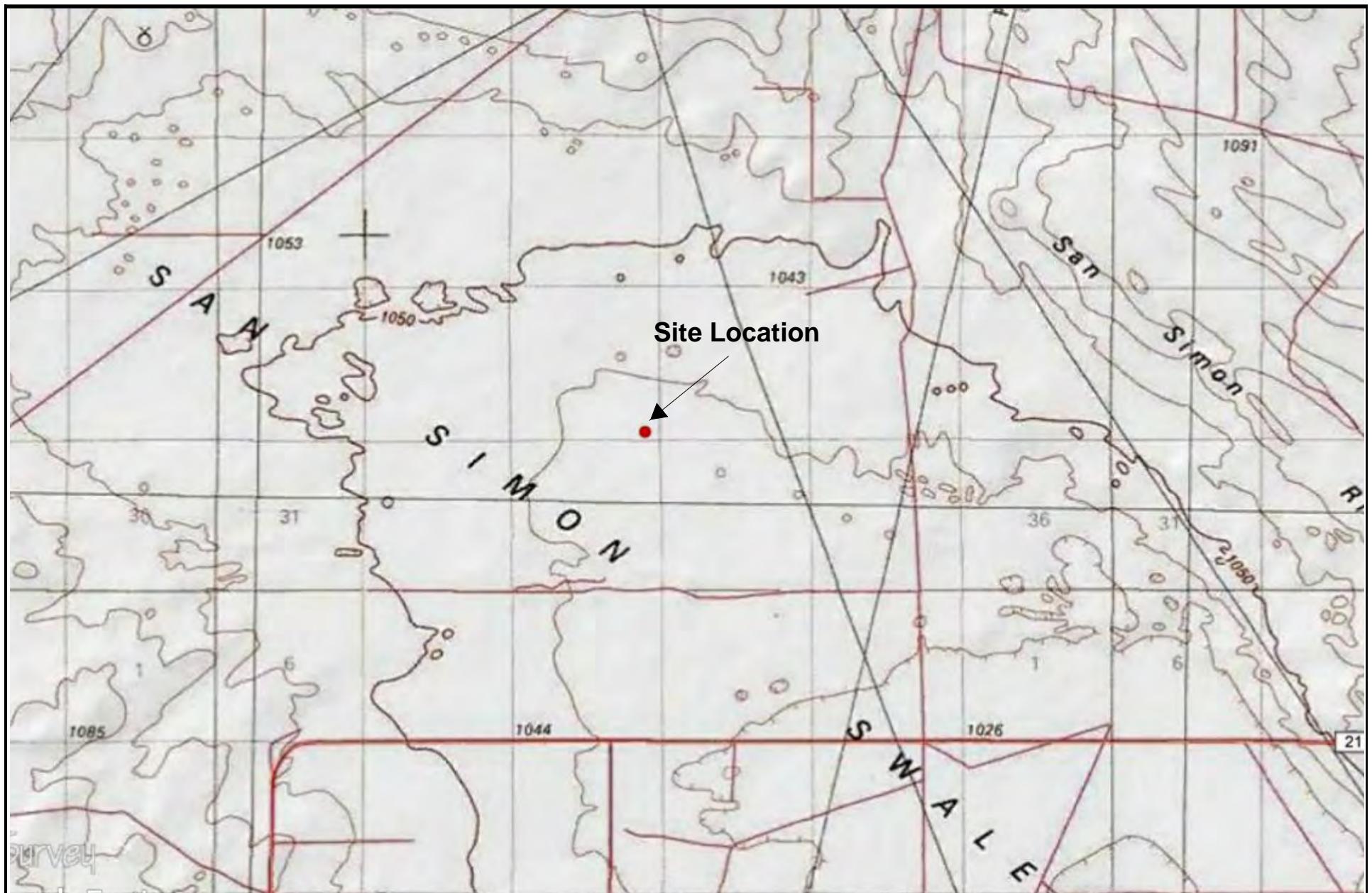
TRC Environmental Corporation has prepared this Remediation Summary and Site Closure Request to the best of its ability. No other warranty, expressed or implied, is made or intended. TRC Environmental Corporation has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. TRC Environmental Corporation 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. TRC Environmental Corporation has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. TRC Environmental Corporation 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 TRC Environmental Corporation and/or Plains Pipeline, L.P.

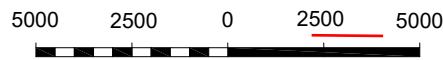
6.0 DISTRIBUTION

- Copy 1: Olivia Yu
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Oil Conservation Division – District I
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Hobbs District Office
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- Copy 5: TRC Environmental Corporation
10 Desta Drive, Suite 150E
Midland, Texas 79705
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FIGURES



LEGEND:



Distance in Feet

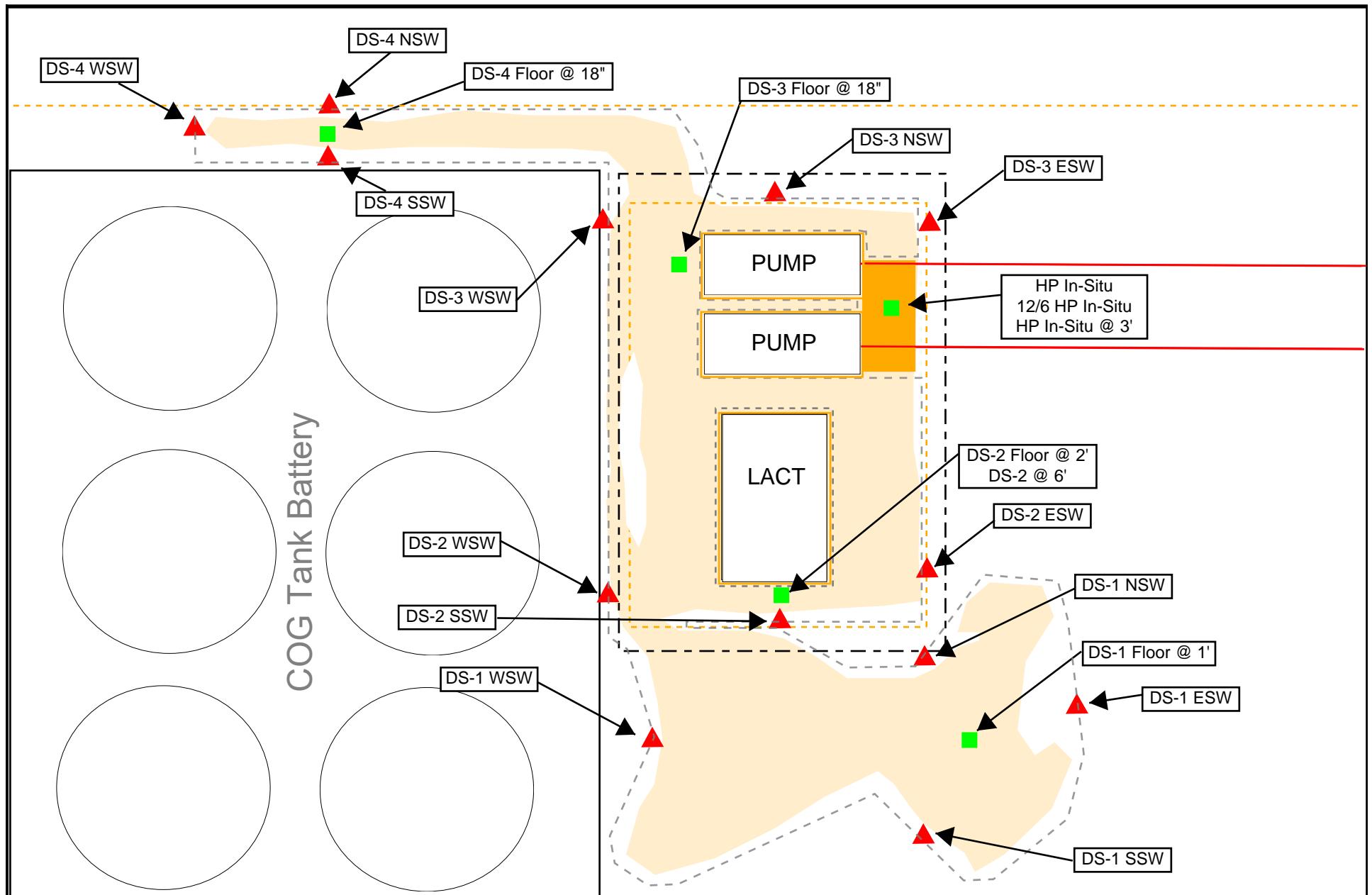
Figure 1

Site Location Map
Plains Pipeline, L.P.
Alpha Gathering A-2 Main
Lea County, NM

Scale 1" = 5,000'	
Drafted By: JL	Checked By: CS
Draft: March 27, 2018	
Lat. N 32.355942 Long. W103.468296	
UL "P", Sec. 28, T22S, R34E	
TRC Proj. No.: 286973	



2057 Commerce Drive
Midland, Texas 79703
432.520.7720



LEGEND:

- Floor Sample Location
- Sidewall Sample
- Excavated Area
- Affected Area

Figure 2

- Fence
- Pipeline
- Firewall
- Affected Soil Remaining In-Situ

Site & Sample Location Map
Plains Pipeline, L.P.
Alphah Gathering A-2 Main
Lea County, NM

Scale 1" = 10'
Drafted By: JL Checked By: CS
Draft: March 28, 2018
Lat. N 32.355942 Long. W103.468296
UL "P", Sec. 28, T22S, R34E
TRC Proj. No.: 286973

CTRC
2057 Commerce Drive
Midland, Texas 79703
432.520.7720

TABLES

TABLE 1
CONCENTRATIONS OF BENZENE, BTEX, TPH, AND CHLORIDE IN SOIL
ALPHA GATHERING A-2 MAIN
PLAINS PIPELINE, L.P.
LEA COUNTY, NM
NMOCD REF. No. 1RP-4813

SAMPLE LOCATION	SAMPLE DATE	SAMPLE DEPTH	STATUS	Methods: EPA SW 846-8021B, 5030					Methods:				Method: E300
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	XYLENES, TOTAL (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO (mg/Kg)	DRO (mg/Kg)	ORO (mg/Kg)	TOTAL TPH (mg/Kg)	
DS-1 Floor @ 1'	11/6/2017	1'	In-Situ	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<3.96	<25.0	<25.0	<25.0	219
DS-1 NSW	11/6/2017	6"	In-Situ	<0.0199	<0.0199	<0.0199	<0.0199	<0.0199	<3.98	<25.0	<25.0	<25.0	-
DS-1 ESW	11/6/2017	6"	In-Situ	<0.0197	<0.0197	0.0197	0.0631	0.0828	<3.94	<25.0	66.3	66.3	-
DS-1 SSW	11/6/2017	6"	In-Situ	<0.0194	0.0349	0.116	0.407	0.5579	22.0	<25.0	<25.0	22.0	-
DS-1 WSW	11/6/2017	6"	In-Situ	<0.0197	0.0296	0.0848	0.3078	0.4222	9.97	300	40.7	350.67	-
DS-2 Floor @ 2'	11/6/2017	2'	In-Situ	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<3.97	33.6	<25.0	33.6	891
DS-2 ESW	11/6/2017	1'	In-Situ	<0.0193	0.120	0.369	1.158	1.647	57.5	107	<25.0	164.5	-
DS-2 SSW	11/6/2017	1'	In-Situ	<0.0200	0.0200	<0.0200	0.048	0.068	<4.00	<25.0	<25.0	<25.0	-
DS-2 WSW	11/6/2017	1'	In-Situ	<0.0197	0.0237	0.0316	0.1184	0.1737	5.09	<25.0	5.09	5.09	-
DS-3 Floor @ 18"	11/6/2017	18"	In-Situ	<0.0196	0.0196	0.0333	0.1313	0.1842	5.07	579	90.3	674.37	52.1
DS-3 NSW	11/6/2017	1'	In-Situ	<0.0379	0.258	0.818	2.793	3.869	104	2,720	460	3,284	-
DS-3 ESW	11/6/2017	1'	In-Situ	<0.01888	0.381	1.28	4.01	5.671	255	240	36.9	531.9	-
DS-3 WSW	11/6/2017	1'	In-Situ	<0.0200	0.0321	0.0842	0.378	0.4943	<3.82	<25.0	<25.0	<25.0	-
DS-4 Floor @ 18"	11/6/2017	18"	In-Situ	<0.0198	<0.0198	<0.0198	0.0988	0.0988	6.31	43.9	<25.0	50.21	<25.0
DS-4 NSW	11/6/2017	1'	In-Situ	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<3.90	<25.0	<25.0	<25.0	-
DS-4 SSW	11/6/2017	1'	In-Situ	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<3.86	<25.0	<25.0	<25.0	-
DS-4 WSW	11/6/2017	1'	In-Situ	<0.0200	0.0220	0.0261	0.0882	0.1363	<4.01	<25.0	<25.0	<25.0	-
HP In-Situ	11/6/2017	1'	In-Situ	<0.0962	3.05	7.24	23.92	34.21	1,670	8,980	1,170	11,820	-
DS-2 @ 6'	12/6/2017	6'	In-Situ	-	-	-	-	-	-	-	-	-	30.6
12/6 HP In-Situ	12/6/2017	6"	In-Situ	-	-	-	-	-	272	8,890	1,980	11,142	-
HP In-Situ @ 3'	12/6/2017	3'	In-Situ	-	-	-	-	-	<14.9	<14.9	<14.9	<14.9	-
NMOCD Regulatory Guideline				10	-	-	-	50	-	-	-	5,000	600

APPENDICES

APPENDIX A

Site Photographs

Photographic Documentation



Photo 1: View of surface staining from the initial release, facing northwest.

Photographic Documentation



Photo 2: View of surface staining from the initial release, facing northwest.



Photo 3: View of surface staining from the initial release, facing west.

Photographic Documentation



Photo 4: View of portion of the excavated area, facing northwest.

Photographic Documentation



Photo 5: View of portion of the excavated area, facing west.

Photographic Documentation



Photo 6: View of portion of the excavated area, facing northwest.

Photographic Documentation



Photo 7: View of portion of the excavated area, facing northwest.

Photographic Documentation



Photo 8: View of the affected area after remediation activities, facing west.

Photographic Documentation



Photo 9: View of the affected area after remediation activities, facing south.

Photographic Documentation

Photo 10: View of the affected area after remediation activities, facing west.

APPENDIX B

Laboratory Analytical Reports



Certificate of Analysis Summary 567615

TRC Solutions, Inc, Midland, TX

Project Name: Plains Smalls Federal

Project Id: 8021

Contact: Joel Lowry

Project Location: New Mexico

Date Received in Lab: Tue Nov-07-17 09:05 am

Report Date: 09-NOV-17

Project Manager: Kelsey Brooks

Analysis Requested	Lab Id:	567615-001	Field Id:	567615-002	Depth:	DS-1 Floor @ 1'	Matrix:	SOIL	Sampled:	Nov-06-17 11:30	Lab Id:	567615-003	Field Id:	DS-1 NSW	Depth:	0-	Matrix:	SOIL	Sampled:	Nov-06-17 11:35	Lab Id:	567615-004	Field Id:	DS-1 ESW	Depth:	0-	Matrix:	SOIL	Sampled:	Nov-06-17 11:40	Lab Id:	567615-005	Field Id:	DS-1 SSW	Depth:	0-	Matrix:	SOIL	Sampled:	Nov-06-17 11:45	Lab Id:	567615-006	Field Id:	DS-1 WS1	Depth:	0-	Matrix:	SOIL	Sampled:	Nov-06-17 11:50	Lab Id:	567615-007	Field Id:	DS-2 Floor @ 2'	Depth:	2- ft	Matrix: <td>SOIL</td> <th>Sampled:</th> <td>Nov-06-17 11:55</td>	SOIL	Sampled:	Nov-06-17 11:55
BTEX by EPA 8021B	Extracted:	Nov-07-17 13:20	Analyzed:	Nov-07-17 13:20	Units/RL:	mg/kg	Extracted:	Nov-07-17 22:41	Analyzed:	Nov-07-17 20:00	Units/RL:	mg/kg	Extracted:	Nov-07-17 13:20	Analyzed:	Nov-07-17 23:08	Units/RL:	mg/kg	Extracted:	Nov-07-17 13:20	Analyzed:	Nov-07-17 23:35	Units/RL:	mg/kg	Extracted:	Nov-07-17 13:20	Analyzed:	Nov-08-17 08:07	Units/RL:	mg/kg	Extracted:	Nov-07-17 13:20	Analyzed:	Nov-08-17 05:52	Units/RL:	mg/kg																								
Benzene		<0.0198	0.0198				<0.0199	0.0199				<0.0197	0.0197		<0.0194	0.0194		<0.0197	0.0197		<0.0198	0.0198																																						
Toluene		<0.0198	0.0198				<0.0199	0.0199				<0.0197	0.0197		0.0349	0.0194		0.0296	0.0197		<0.0198	0.0198																																						
Ethylbenzene		<0.0198	0.0198				<0.0199	0.0199				0.0197	0.0197		0.116	0.0194		0.0848	0.0197		<0.0198	0.0198																																						
Xylenes, Total		<0.0198	0.0198				<0.0199	0.0199				0.0631	0.0197		0.407	0.0194		0.3078	0.0197		<0.0198	0.0198																																						
Total BTEX		<0.0198	0.0198				<0.0199	0.0199				0.0828	0.0197		0.5579	0.0194		0.4222	0.0197		<0.0198	0.0198																																						
Chloride by EPA 300	Extracted:	Nov-07-17 15:00	Analyzed:		Units/RL:	mg/kg	Extracted:	Nov-08-17 09:46	Analyzed:		Units/RL:	mg/kg																																																
Chloride		219	25.0																																																									
DRO-ORO By SW8015B	Extracted:	Nov-07-17 11:45	Analyzed:	Nov-07-17 11:45	Units/RL:	mg/kg	Extracted:	Nov-07-17 16:28	Analyzed:	Nov-07-17 17:02	Units/RL:	mg/kg	Extracted:	Nov-07-17 11:45	Analyzed:	Nov-07-17 17:35	Units/RL:	mg/kg	Extracted:	Nov-07-17 11:45	Analyzed:	Nov-07-17 18:09	Units/RL:	mg/kg	Extracted:	Nov-07-17 11:45	Analyzed:	Nov-07-17 18:42	Units/RL:	mg/kg	Extracted:	Nov-07-17 11:45	Analyzed:	Nov-07-17 19:15	Units/RL:	mg/kg																								
Diesel Range Organics (DRO)		<25.0	25.0				<25.0	25.0				66.3	25.0		<25.0	25.0		300	25.0		33.6	25.0																																						
Oil Range Hydrocarbons (ORO)		<25.0	25.0				<25.0	25.0				<25.0	25.0		<25.0	25.0		40.7	25.0		<25.0	25.0																																						
TPH GRO by EPA 8015 Mod.	Extracted:	Nov-07-17 13:20	Analyzed:	Nov-07-17 22:41	Units/RL:	mg/kg	Extracted:	Nov-07-17 13:20	Analyzed:	Nov-07-17 20:00	Units/RL:	mg/kg	Extracted:	Nov-07-17 13:20	Analyzed:	Nov-07-17 23:08	Units/RL:	mg/kg	Extracted:	Nov-07-17 13:20	Analyzed:	Nov-07-17 23:35	Units/RL:	mg/kg	Extracted:	Nov-07-17 13:20	Analyzed:	Nov-08-17 18:14	Units/RL:	mg/kg	Extracted:	Nov-07-17 13:20	Analyzed:	Nov-08-17 05:52	Units/RL:	mg/kg																								
TPH-GRO		<3.96	3.96				<3.98	3.98				<3.94	3.94		22.0	3.88		9.97	3.98		<3.97	3.97																																						

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.

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

Mike Kimmel
Client Services Manager



Certificate of Analysis Summary 567615

TRC Solutions, Inc, Midland, TX

Project Name: Plains Smalls Federal

Project Id: 8021

Contact: Joel Lowry

Project Location: New Mexico

Date Received in Lab: Tue Nov-07-17 09:05 am

Report Date: 09-NOV-17

Project Manager: Kelsey Brooks

Analysis Requested		Lab Id:	567615-007	Field Id:	567615-008	Depth:	DS-2 ESW	Matrix:	SOIL	Sampled:	Nov-06-17 12:00	567615-009	DS-2 SSW	18-	In	567615-010	DS-3 Floor @ 18 "	567615-011	DS-3 NSW	567615-012	DS-3 ESW		
BTEX by EPA 8021B		Extracted:	Nov-07-17 13:20	Analyzed:	Nov-07-17 13:20	Units/RL:	mg/kg	Extracted:	Nov-08-17 00:03	Analyzed:	Nov-08-17 00:30	Units/RL:	mg/kg	Extracted:	Nov-08-17 00:57	Analyzed:	Nov-08-17 06:19	Units/RL:	mg/kg	Extracted:	Nov-08-17 08:34	Analyzed:	Nov-08-17 01:24
Benzene		<0.0193	0.0193	<0.0200	0.0200	<0.0197	0.0197	<0.0196	0.0196	<0.0379	0.0379	<0.0188	0.0188										
Toluene		0.120	0.0193	0.0200	0.0200	0.0237	0.0197	0.0196	0.0196	0.258	0.0379	0.381	0.0188										
Ethylbenzene		0.369	0.0193	<0.0200	0.0200	0.0316	0.0197	0.0333	0.0196	0.818	0.0379	1.28	0.0188										
Xylenes, Total		1.158	0.0193	0.048	0.02	0.1184	0.0197	0.1313	0.0196	2.793	0.0379	4.01	0.0188										
Total BTEX		1.647	0.0193	0.068	0.02	0.1737	0.0197	0.1842	0.0196	3.869	0.0379	5.671	0.0188										
Chloride by EPA 300		Extracted:								Nov-07-17 15:00													
		Analyzed:								Nov-08-17 11:00													
		Units/RL:								mg/kg	RL												
Chloride										52.1	25.0												
DRO-ORO By SW8015B		Extracted:	Nov-07-17 11:45	Analyzed:	Nov-07-17 11:45	Units/RL:	mg/kg	Extracted:	Nov-07-17 19:48	Analyzed:	Nov-07-17 20:22	Units/RL:	mg/kg	Extracted:	Nov-07-17 20:54	Analyzed:	Nov-07-17 21:27	Units/RL:	mg/kg	Extracted:	Nov-08-17 10:33	Analyzed:	Nov-07-17 22:34
Diesel Range Organics (DRO)			107	25.0	<25.0	25.0	<25.0			579	25.0												
Oil Range Hydrocarbons (ORO)			<25.0	25.0	<25.0	25.0	<25.0			90.3	25.0												
TPH GRO by EPA 8015 Mod.		Extracted:	Nov-07-17 13:20	Analyzed:	Nov-08-17 00:03	Units/RL:	mg/kg	Extracted:	Nov-08-17 00:03	Analyzed:	Nov-08-17 00:30	Units/RL:	mg/kg	Extracted:	Nov-08-17 00:57	Analyzed:	Nov-08-17 06:19	Units/RL:	mg/kg	Extracted:	Nov-08-17 08:34	Analyzed:	Nov-08-17 18:41
TPH-GRO			57.5	3.86	<4.00	4.00	<4.00			5.09	3.94												
										5.07	3.92												
										104	7.58												
										255	38.5												

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

Mike Kimmel
Client Services Manager



Certificate of Analysis Summary 567615

TRC Solutions, Inc, Midland, TX

Project Name: Plains Smalls Federal

Project Id: 8021

Contact: Joel Lowry

Project Location: New Mexico

Date Received in Lab: Tue Nov-07-17 09:05 am

Report Date: 09-NOV-17

Project Manager: Kelsey Brooks

Analysis Requested		Lab Id:	567615-013	Field Id:	567615-014	Depth:	DS-3 WSW	Matrix:	SOIL	Sampled:	Nov-06-17 12:25	Lab Id:	567615-015	Field Id:	DS-4 Floor @ 18 "	Depth:	0-	Matrix:	SOIL	Sampled:	Nov-06-17 12:30	Lab Id:	567615-016	Field Id:	DS-4 NSW	Depth:	0-	Matrix:	SOIL	Sampled:	Nov-06-17 12:35	Lab Id:	567615-017	Field Id:	DS-4 SSW	Depth:	0-	Matrix:	SOIL	Sampled:	Nov-06-17 12:40	Lab Id:	567615-018	Field Id:	DS-4 WSW	Depth:	0-	Matrix:	SOIL	Sampled:	Nov-06-17 12:45
BTEX by EPA 8021B		Extracted:	Nov-07-17 13:20	Analyzed:	Nov-07-17 13:20	Units/RL:	mg/kg	Extracted:	Nov-08-17 01:50	Analyzed:	Nov-08-17 02:17	Units/RL:	mg/kg	Extracted:	Nov-07-17 13:20	Analyzed:	Nov-08-17 04:31	Units/RL:	mg/kg	Extracted:	Nov-07-17 13:20	Analyzed:	Nov-08-17 04:58	Units/RL:	mg/kg	Extracted:	Nov-07-17 13:20	Analyzed:	Nov-08-17 05:25	Units/RL:	mg/kg																				
Benzene			<0.0200	0.0200																																															
Toluene			0.0321	0.0200																																															
Ethylbenzene			0.0842	0.0200																																															
Xylenes, Total			0.378	0.02																																															
Total BTEX			0.4943	0.02																																															
Chloride by EPA 300		Extracted:		Analyzed:	Nov-07-17 15:00	Units/RL:	mg/kg	Extracted:		Analyzed:	Nov-08-17 11:13	Units/RL:	mg/kg	Extracted:		Analyzed:	Nov-07-17 11:13	Units/RL:	mg/kg	Extracted:		Analyzed:	Nov-08-17 00:14	Units/RL:	mg/kg	Extracted:		Analyzed:	Nov-08-17 00:47	Units/RL:	mg/kg	Extracted:		Analyzed:	Nov-08-17 01:20	Units/RL:	mg/kg														
Chloride																																																			
DRO-ORO By SW8015B		Extracted:	Nov-07-17 11:45	Analyzed:	Nov-07-17 11:45	Units/RL:	mg/kg	Extracted:	Nov-07-17 23:07	Analyzed:	Nov-07-17 23:41	Units/RL:	mg/kg	Extracted:	Nov-07-17 11:45	Analyzed:	Nov-08-17 00:14	Units/RL:	mg/kg	Extracted:	Nov-07-17 11:45	Analyzed:	Nov-08-17 00:47	Units/RL:	mg/kg	Extracted:	Nov-07-17 11:45	Analyzed:	Nov-08-17 01:20	Units/RL:	mg/kg																				
Diesel Range Organics (DRO)			<25.0	25.0																																															
Oil Range Hydrocarbons (ORO)			<25.0	25.0																																															
TPH GRO by EPA 8015 Mod.		Extracted:	Nov-08-17 12:45	Analyzed:	Nov-07-17 13:20	Units/RL:	mg/kg	Extracted:	Nov-08-17 16:26	Analyzed:	Nov-08-17 02:17	Units/RL:	mg/kg	Extracted:	Nov-07-17 13:20	Analyzed:	Nov-08-17 04:31	Units/RL:	mg/kg	Extracted:	Nov-07-17 13:20	Analyzed:	Nov-08-17 04:58	Units/RL:	mg/kg	Extracted:	Nov-07-17 13:20	Analyzed:	Nov-08-17 05:25	Units/RL:	mg/kg																				
TPH-GRO			<3.82	3.82																																															

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Mike Kimmel
Client Services Manager

Analytical Report 567615

**for
TRC Solutions, Inc**

Project Manager: Joel Lowry

Plains Smalls Federal

09-NOV-17

Collected By: Client



6701 Aberdeen, Suite 9 Lubbock, TX 79424

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-17-23), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab code: TX01468):
Texas (T104704295-17-15), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-17-13)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)



09-NOV-17

Project Manager: **Joel Lowry**

TRC Solutions, Inc

2057 Commerce

Midland, TX 79703

Reference: XENCO Report No(s): **567615**

Plains Smalls Federal

Project Address: New Mexico

Joel Lowry:

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(s) 567615. 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. 567615 will be filed for 45 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,

A handwritten signature in black ink, appearing to read "Mike Kimmel".

Mike Kimmel

Client Services 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

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Sample Cross Reference 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
DS-1 Floor @ 1'	S	11-06-17 11:30	1 ft	567615-001
DS-1 NSW	S	11-06-17 11:35	0	567615-002
DS-1 ESW	S	11-06-17 11:40	0	567615-003
DS-1 SSW	S	11-06-17 11:45	0	567615-004
DS-1 WS1	S	11-06-17 11:50	0	567615-005
DS-2 Floor @ 2'	S	11-06-17 11:55	2 ft	567615-006
DS-2 ESW	S	11-06-17 12:00	0	567615-007
DS-2 SSW	S	11-06-17 12:05	0	567615-008
DS-2 WSW	S	11-06-17 12:10	0	567615-009
DS-3 Floor @ 18 "	S	11-06-17 00:00	18 In	567615-010
DS-3 NSW	S	11-06-17 12:15	0	567615-011
DS-3 ESW	S	11-06-17 12:20	0	567615-012
DS-3 WSW	S	11-06-17 12:25	0	567615-013
DS-4 Floor @ 18 "	S	11-06-17 12:30	18 In	567615-014
DS-4 NSW	S	11-06-17 12:35	0	567615-015
DS-4 SSW	S	11-06-17 12:40	0	567615-016
DS-4 WSW	S	11-06-17 12:45	0	567615-017



CASE NARRATIVE

Client Name: TRC Solutions, Inc
Project Name: Plains Smalls Federal

Project ID: 8021
Work Order Number(s): 567615

Report Date: 09-NOV-17
Date Received: 11/07/2017

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3032645 DRO-ORO By SW8015B

Surrogate Tricosane recovered below QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 567615-011.

Surrogate n-Triacontane recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 567615-010,567615-011.

Batch: LBA-3032648 BTEX by EPA 8021B

Sample 567615-011 was diluted due to excessive hydrocarbons beyond xylene.

Batch: LBA-3032651 Chloride by EPA 300

Lab Sample ID 567615-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 567615-001, -006, -010, -014.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-1 Floor @ 1'** Matrix: Soil Date Received: 11.07.17 09.05
Lab Sample Id: 567615-001 Date Collected: 11.06.17 11.30 Sample Depth: 1 ft
Analytical Method: Chloride by EPA 300 Prep Method: E300P
Tech: RNL % Moisture:
Analyst: RNL Date Prep: 11.07.17 15.00 Basis: Wet Weight
Seq Number: 3032651

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	219	25.0	mg/kg	11.08.17 09.46		1

Analytical Method: DRO-ORO By SW8015B Prep Method: SW8015P
Tech: PGM % Moisture:
Analyst: PGM Date Prep: 11.07.17 11.45 Basis: Wet Weight
Seq Number: 3032645

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	<25.0	25.0	mg/kg	11.07.17 16.28	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<25.0	25.0	mg/kg	11.07.17 16.28	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
Tricosane	638-67-5	94	%	65-144	11.07.17 16.28		
n-Triacontane	638-68-6	62	%	46-152	11.07.17 16.28		

Analytical Method: BTEX by EPA 8021B Prep Method: SW5030B
Tech: MIT % Moisture:
Analyst: MIT Date Prep: 11.07.17 13.20 Basis: Wet Weight
Seq Number: 3032648

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0198	0.0198	mg/kg	11.07.17 22.41	U	1
Toluene	108-88-3	<0.0198	0.0198	mg/kg	11.07.17 22.41	U	1
Ethylbenzene	100-41-4	<0.0198	0.0198	mg/kg	11.07.17 22.41	U	1
Xylenes, Total	1330-20-7	<0.0198	0.0198	mg/kg	11.07.17 22.41	U	1
Total BTEX		<0.0198	0.0198	mg/kg	11.07.17 22.41	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	95	%	68-120	11.07.17 22.41		
a,a,a-Trifluorotoluene	98-08-8	89	%	71-121	11.07.17 22.41		



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-1 Floor @ 1'**

Matrix: Soil

Date Received: 11.07.17 09.05

Lab Sample Id: 567615-001

Date Collected: 11.06.17 11.30

Sample Depth: 1 ft

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 11.07.17 13.20

Basis: Wet Weight

Seq Number: 3032644

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<3.96	3.96	mg/kg	11.07.17 22.41	U	1
Surrogate							
		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene		460-00-4	115	%	76-123	11.07.17 22.41	
a,a,a-Trifluorotoluene		98-08-8	110	%	69-120	11.07.17 22.41	



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-1 NSW**

Lab Sample Id: 567615-002

Matrix: Soil

Date Received: 11.07.17 09.05

Date Collected: 11.06.17 11.35

Sample Depth: 0

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: PGM

% Moisture:

Analyst: PGM

Date Prep: 11.07.17 11.45

Basis: Wet Weight

Seq Number: 3032645

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	<25.0	25.0	mg/kg	11.07.17 17.02	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<25.0	25.0	mg/kg	11.07.17 17.02	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
Tricosane	638-67-5	113	%	65-144	11.07.17 17.02		
n-Triacontane	638-68-6	70	%	46-152	11.07.17 17.02		

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 11.07.17 13.20

Basis: Wet Weight

Seq Number: 3032648

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0199	0.0199	mg/kg	11.07.17 20.00	U	1
Toluene	108-88-3	<0.0199	0.0199	mg/kg	11.07.17 20.00	U	1
Ethylbenzene	100-41-4	<0.0199	0.0199	mg/kg	11.07.17 20.00	U	1
Xylenes, Total	1330-20-7	<0.0199	0.0199	mg/kg	11.07.17 20.00	U	1
Total BTEX		<0.0199	0.0199	mg/kg	11.07.17 20.00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	68-120	11.07.17 20.00		
a,a,a-Trifluorotoluene	98-08-8	91	%	71-121	11.07.17 20.00		



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-1 NSW**

Matrix: Soil

Date Received: 11.07.17 09.05

Lab Sample Id: 567615-002

Date Collected: 11.06.17 11.35

Sample Depth: 0

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 11.07.17 13.20

Basis: Wet Weight

Seq Number: 3032644

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<3.98	3.98	mg/kg	11.07.17 20.00	U	1
Surrogate							
		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene		460-00-4	115	%	76-123	11.07.17 20.00	
a,a,a-Trifluorotoluene		98-08-8	111	%	69-120	11.07.17 20.00	



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-1 ESW**

Matrix: Soil

Date Received: 11.07.17 09.05

Lab Sample Id: 567615-003

Date Collected: 11.06.17 11.40

Sample Depth: 0

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: PGM

% Moisture:

Analyst: PGM

Date Prep: 11.07.17 11.45

Basis: Wet Weight

Seq Number: 3032645

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	66.3	25.0	mg/kg	11.07.17 17.35		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<25.0	25.0	mg/kg	11.07.17 17.35	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
Tricosane	638-67-5	128	%	65-144	11.07.17 17.35		
n-Triacontane	638-68-6	79	%	46-152	11.07.17 17.35		

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 11.07.17 13.20

Basis: Wet Weight

Seq Number: 3032648

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0197	0.0197	mg/kg	11.07.17 23.08	U	1
Toluene	108-88-3	<0.0197	0.0197	mg/kg	11.07.17 23.08	U	1
Ethylbenzene	100-41-4	0.0197	0.0197	mg/kg	11.07.17 23.08		1
Xylenes, Total	1330-20-7	0.0631	0.0197	mg/kg	11.07.17 23.08		1
Total BTEX		0.0828	0.0197	mg/kg	11.07.17 23.08		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	68-120	11.07.17 23.08		
a,a,a-Trifluorotoluene	98-08-8	90	%	71-121	11.07.17 23.08		



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-1 ESW**

Matrix: **Soil**

Date Received: 11.07.17 09.05

Lab Sample Id: **567615-003**

Date Collected: **11.06.17 11.40**

Sample Depth: **0**

Analytical Method: **TPH GRO by EPA 8015 Mod.**

Prep Method: **SW5030B**

Tech: **MIT**

% Moisture:

Analyst: **MIT**

Date Prep: **11.07.17 13.20**

Basis: **Wet Weight**

Seq Number: **3032644**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<3.94	3.94	mg/kg	11.07.17 23.08	U	1
Surrogate							
		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene		460-00-4	121	%	76-123	11.07.17 23.08	
a,a,a-Trifluorotoluene		98-08-8	112	%	69-120	11.07.17 23.08	



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-1 SSW**

Matrix: Soil

Date Received: 11.07.17 09.05

Lab Sample Id: 567615-004

Date Collected: 11.06.17 11.45

Sample Depth: 0

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: PGM

% Moisture:

Analyst: PGM

Date Prep: 11.07.17 11.45

Basis: Wet Weight

Seq Number: 3032645

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	<25.0	25.0	mg/kg	11.07.17 18.09	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<25.0	25.0	mg/kg	11.07.17 18.09	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
Tricosane	638-67-5	102	%	65-144	11.07.17 18.09		
n-Triacontane	638-68-6	68	%	46-152	11.07.17 18.09		

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 11.07.17 13.20

Basis: Wet Weight

Seq Number: 3032648

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0194	0.0194	mg/kg	11.07.17 23.35	U	1
Toluene	108-88-3	0.0349	0.0194	mg/kg	11.07.17 23.35		1
Ethylbenzene	100-41-4	0.116	0.0194	mg/kg	11.07.17 23.35		1
Xylenes, Total	1330-20-7	0.407	0.0194	mg/kg	11.07.17 23.35		1
Total BTEX		0.5579	0.0194	mg/kg	11.07.17 23.35		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	68-120	11.07.17 23.35		
a,a,a-Trifluorotoluene	98-08-8	89	%	71-121	11.07.17 23.35		



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-1 SSW**

Matrix: **Soil**

Date Received: 11.07.17 09.05

Lab Sample Id: **567615-004**

Date Collected: **11.06.17 11.45**

Sample Depth: **0**

Analytical Method: **TPH GRO by EPA 8015 Mod.**

Prep Method: **SW5030B**

Tech: **MIT**

% Moisture:

Analyst: **MIT**

Date Prep: **11.07.17 13.20**

Basis: **Wet Weight**

Seq Number: **3032644**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	22.0	3.88	mg/kg	11.07.17 23.35		1
Surrogate							
		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene		460-00-4	114	%	76-123	11.07.17 23.35	
a,a,a-Trifluorotoluene		98-08-8	110	%	69-120	11.07.17 23.35	



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-1 WS1**

Matrix: Soil

Date Received: 11.07.17 09.05

Lab Sample Id: 567615-005

Date Collected: 11.06.17 11.50

Sample Depth: 0

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: PGM

% Moisture:

Analyst: PGM

Date Prep: 11.07.17 11.45

Basis: Wet Weight

Seq Number: 3032645

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	300	25.0	mg/kg	11.07.17 18.42		1
Oil Range Hydrocarbons (ORO)	PHCG2835	40.7	25.0	mg/kg	11.07.17 18.42		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
Tricosane	638-67-5	254	%	65-144	11.07.17 18.42	**	
n-Triacontane	638-68-6	128	%	46-152	11.07.17 18.42		

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 11.07.17 13.20

Basis: Wet Weight

Seq Number: 3032648

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0197	0.0197	mg/kg	11.08.17 08.07	U	1
Toluene	108-88-3	0.0296	0.0197	mg/kg	11.08.17 08.07		1
Ethylbenzene	100-41-4	0.0848	0.0197	mg/kg	11.08.17 08.07		1
Xylenes, Total	1330-20-7	0.3078	0.0197	mg/kg	11.08.17 08.07		1
Total BTEX		0.4222	0.0197	mg/kg	11.08.17 08.07		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	68-120	11.08.17 08.07		
a,a,a-Trifluorotoluene	98-08-8	89	%	71-121	11.08.17 08.07		



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-1 WS1**

Matrix: **Soil**

Date Received: 11.07.17 09.05

Lab Sample Id: **567615-005**

Date Collected: **11.06.17 11.50**

Sample Depth: **0**

Analytical Method: **TPH GRO by EPA 8015 Mod.**

Prep Method: **SW5030B**

Tech: **MIT**

% Moisture:

Analyst: **MIT**

Date Prep: **11.08.17 12.45**

Basis: **Wet Weight**

Seq Number: **3032747**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	9.97	3.98	mg/kg	11.08.17 18.14		1
Surrogate							
		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene		460-00-4	121	%	76-123	11.08.17 18.14	
a,a,a-Trifluorotoluene		98-08-8	110	%	69-120	11.08.17 18.14	



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-2 Floor @ 2'**

Matrix: Soil

Date Received: 11.07.17 09.05

Lab Sample Id: 567615-006

Date Collected: 11.06.17 11.55

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: RNL

% Moisture:

Analyst: RNL

Date Prep: 11.07.17 15.00

Basis: Wet Weight

Seq Number: 3032651

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	891	125	mg/kg	11.08.17 10.48	D	5

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: PGM

% Moisture:

Analyst: PGM

Date Prep: 11.07.17 11.45

Basis: Wet Weight

Seq Number: 3032645

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	33.6	25.0	mg/kg	11.07.17 19.15		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<25.0	25.0	mg/kg	11.07.17 19.15	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
Tricosane	638-67-5	114	%	65-144	11.07.17 19.15		
n-Triacontane	638-68-6	78	%	46-152	11.07.17 19.15		

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 11.07.17 13.20

Basis: Wet Weight

Seq Number: 3032648

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0198	0.0198	mg/kg	11.08.17 05.52	U	1
Toluene	108-88-3	<0.0198	0.0198	mg/kg	11.08.17 05.52	U	1
Ethylbenzene	100-41-4	<0.0198	0.0198	mg/kg	11.08.17 05.52	U	1
Xylenes, Total	1330-20-7	<0.0198	0.0198	mg/kg	11.08.17 05.52	U	1
Total BTEX		<0.0198	0.0198	mg/kg	11.08.17 05.52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	68-120	11.08.17 05.52		
a,a,a-Trifluorotoluene	98-08-8	90	%	71-121	11.08.17 05.52		



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-2 Floor @ 2'**

Matrix: Soil

Date Received: 11.07.17 09.05

Lab Sample Id: 567615-006

Date Collected: 11.06.17 11.55

Sample Depth: 2 ft

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 11.07.17 13.20

Basis: Wet Weight

Seq Number: 3032644

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<3.97	3.97	mg/kg	11.08.17 05.52	U	1
Surrogate							
		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene		460-00-4	120	%	76-123	11.08.17 05.52	
a,a,a-Trifluorotoluene		98-08-8	112	%	69-120	11.08.17 05.52	



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-2 ESW**

Matrix: **Soil**

Date Received: 11.07.17 09.05

Lab Sample Id: **567615-007**

Date Collected: 11.06.17 12.00

Sample Depth: 0

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: **PGM**

% Moisture:

Analyst: **PGM**

Date Prep: **11.07.17 11.45**

Basis: **Wet Weight**

Seq Number: **3032645**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	107	25.0	mg/kg	11.07.17 19.48		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<25.0	25.0	mg/kg	11.07.17 19.48	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
Tricosane	638-67-5	121	%	65-144	11.07.17 19.48		
n-Triacontane	638-68-6	79	%	46-152	11.07.17 19.48		

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: **MIT**

% Moisture:

Analyst: **MIT**

Date Prep: **11.07.17 13.20**

Basis: **Wet Weight**

Seq Number: **3032648**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0193	0.0193	mg/kg	11.08.17 00.03	U	1
Toluene	108-88-3	0.120	0.0193	mg/kg	11.08.17 00.03		1
Ethylbenzene	100-41-4	0.369	0.0193	mg/kg	11.08.17 00.03		1
Xylenes, Total	1330-20-7	1.158	0.0193	mg/kg	11.08.17 00.03		1
Total BTEX		1.647	0.0193	mg/kg	11.08.17 00.03		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	111	%	68-120	11.08.17 00.03		
a,a,a-Trifluorotoluene	98-08-8	89	%	71-121	11.08.17 00.03		



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-2 ESW**

Matrix: **Soil**

Date Received: 11.07.17 09.05

Lab Sample Id: **567615-007**

Date Collected: 11.06.17 12.00

Sample Depth: 0

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: **MIT**

% Moisture:

Analyst: **MIT**

Date Prep: **11.07.17 13.20**

Basis: **Wet Weight**

Seq Number: **3032644**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	57.5	3.86	mg/kg	11.08.17 00.03		1
Surrogate							
		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene		460-00-4	116	%	76-123	11.08.17 00.03	
a,a,a-Trifluorotoluene		98-08-8	109	%	69-120	11.08.17 00.03	



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-2 SSW**

Matrix: **Soil**

Date Received: 11.07.17 09.05

Lab Sample Id: **567615-008**

Date Collected: 11.06.17 12.05

Sample Depth: 0

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: **PGM**

% Moisture:

Analyst: **PGM**

Date Prep: **11.07.17 11.45**

Basis: **Wet Weight**

Seq Number: **3032645**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	<25.0	25.0	mg/kg	11.07.17 20.22	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<25.0	25.0	mg/kg	11.07.17 20.22	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
Tricosane	638-67-5	106	%	65-144	11.07.17 20.22		
n-Triacontane	638-68-6	70	%	46-152	11.07.17 20.22		

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: **MIT**

% Moisture:

Analyst: **MIT**

Date Prep: **11.07.17 13.20**

Basis: **Wet Weight**

Seq Number: **3032648**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0200	0.0200	mg/kg	11.08.17 00.30	U	1
Toluene	108-88-3	0.0200	0.0200	mg/kg	11.08.17 00.30		1
Ethylbenzene	100-41-4	<0.0200	0.0200	mg/kg	11.08.17 00.30	U	1
Xylenes, Total	1330-20-7	0.048	0.02	mg/kg	11.08.17 00.30		1
Total BTEX		0.068	0.02	mg/kg	11.08.17 00.30		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	95	%	68-120	11.08.17 00.30		
a,a,a-Trifluorotoluene	98-08-8	91	%	71-121	11.08.17 00.30		



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-2 SSW**

Matrix: **Soil**

Date Received: 11.07.17 09.05

Lab Sample Id: **567615-008**

Date Collected: 11.06.17 12.05

Sample Depth: 0

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: **MIT**

% Moisture:

Analyst: **MIT**

Date Prep: 11.07.17 13.20

Basis: **Wet Weight**

Seq Number: **3032644**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<4.00	4.00	mg/kg	11.08.17 00.30	U	1
Surrogate							
		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	76-123	11.08.17 00.30		
a,a,a-Trifluorotoluene	98-08-8	111	%	69-120	11.08.17 00.30		



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-2 WSW**

Matrix: **Soil**

Date Received: 11.07.17 09.05

Lab Sample Id: **567615-009**

Date Collected: 11.06.17 12.10

Sample Depth: 0

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: **PGM**

% Moisture:

Analyst: **PGM**

Date Prep: **11.07.17 11.45**

Basis: **Wet Weight**

Seq Number: **3032645**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	<25.0	25.0	mg/kg	11.07.17 20.54	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<25.0	25.0	mg/kg	11.07.17 20.54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
Tricosane	638-67-5	117	%	65-144	11.07.17 20.54		
n-Triacontane	638-68-6	76	%	46-152	11.07.17 20.54		

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: **MIT**

% Moisture:

Analyst: **MIT**

Date Prep: **11.07.17 13.20**

Basis: **Wet Weight**

Seq Number: **3032648**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0197	0.0197	mg/kg	11.08.17 00.57	U	1
Toluene	108-88-3	0.0237	0.0197	mg/kg	11.08.17 00.57		1
Ethylbenzene	100-41-4	0.0316	0.0197	mg/kg	11.08.17 00.57		1
Xylenes, Total	1330-20-7	0.1184	0.0197	mg/kg	11.08.17 00.57		1
Total BTEX		0.1737	0.0197	mg/kg	11.08.17 00.57		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	95	%	68-120	11.08.17 00.57		
a,a,a-Trifluorotoluene	98-08-8	89	%	71-121	11.08.17 00.57		



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-2 WSW**

Matrix: **Soil**

Date Received: 11.07.17 09.05

Lab Sample Id: **567615-009**

Date Collected: 11.06.17 12.10

Sample Depth: 0

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: **MIT**

% Moisture:

Analyst: **MIT**

Date Prep: 11.07.17 13.20

Basis: **Wet Weight**

Seq Number: **3032644**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	5.09	3.94	mg/kg	11.08.17 00.57		1
Surrogate			% Recovery				
4-Bromofluorobenzene	460-00-4		114	%	76-123	11.08.17 00.57	
a,a,a-Trifluorotoluene	98-08-8		110	%	69-120	11.08.17 00.57	



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-3 Floor @ 18 "** Matrix: Soil Date Received: 11.07.17 09.05
Lab Sample Id: 567615-010 Date Collected: 11.06.17 00.00 Sample Depth: 18 In
Analytical Method: Chloride by EPA 300 Prep Method: E300P
Tech: RNL % Moisture:
Analyst: RNL Date Prep: 11.07.17 15.00 Basis: Wet Weight
Seq Number: 3032651

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	52.1	25.0	mg/kg	11.08.17 11.00		1

Analytical Method: DRO-ORO By SW8015B Prep Method: SW8015P
Tech: PGM % Moisture:
Analyst: PGM Date Prep: 11.07.17 11.45 Basis: Wet Weight
Seq Number: 3032645

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	579	25.0	mg/kg	11.07.17 21.27		1
Oil Range Hydrocarbons (ORO)	PHCG2835	90.3	25.0	mg/kg	11.07.17 21.27		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
Tricosane	638-67-5	508	%	65-144	11.07.17 21.27	**	
n-Triacontane	638-68-6	214	%	46-152	11.07.17 21.27	**	

Analytical Method: BTEX by EPA 8021B Prep Method: SW5030B
Tech: MIT % Moisture:
Analyst: MIT Date Prep: 11.07.17 13.20 Basis: Wet Weight
Seq Number: 3032648

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0196	0.0196	mg/kg	11.08.17 06.19	U	1
Toluene	108-88-3	0.0196	0.0196	mg/kg	11.08.17 06.19		1
Ethylbenzene	100-41-4	0.0333	0.0196	mg/kg	11.08.17 06.19		1
Xylenes, Total	1330-20-7	0.1313	0.0196	mg/kg	11.08.17 06.19		1
Total BTEX		0.1842	0.0196	mg/kg	11.08.17 06.19		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	95	%	68-120	11.08.17 06.19		
a,a,a-Trifluorotoluene	98-08-8	93	%	71-121	11.08.17 06.19		



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-3 Floor @ 18 "** Matrix: Soil Date Received: 11.07.17 09.05
Lab Sample Id: 567615-010 Date Collected: 11.06.17 00.00 Sample Depth: 18 In
Analytical Method: TPH GRO by EPA 8015 Mod. Prep Method: SW5030B
Tech: MIT % Moisture:
Analyst: MIT Date Prep: 11.07.17 13.20 Basis: Wet Weight
Seq Number: 3032644

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	5.07	3.92	mg/kg	11.08.17 06.19		1
Surrogate							
		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene		460-00-4	115	%	76-123	11.08.17 06.19	
a,a,a-Trifluorotoluene		98-08-8	113	%	69-120	11.08.17 06.19	



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-3 NSW**

Matrix: **Soil**

Date Received: 11.07.17 09.05

Lab Sample Id: **567615-011**

Date Collected: 11.06.17 12.15

Sample Depth: 0

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: **PGM**

% Moisture:

Analyst: **PGM**

Date Prep: **11.07.17 11.45**

Basis: **Wet Weight**

Seq Number: **3032645**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	2720	50.0	mg/kg	11.08.17 10.33		2
Oil Range Hydrocarbons (ORO)	PHCG2835	460	50.0	mg/kg	11.08.17 10.33		2
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
Tricosane	638-67-5	0	%	65-144	11.08.17 10.33	***	
n-Triacontane	638-68-6	621	%	46-152	11.08.17 10.33	**	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: **MIT**

% Moisture:

Analyst: **MIT**

Date Prep: **11.07.17 13.20**

Basis: **Wet Weight**

Seq Number: **3032648**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0379	0.0379	mg/kg	11.08.17 08.34	U	2
Toluene	108-88-3	0.258	0.0379	mg/kg	11.08.17 08.34		2
Ethylbenzene	100-41-4	0.818	0.0379	mg/kg	11.08.17 08.34		2
Xylenes, Total	1330-20-7	2.793	0.0379	mg/kg	11.08.17 08.34		2
Total BTEX		3.869	0.0379	mg/kg	11.08.17 08.34		2
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	108	%	68-120	11.08.17 08.34		
a,a,a-Trifluorotoluene	98-08-8	86	%	71-121	11.08.17 08.34		



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-3 NSW**

Matrix: **Soil**

Date Received: 11.07.17 09.05

Lab Sample Id: **567615-011**

Date Collected: **11.06.17 12.15**

Sample Depth: **0**

Analytical Method: **TPH GRO by EPA 8015 Mod.**

Prep Method: **SW5030B**

Tech: **MIT**

% Moisture:

Analyst: **MIT**

Date Prep: **11.07.17 13.20**

Basis: **Wet Weight**

Seq Number: **3032644**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	104	7.58	mg/kg	11.08.17 08.34		2
Surrogate							
		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene		460-00-4	123	%	76-123	11.08.17 08.34	
a,a,a-Trifluorotoluene		98-08-8	101	%	69-120	11.08.17 08.34	



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-3 ESW**

Matrix: **Soil**

Date Received: 11.07.17 09.05

Lab Sample Id: **567615-012**

Date Collected: 11.06.17 12.20

Sample Depth: 0

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: **PGM**

% Moisture:

Analyst: **PGM**

Date Prep: **11.07.17 11.45**

Basis: **Wet Weight**

Seq Number: **3032645**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	240	25.0	mg/kg	11.07.17 22.34		1
Oil Range Hydrocarbons (ORO)	PHCG2835	36.9	25.0	mg/kg	11.07.17 22.34		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
Tricosane	638-67-5	137	%	65-144	11.07.17 22.34		
n-Triacontane	638-68-6	110	%	46-152	11.07.17 22.34		

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: **MIT**

% Moisture:

Analyst: **MIT**

Date Prep: **11.07.17 13.20**

Basis: **Wet Weight**

Seq Number: **3032648**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0188	0.0188	mg/kg	11.08.17 01.24	U	1
Toluene	108-88-3	0.381	0.0188	mg/kg	11.08.17 01.24		1
Ethylbenzene	100-41-4	1.28	0.0188	mg/kg	11.08.17 01.24		1
Xylenes, Total	1330-20-7	4.01	0.0188	mg/kg	11.08.17 01.24		1
Total BTEX		5.671	0.0188	mg/kg	11.08.17 01.24		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	105	%	68-120	11.08.17 01.24		
a,a,a-Trifluorotoluene	98-08-8	88	%	71-121	11.08.17 01.24		



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-3 ESW**

Matrix: **Soil**

Date Received: 11.07.17 09.05

Lab Sample Id: **567615-012**

Date Collected: 11.06.17 12.20

Sample Depth: 0

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: **MIT**

% Moisture:

Analyst: **MIT**

Date Prep: **11.08.17 12.45**

Basis: **Wet Weight**

Seq Number: **3032747**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	255	38.5	mg/kg	11.08.17 18.41		10
Surrogate							
		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene		460-00-4	101	%	76-123	11.08.17 18.41	
a,a,a-Trifluorotoluene		98-08-8	101	%	69-120	11.08.17 18.41	



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-3 WSW**

Lab Sample Id: 567615-013

Matrix: Soil

Date Collected: 11.06.17 12.25

Date Received: 11.07.17 09.05

Sample Depth: 0

Analytical Method: DRO-ORO By SW8015B

Tech: PGM

Analyst: PGM

Seq Number: 3032645

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	<25.0	25.0	mg/kg	11.07.17 23.07	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<25.0	25.0	mg/kg	11.07.17 23.07	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
Tricosane	638-67-5	111	%	65-144	11.07.17 23.07		
n-Triacontane	638-68-6	89	%	46-152	11.07.17 23.07		

Analytical Method: BTEX by EPA 8021B

Tech: MIT

Analyst: MIT

Seq Number: 3032648

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0200	0.0200	mg/kg	11.08.17 01.50	U	1
Toluene	108-88-3	0.0321	0.0200	mg/kg	11.08.17 01.50		1
Ethylbenzene	100-41-4	0.0842	0.0200	mg/kg	11.08.17 01.50		1
Xylenes, Total	1330-20-7	0.378	0.02	mg/kg	11.08.17 01.50		1
Total BTEX		0.4943	0.02	mg/kg	11.08.17 01.50		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	101	%	68-120	11.08.17 01.50		
a,a,a-Trifluorotoluene	98-08-8	91	%	71-121	11.08.17 01.50		



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-3 WSW**

Matrix: **Soil**

Date Received: 11.07.17 09.05

Lab Sample Id: **567615-013**

Date Collected: **11.06.17 12.25**

Sample Depth: **0**

Analytical Method: **TPH GRO by EPA 8015 Mod.**

Prep Method: **SW5030B**

Tech: **MIT**

% Moisture:

Analyst: **MIT**

Date Prep: **11.08.17 12.45**

Basis: **Wet Weight**

Seq Number: **3032747**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<3.82	3.82	mg/kg	11.08.17 16.26	U	1
Surrogate							
		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene		460-00-4	113	%	76-123	11.08.17 16.26	
a,a,a-Trifluorotoluene		98-08-8	109	%	69-120	11.08.17 16.26	



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-4 Floor @ 18 "** Matrix: **Soil** Date Received: 11.07.17 09.05
Lab Sample Id: **567615-014** Date Collected: 11.06.17 12.30 Sample Depth: 18 In
Analytical Method: Chloride by EPA 300 Prep Method: E300P
Tech: **RNL** % Moisture:
Analyst: **RNL** Date Prep: **11.07.17 15.00** Basis: **Wet Weight**
Seq Number: **3032651**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<25.0	25.0	mg/kg	11.08.17 11.13	U	1

Analytical Method: DRO-ORO By SW8015B Prep Method: SW8015P
Tech: **PGM** % Moisture:
Analyst: **PGM** Date Prep: **11.07.17 11.45** Basis: **Wet Weight**
Seq Number: **3032645**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	43.9	25.0	mg/kg	11.07.17 23.41		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<25.0	25.0	mg/kg	11.07.17 23.41	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
Tricosane	638-67-5	121	%	65-144	11.07.17 23.41		
n-Triacontane	638-68-6	92	%	46-152	11.07.17 23.41		

Analytical Method: BTEX by EPA 8021B Prep Method: SW5030B
Tech: **MIT** % Moisture:
Analyst: **MIT** Date Prep: **11.07.17 13.20** Basis: **Wet Weight**
Seq Number: **3032648**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0198	0.0198	mg/kg	11.08.17 02.17	U	1
Toluene	108-88-3	<0.0198	0.0198	mg/kg	11.08.17 02.17	U	1
Ethylbenzene	100-41-4	<0.0198	0.0198	mg/kg	11.08.17 02.17	U	1
Xylenes, Total	1330-20-7	0.0988	0.0198	mg/kg	11.08.17 02.17		1
Total BTEX		0.0988	0.0198	mg/kg	11.08.17 02.17		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	68-120	11.08.17 02.17		
a,a,a-Trifluorotoluene	98-08-8	90	%	71-121	11.08.17 02.17		



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-4 Floor @ 18 "** Matrix: Soil Date Received: 11.07.17 09.05
Lab Sample Id: 567615-014 Date Collected: 11.06.17 12.30 Sample Depth: 18 In
Analytical Method: TPH GRO by EPA 8015 Mod. Prep Method: SW5030B
Tech: MIT % Moisture:
Analyst: MIT Date Prep: 11.07.17 13.20 Basis: Wet Weight
Seq Number: 3032644

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	6.31	3.95	mg/kg	11.08.17 02.17		1
Surrogate							
		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene		460-00-4	117	%	76-123	11.08.17 02.17	
a,a,a-Trifluorotoluene		98-08-8	108	%	69-120	11.08.17 02.17	



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-4 NSW**

Lab Sample Id: 567615-015

Matrix: Soil

Date Collected: 11.06.17 12.35

Date Received: 11.07.17 09.05

Sample Depth: 0

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: PGM

% Moisture:

Analyst: PGM

Date Prep: 11.07.17 11.45

Basis: Wet Weight

Seq Number: 3032645

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	<25.0	25.0	mg/kg	11.08.17 00.14	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<25.0	25.0	mg/kg	11.08.17 00.14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
Tricosane	638-67-5	104	%	65-144	11.08.17 00.14		
n-Triacontane	638-68-6	83	%	46-152	11.08.17 00.14		

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 11.07.17 13.20

Basis: Wet Weight

Seq Number: 3032648

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0195	0.0195	mg/kg	11.08.17 04.31	U	1
Toluene	108-88-3	<0.0195	0.0195	mg/kg	11.08.17 04.31	U	1
Ethylbenzene	100-41-4	<0.0195	0.0195	mg/kg	11.08.17 04.31	U	1
Xylenes, Total	1330-20-7	<0.0195	0.0195	mg/kg	11.08.17 04.31	U	1
Total BTEX		<0.0195	0.0195	mg/kg	11.08.17 04.31	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	95	%	68-120	11.08.17 04.31		
a,a,a-Trifluorotoluene	98-08-8	90	%	71-121	11.08.17 04.31		



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-4 NSW**

Matrix: **Soil**

Date Received: 11.07.17 09.05

Lab Sample Id: **567615-015**

Date Collected: 11.06.17 12.35

Sample Depth: 0

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: **MIT**

% Moisture:

Analyst: **MIT**

Date Prep: 11.07.17 13.20

Basis: **Wet Weight**

Seq Number: **3032644**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<3.90	3.90	mg/kg	11.08.17 04.31	U	1
Surrogate							
		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene		460-00-4	122	%	76-123	11.08.17 04.31	
a,a,a-Trifluorotoluene		98-08-8	109	%	69-120	11.08.17 04.31	



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-4 SSW**

Matrix: **Soil**

Date Received: 11.07.17 09.05

Lab Sample Id: **567615-016**

Date Collected: 11.06.17 12.40

Sample Depth: 0

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: **PGM**

% Moisture:

Analyst: **PGM**

Date Prep: **11.07.17 11.45**

Basis: **Wet Weight**

Seq Number: **3032645**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	<25.0	25.0	mg/kg	11.08.17 00.47	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<25.0	25.0	mg/kg	11.08.17 00.47	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
Tricosane	638-67-5	92	%	65-144	11.08.17 00.47		
n-Triacontane	638-68-6	79	%	46-152	11.08.17 00.47		

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: **MIT**

% Moisture:

Analyst: **MIT**

Date Prep: **11.07.17 13.20**

Basis: **Wet Weight**

Seq Number: **3032648**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0193	0.0193	mg/kg	11.08.17 04.58	U	1
Toluene	108-88-3	<0.0193	0.0193	mg/kg	11.08.17 04.58	U	1
Ethylbenzene	100-41-4	<0.0193	0.0193	mg/kg	11.08.17 04.58	U	1
Xylenes, Total	1330-20-7	<0.0193	0.0193	mg/kg	11.08.17 04.58	U	1
Total BTEX		<0.0193	0.0193	mg/kg	11.08.17 04.58	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	68-120	11.08.17 04.58		
a,a,a-Trifluorotoluene	98-08-8	90	%	71-121	11.08.17 04.58		



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-4 SSW**

Matrix: **Soil**

Date Received: 11.07.17 09.05

Lab Sample Id: **567615-016**

Date Collected: 11.06.17 12.40

Sample Depth: 0

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: **MIT**

% Moisture:

Analyst: **MIT**

Date Prep: 11.07.17 13.20

Basis: **Wet Weight**

Seq Number: **3032644**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<3.86	3.86	mg/kg	11.08.17 04.58	U	1
Surrogate							
		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4		115	%	76-123	11.08.17 04.58	
a,a,a-Trifluorotoluene	98-08-8		111	%	69-120	11.08.17 04.58	



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-4 WSW**

Lab Sample Id: 567615-017

Matrix: Soil

Date Collected: 11.06.17 12.45

Date Received: 11.07.17 09.05

Sample Depth: 0

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: PGM

% Moisture:

Analyst: PGM

Date Prep: 11.07.17 11.45

Basis: Wet Weight

Seq Number: 3032645

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	<25.0	25.0	mg/kg	11.08.17 01.20	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<25.0	25.0	mg/kg	11.08.17 01.20	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
Tricosane	638-67-5	111	%	65-144	11.08.17 01.20		
n-Triacontane	638-68-6	83	%	46-152	11.08.17 01.20		

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 11.07.17 13.20

Basis: Wet Weight

Seq Number: 3032648

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0200	0.0200	mg/kg	11.08.17 05.25	U	1
Toluene	108-88-3	0.0220	0.0200	mg/kg	11.08.17 05.25		1
Ethylbenzene	100-41-4	0.0261	0.0200	mg/kg	11.08.17 05.25		1
Xylenes, Total	1330-20-7	0.0882	0.02	mg/kg	11.08.17 05.25		1
Total BTEX		0.1363	0.02	mg/kg	11.08.17 05.25		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	68-120	11.08.17 05.25		
a,a,a-Trifluorotoluene	98-08-8	91	%	71-121	11.08.17 05.25		



Certificate of Analytical Results 567615

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **DS-4 WSW**

Matrix: **Soil**

Date Received: 11.07.17 09.05

Lab Sample Id: **567615-017**

Date Collected: 11.06.17 12.45

Sample Depth: 0

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: **MIT**

% Moisture:

Analyst: **MIT**

Date Prep: 11.07.17 13.20

Basis: **Wet Weight**

Seq Number: **3032644**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<4.01	4.01	mg/kg	11.08.17 05.25	U	1
Surrogate							
		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene		460-00-4	105	%	76-123	11.08.17 05.25	
a,a,a-Trifluorotoluene		98-08-8	112	%	69-120	11.08.17 05.25	

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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QC Summary 567615

TRC Solutions, Inc

Plains Smalls Federal

Analytical Method: Chloride by EPA 300

Seq Number:	3032651	Matrix:	Solid	Prep Method:	E300P							
MB Sample Id:	7633993-1-BLK	LCS Sample Id:	7633993-1-BKS	Date Prep:	11.07.17							
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<25.0	250	249	100	239	96	90-110	4	20	mg/kg	11.08.17 09:21	

Analytical Method: Chloride by EPA 300

Seq Number:	3032651	Matrix:	Soil	Prep Method:	E300P							
Parent Sample Id:	567615-001	MS Sample Id:	567615-001 S	Date Prep:	11.07.17							
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	219	250	346	51	385	66	80-120	11	20	mg/kg	11.08.17 10:11	X

Analytical Method: DRO-ORO By SW8015B

Seq Number:	3032645	Matrix:	Solid	Prep Method:	SW8015P							
MB Sample Id:	7633975-1-BLK	LCS Sample Id:	7633975-1-BKS	Date Prep:	11.07.17							
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Diesel Range Organics (DRO)	<25.0	100	96.0	96	103	103	63-139	7	20	mg/kg	11.07.17 13:43	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
Tricosane	142		89		110		65-144			%	11.07.17 13:43	
n-Triacontane	81		48		58		46-152			%	11.07.17 13:43	

Analytical Method: DRO-ORO By SW8015B

Seq Number:	3032645	Matrix:	Sludge	Prep Method:	SW8015P							
Parent Sample Id:	567537-001	MS Sample Id:	567537-001 S	Date Prep:	11.07.17							
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Diesel Range Organics (DRO)	213	100	260	47	285	72	63-139	9	20	mg/kg	11.07.17 15:21	X
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits			Units	Analysis Date	
Tricosane			127		142		65-144			%	11.07.17 15:21	
n-Triacontane			65		68		46-152			%	11.07.17 15:21	



QC Summary 567615

TRC Solutions, Inc

Plains Smalls Federal

Analytical Method: BTEX by EPA 8021B

Seq Number: 3032648

Matrix: Solid

Prep Method: SW5030B

Date Prep: 11.07.17

MB Sample Id: 7633982-1-BLK

LCS Sample Id: 7633982-1-BKS

LCSD Sample Id: 7633982-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.0200	2.00	1.70	85	1.71	86	55-120	1	20	mg/kg	11.07.17 17:19	
Toluene	<0.0200	2.00	1.77	89	1.79	90	77-120	1	20	mg/kg	11.07.17 17:19	
Ethylbenzene	<0.0200	2.00	1.78	89	1.82	91	77-120	2	20	mg/kg	11.07.17 17:19	
Xylenes, Total	0	6	5.39	90	5.49	92	71-133	0	20	mg/kg	11.07.17 17:19	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
4-Bromofluorobenzene	87		87		87		68-120			%	11.07.17 17:19	
a,a,a-Trifluorotoluene	82		81		79		71-121			%	11.07.17 17:19	

Analytical Method: BTEX by EPA 8021B

Seq Number: 3032648

Matrix: Soil

Prep Method: SW5030B

Date Prep: 11.07.17

Parent Sample Id: 567615-002

MS Sample Id: 567615-002 S

MSD Sample Id: 567615-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.0197	1.97	1.60	81	1.66	87	54-120	4	25	mg/kg	11.07.17 20:27	
Toluene	<0.0197	1.97	1.73	88	1.74	91	57-120	1	25	mg/kg	11.07.17 20:27	
Ethylbenzene	<0.0197	1.97	1.80	91	1.82	95	58-131	1	25	mg/kg	11.07.17 20:27	
Xylenes, Total	0	5.91	5.45	92	5.48	96	71-133	0	20	mg/kg	11.07.17 20:27	
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits			Units	Analysis Date	
4-Bromofluorobenzene			89		92		68-120			%	11.07.17 20:27	
a,a,a-Trifluorotoluene			87		98		71-121			%	11.07.17 20:27	

Analytical Method: TPH GRO by EPA 8015 Mod.

Seq Number: 3032644

Matrix: Solid

Prep Method: SW5030B

Date Prep: 11.07.17

MB Sample Id: 7633983-1-BLK

LCS Sample Id: 7633983-1-BKS

LCSD Sample Id: 7633983-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
TPH-GRO	<4.00	20.0	22.8	114	24.4	122	35-129	7	20	mg/kg	11.07.17 18:12	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
4-Bromofluorobenzene	106		111		110		76-123			%	11.07.17 18:12	
a,a,a-Trifluorotoluene	104		99		99		69-120			%	11.07.17 18:12	



QC Summary 567615

TRC Solutions, Inc

Plains Smalls Federal

Analytical Method: TPH GRO by EPA 8015 Mod.

Seq Number:	3032747	Matrix:	Solid	Prep Method:	SW5030B						
MB Sample Id:	7634038-1-BLK	LCS Sample Id:	7634038-1-BKS	Date Prep:	11.08.17						
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date
TPH-GRO	<4.00	20.0	23.0	115	25.5	128	35-129	10	20	mg/kg	11.08.17 14:11
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date	Flag	
4-Bromofluorobenzene	106		96		109		76-123	%	11.08.17 14:11		
a,a,a-Trifluorotoluene	100		83		93		69-120	%	11.08.17 14:11		

Analytical Method: TPH GRO by EPA 8015 Mod.

Seq Number:	3032644	Matrix:	Soil	Prep Method:	SW5030B						
Parent Sample Id:	567615-002	MS Sample Id:	567615-002 S	Date Prep:	11.07.17						
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date
TPH-GRO	<3.88	19.4	24.0	124	20.8	109	35-129	14	20	mg/kg	11.07.17 21:20
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date	Flag	
4-Bromofluorobenzene			123		121		76-123	%	11.07.17 21:20		
a,a,a-Trifluorotoluene			99		99		69-120	%	11.07.17 21:20		

Analytical Method: TPH GRO by EPA 8015 Mod.

Seq Number:	3032747	Matrix:	Soil	Prep Method:	SW5030B						
Parent Sample Id:	567615-013	MS Sample Id:	567615-013 S	Date Prep:	11.08.17						
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date
TPH-GRO	<3.80	19.0	24.5	129	24.0	125	35-129	2	20	mg/kg	11.08.17 16:53
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date	Flag	
4-Bromofluorobenzene			123		122		76-123	%	11.08.17 16:53		
a,a,a-Trifluorotoluene			96		101		69-120	%	11.08.17 16:53		

569615

CHAIN OF CUSTODY RECORD											
Office Location	Millard			Laboratory:	Xemco			ANALYSIS REQUESTED	LAB USE ONLY DUE DATE: 12/1/11		
Project Manager	Soil Survey			Address:	6701 Aberdeen Lubbock, Texas 79424			TEMP OF COOLER WHEN RECEIVED (°C)			
Sampler's Name	Soil Survey			Phone:	932-466-4450			Page <u>1</u> of <u>3</u>			
Project Number	TPH 2015 M			PO/SO #:	JJS			Sampler's Signature			
Matrix	Date	Time	Grab Comp	Identifying Marks of Sample(s)			No. Type of Containers				
Sediment	11:30	X	DS-1 Floor Q1	Start Depth	End Depth	4 oz Glass				Lab Sample ID	
	11:35	X	DS-1 WSW	1	1						
	11:40	X	DS-1 ESW								
	11:45	X	DS-1 SSW								
	11:50	X	DS-1 WSW								
	11:55	X	DS-2 Floor Q2	2	2						
	12:00	X	DS-2 ESW								
	12:05	X	DS-2 SSW								
	12:10	X	DS-2 WSW								
			DS-3 Floor Q1	19'	19'						
TURNAROUND TIME	<input type="checkbox"/> Normal			<input type="checkbox"/> 48-Hour Rush			<input checked="" type="checkbox"/> 24-Hour Rush			TRRP Laboratory Review Checklist	
Received by (Signature)	Date:	Time:	Received by (Signature)	Date:	Time:	Received by (Signature)	Date:	Time:	Received by (Signature)	Notes: <u>12/4/11</u>	
Relinquished by (Signature)	Date:	Time:	Received by (Signature)	Date:	Time:	Received by (Signature)	Date:	Time:	Received by (Signature)	e-mail results to: <u>Jewett@frustrations.com</u>	
Relinquished by (Signature)	Date:	Time:	Received by (Signature)	Date:	Time:	Received by (Signature)	Date:	Time:	Received by (Signature)		
Relinquished by (Signature)	Date:	Time:	Received by (Signature)	Date:	Time:	Received by (Signature)	Date:	Time:	Received by (Signature)		
Matrix	WW-Wastewater	W-Water	S-Soil	L-Liquid	A-Air Bag	C-Charcoal tube	Sl-Sludge				
Container	VGA-40 ml vial	N/G-Ambient Glass 1L	250 ml Glass wide mouth	P/O-Plastic or other							

567615

CHAIN OF CUSTODY RECORD									
Office Location	Millard			Laboratory: Xenco Address: 6701 Aberdeen Lubbock, Texas 79424	ANALYSIS REQUESTED	LAB USE ONLY DUE DATE:			
Project Manager Sampler's Name	Soil Lowry			Phone: 432-466-4450 Contact: _____ PO/SO #: _____	TEMP OF COOLER WHEN RECEIVED (°C)				
Project Number	Soil Lowry			Page 2 of 2					
Matrix	Date	Time	Grab Comp	Identifying Marks of Sample(s)	No. Type of Containers	4 oz Glass	Start Depth	End Depth	Lab Sample ID
Soil	11/11/15	12:15	X DS-3 NSSW		1				
	11/11/15	12:20	X DS-3 NSSW		1				
	11/11/15	12:25	X DS-3 NSSW		1				
	11:30		X DS-21 Floor @ 18'		1				
	12:35		X DS-21 NSSW		1				
	12:40		X DS-44 NSSW		1				
	12:45		X DS-21 NSSW		1				
TURNAROUND TIME									
Submitted by (Signature)	<u>Jeff Johnson</u>			<input type="checkbox"/> Normal	<input type="checkbox"/> 48-Hour Rush	<input checked="" type="checkbox"/> 24-Hour Rush	TRRP Laboratory Review Checklist		
Retained by (Signature)				Date: 11/11/15	Time: 9:05	Received by (Signature) <u>Jeff Johnson</u>	Date: 11/11/15	Time: 9:05	NOTES: 011515
Retained by (Signature)				Date: _____	Time: _____	Received by (Signature) _____	Date: _____	Time: _____	e-mail results to: <u>jlowry@louisiana.edu</u>
Retained by (Signature)				Date: _____	Time: _____	Received by (Signature) _____	Date: _____	Time: _____	
Matrix Container	W/W/Wastewater VOA-40ml/1L	W - Water	S - Soil	I - Liquid	A - Air Bag	C - Charcoal tube	Sl - Sludge		
			250ml = Glass wide mouth		P/O - Plastic or other				



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 11/07/2017 09:05:00 AM

Work Order #: 567615

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used : IR-3

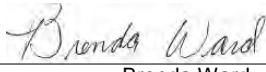
Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.7
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	No
#5 Custody Seals intact on sample bottles?	N/A
#6* Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

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

Analyst:

PH Device/Lot#:

Checklist completed by:


Brenda Ward
Brenda Ward

Date: 11/07/2017

Checklist reviewed by:


Mike Kimmel

Date: 11/08/2017



Certificate of Analysis Summary 567619

TRC Solutions, Inc, Midland, TX

Project Name: Plains Smalls Federal

Project Id: 8021
Contact: Joel Lowry
Project Location: Plains Smalls Federal

Date Received in Lab: Tue Nov-07-17 09:05 am
Report Date: 09-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested		Lab Id: 567619-001 Field Id: HP- In-Situ Depth: Matrix: SOIL Sampled: Nov-06-17 12:55					
BTEX by EPA 8021B		Extracted: Nov-07-17 13:20 Analyzed: Nov-08-17 07:13 Units/RL: mg/kg RL					
Benzene		<0.0962 0.0962					
Toluene		3.05 0.0962					
Ethylbenzene		7.24 0.0962					
Xylenes, Total		23.92 0.0962					
Total BTEX		34.21 0.0962					
DRO-ORO By SW8015B		Extracted: Nov-07-17 11:45 Analyzed: Nov-08-17 09:58 Units/RL: mg/kg RL					
Diesel Range Organics (DRO)		8980 250					
Oil Range Hydrocarbons (ORO)		1170 250					
TPH GRO by EPA 8015 Mod.		Extracted: Nov-08-17 12:45 Analyzed: Nov-08-17 19:08 Units/RL: mg/kg RL					
TPH-GRO		1670 196					

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.

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

Version: 1.%

Mike Kimmel
Client Services Manager

Analytical Report 567619

**for
TRC Solutions, Inc**

Project Manager: Joel Lowry

Plains Smalls Federal

09-NOV-17

Collected By: Client



6701 Aberdeen, Suite 9 Lubbock, TX 79424

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-17-23), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab code: TX01468):
Texas (T104704295-17-15), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-17-13)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)



09-NOV-17

Project Manager: **Joel Lowry**

TRC Solutions, Inc

2057 Commerce

Midland, TX 79703

Reference: XENCO Report No(s): **567619**

Plains Smalls Federal

Project Address: Plains Smalls Federal

Joel Lowry:

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(s) 567619. 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. 567619 will be filed for 45 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,

A handwritten signature in black ink, appearing to read "Mike Kimmel".

Mike Kimmel

Client Services Manager

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Sample Cross Reference 567619

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
HP- In-Situ	S	11-06-17 12:55		567619-001



CASE NARRATIVE

Client Name: TRC Solutions, Inc
Project Name: Plains Smalls Federal

Project ID: 8021
Work Order Number(s): 567619

Report Date: 09-NOV-17
Date Received: 11/07/2017

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3032645 DRO-ORO By SW8015B

Surrogate Tricosane, Surrogate n-Triacontane recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 567619-001.

Batch: LBA-3032648 BTEX by EPA 8021B

Sample 567619-001 was diluted due to excessive hydrocarbons beyond xylene.



Certificate of Analytical Results 567619

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **HP-In-Situ**

Matrix: **Soil**

Date Received: 11.07.17 09.05

Lab Sample Id: **567619-001**

Date Collected: **11.06.17 12.55**

Analytical Method: **DRO-ORO By SW8015B**

Prep Method: **SW8015P**

Tech: **PGM**

% Moisture:

Analyst: **PGM**

Date Prep: **11.07.17 11.45**

Basis: **Wet Weight**

Seq Number: **3032645**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	8980	250	mg/kg	11.08.17 09.58		10
Oil Range Hydrocarbons (ORO)	PHCG2835	1170	250	mg/kg	11.08.17 09.58		10
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
Tricosane	638-67-5	3390	%	65-144	11.08.17 09.58	**	
n-Triacontane	638-68-6	1680	%	46-152	11.08.17 09.58	**	

Analytical Method: **BTEX by EPA 8021B**

Prep Method: **SW5030B**

Tech: **MIT**

% Moisture:

Analyst: **MIT**

Date Prep: **11.07.17 13.20**

Basis: **Wet Weight**

Seq Number: **3032648**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0962	0.0962	mg/kg	11.08.17 07.13	U	5
Toluene	108-88-3	3.05	0.0962	mg/kg	11.08.17 07.13		5
Ethylbenzene	100-41-4	7.24	0.0962	mg/kg	11.08.17 07.13		5
Xylenes, Total	1330-20-7	23.92	0.0962	mg/kg	11.08.17 07.13		5
Total BTEX		34.21	0.0962	mg/kg	11.08.17 07.13		5
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	109	%	68-120	11.08.17 07.13		
a,a,a-Trifluorotoluene	98-08-8	85	%	71-121	11.08.17 07.13		



Certificate of Analytical Results 567619

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **HP-In-Situ**

Matrix: **Soil**

Date Received: 11.07.17 09.05

Lab Sample Id: **567619-001**

Date Collected: **11.06.17 12.55**

Analytical Method: **TPH GRO by EPA 8015 Mod.**

Prep Method: **SW5030B**

Tech: **MIT**

% Moisture:

Analyst: **MIT**

Date Prep: **11.08.17 12.45**

Basis: **Wet Weight**

Seq Number: **3032747**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	1670	196	mg/kg	11.08.17 19.08		50
Surrogate			% Recovery				
4-Bromofluorobenzene	460-00-4		106	%	76-123	11.08.17 19.08	
a,a,a-Trifluorotoluene	98-08-8		97	%	69-120	11.08.17 19.08	

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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 5332 Blackberry Drive, San Antonio TX 78238
 1211 W Florida Ave, Midland, TX 79701
 2525 W. Huntington Dr. - Suite 102, Tempe AZ 85282

Phone	Fax
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(214) 902 0300	(214) 351-9139
(210) 509-3334	(210) 509-3335
(432) 563-1800	(432) 563-1713
(602) 437-0330	



QC Summary 567619

TRC Solutions, Inc Plains Smalls Federal

Analytical Method: DRO-ORO By SW8015B

Seq Number:	3032645	Matrix:	Solid	Prep Method:	SW8015P							
MB Sample Id:	7633975-1-BLK	LCS Sample Id:	7633975-1-BKS	Date Prep:	11.07.17							
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Diesel Range Organics (DRO)	<25.0	100	96.0	96	103	103	63-139	7	20	mg/kg	11.07.17 13:43	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
Tricosane	142		89		110		65-144			%	11.07.17 13:43	
n-Triacontane	81		48		58		46-152			%	11.07.17 13:43	

Analytical Method: DRO-ORO By SW8015B

Seq Number:	3032645	Matrix:	Sludge	Prep Method:	SW8015P							
Parent Sample Id:	567537-001	MS Sample Id:	567537-001 S	Date Prep:	11.07.17							
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Diesel Range Organics (DRO)	213	100	260	47	285	72	63-139	9	20	mg/kg	11.07.17 15:21	X
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits			Units	Analysis Date	
Tricosane			127		142		65-144			%	11.07.17 15:21	
n-Triacontane			65		68		46-152			%	11.07.17 15:21	

Analytical Method: BTEX by EPA 8021B

Seq Number:	3032648	Matrix:	Solid	Prep Method:	SW5030B							
MB Sample Id:	7633982-1-BLK	LCS Sample Id:	7633982-1-BKS	Date Prep:	11.07.17							
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.0200	2.00	1.70	85	1.71	86	55-120	1	20	mg/kg	11.07.17 17:19	
Toluene	<0.0200	2.00	1.77	89	1.79	90	77-120	1	20	mg/kg	11.07.17 17:19	
Ethylbenzene	<0.0200	2.00	1.78	89	1.82	91	77-120	2	20	mg/kg	11.07.17 17:19	
Xylenes, Total	0	6	5.39	90	5.49	92	71-133	0	20	mg/kg	11.07.17 17:19	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
4-Bromofluorobenzene	87		87		87		68-120			%	11.07.17 17:19	
a,a,a-Trifluorotoluene	82		81		79		71-121			%	11.07.17 17:19	



QC Summary 567619

TRC Solutions, Inc

Plains Smalls Federal

Analytical Method: BTEX by EPA 8021B

Seq Number: 3032648

Parent Sample Id: 567615-002

Matrix: Soil

Prep Method: SW5030B

Date Prep: 11.07.17

MSD Sample Id: 567615-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.0197	1.97	1.60	81	1.66	87	54-120	4	25	mg/kg	11.07.17 20:27	
Toluene	<0.0197	1.97	1.73	88	1.74	91	57-120	1	25	mg/kg	11.07.17 20:27	
Ethylbenzene	<0.0197	1.97	1.80	91	1.82	95	58-131	1	25	mg/kg	11.07.17 20:27	
Xylenes, Total	0	5.91	5.45	92	5.48	96	71-133	0	20	mg/kg	11.07.17 20:27	
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag				Units	Analysis Date	
4-Bromofluorobenzene			89		92				68-120	%	11.07.17 20:27	
a,a,a-Trifluorotoluene			87		98				71-121	%	11.07.17 20:27	

Analytical Method: TPH GRO by EPA 8015 Mod.

Seq Number: 3032747

MB Sample Id: 7634038-1-BLK

Matrix: Solid

Prep Method: SW5030B

Date Prep: 11.08.17

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
TPH-GRO	<4.00	20.0	23.0	115	25.5	128	35-129	10	20	mg/kg	11.08.17 14:11	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag				Units	Analysis Date	
4-Bromofluorobenzene	106		96		109				76-123	%	11.08.17 14:11	
a,a,a-Trifluorotoluene	100		83		93				69-120	%	11.08.17 14:11	

Analytical Method: TPH GRO by EPA 8015 Mod.

Seq Number: 3032747

Parent Sample Id: 567615-013

Matrix: Soil

Prep Method: SW5030B

Date Prep: 11.08.17

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
TPH-GRO	<3.80	19.0	24.5	129	24.0	125	35-129	2	20	mg/kg	11.08.17 16:53	
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag				Units	Analysis Date	
4-Bromofluorobenzene			123		122				76-123	%	11.08.17 16:53	
a,a,a-Trifluorotoluene			96		101				69-120	%	11.08.17 16:53	

567619

CHAIN OF CUSTODY RECORD

Office Location	Laboratory: Xenco Address: 6701 Aberdeen Lubbock, Texas 79424			ANALYSIS REQUESTED	LAB USE ONLY DUE DATE:
Project Manager	Phone: 432-446-4450 Contact: _____			TEMP OF COOLER WHEN RECEIVED (°C)	7.31.21 -0.1
Sampler's Name	PO/SO #: _____ Sampler's Signature: <i>Sue Lowry</i>			Page ____ of ____	
Project Number	Project Name: <i>Plains Smalls Field</i>			No. Type of Containers	
Matrix	Date	Time	Grab Comp	Identifying Marks of Sample(s)	
M	11/6/17	12:55	X HP-Tn-Sidu	4 oz Glass	
				Start Depth	
				End Depth	
				Lab Sample ID	
TURNAROUND TIME					
<input type="checkbox"/> Normal	<input type="checkbox"/> 48-Hour Rush		TRRP Laboratory Review Checklist		
Relinquished by (Signature): <i>John J. Brown</i>	Date: 11-7-17	Time: 01:05	Received by (Signature): <i>He</i>	Date: 11-7-17	Time: 01:05
Relinquished by (Signature): <i>John J. Brown</i>	Date:	Time:	Received by (Signature): <i>He</i>	Date:	Time:
Relinquished by (Signature): <i>John J. Brown</i>	Date:	Time:	Received by (Signature): <i>He</i>	Date:	Time:
Relinquished by (Signature): <i>John J. Brown</i>	Date:	Time:	Received by (Signature): <i>He</i>	Date:	Time:
Matrix: WW-Water/soil Container: VOA - 40 ml vial	W - Water A/G - Amber Glass 11.	S - Soil	L - Liquid 250 ml - Glass wide mouth	A - Air Bag P/O - Plastic or other	C - Charcoal tube Sl - Sludge



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In



Client: TRC Solutions, Inc

Date/ Time Received: 11/07/2017 09:05:00 AM

Work Order #: 567619

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used : IR-3

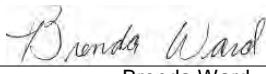
Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.2
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	No
#5 Custody Seals intact on sample bottles?	N/A
#6* Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

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

Analyst:

PH Device/Lot#:

Checklist completed by:


Brenda Ward
Brenda Ward

Date: 11/07/2017

Checklist reviewed by:


Mike Kimmel

Date: 11/08/2017



Certificate of Analysis Summary 570586

TRC Solutions, Inc, Midland, TX

Project Name: Alpha A-2 Main



Project Id:

Contact: Joel Lowry

Project Location: Lea Co, NM

Date Received in Lab: Thu Dec-07-17 04:21 pm

Report Date: 02-JAN-18

Project Manager: Kelsey Brooks

Analysis Requested		<i>Lab Id:</i>	570586-001	570586-002	570586-003			
		<i>Field Id:</i>	PS-2 @ 6'	12/6 HP In-Situ	HP In-Situ @ 3'			
		<i>Depth:</i>	6'- In	6"- In	3'- In			
		<i>Matrix:</i>	SOIL	SOIL	SOIL			
		<i>Sampled:</i>	Dec-06-17 12:05	Dec-06-17 12:10	Dec-06-17 12:15			
Inorganic Anions by EPA 300/300.1		<i>Extracted:</i>	Dec-11-17 16:20					
		<i>Analyzed:</i>	Dec-11-17 19:18					
		<i>Units/RL:</i>	mg/kg	RL				
Chloride			30.6	4.92				
TPH by SW8015 Mod		<i>Extracted:</i>		Dec-18-17 16:00	Dec-18-17 16:00			
		<i>Analyzed:</i>		Dec-19-17 01:13	Dec-19-17 01:35			
		<i>Units/RL:</i>	mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)				272	74.9	<14.9	14.9	
Diesel Range Organics (DRO)				8890	74.9	<14.9	14.9	
Oil Range Hydrocarbons (ORO)				1980	74.9	<14.9	14.9	
Total TPH				11142	74.9	<14.9	14.9	

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.

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

Mike Kimmel
Client Services Manager

Analytical Report 570586

**for
TRC Solutions, Inc**

Project Manager: Joel Lowry

Alpha A-2 Main

02-JAN-18

Collected By: Client



1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-17-23), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab code: TX01468):
Texas (T104704295-17-15), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-17-13)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

02-JAN-18

Project Manager: **Joel Lowry**

TRC Solutions, Inc

2057 Commerce

Midland, TX 79703

Reference: XENCO Report No(s): **570586**

Alpha A-2 Main

Project Address: Lea Co, NM

Joel Lowry:

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(s) 570586. 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. 570586 will be filed for 45 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,



Mike Kimmel

Client Services Manager

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TRC Solutions, Inc, Midland, TX

Alpha A-2 Main

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PS-2 @ 6'	S	12-06-17 12:05	6' In	570586-001
12/6 HP In-Situ	S	12-06-17 12:10	6" In	570586-002
HP In-Situ @ 3'	S	12-06-17 12:15	3' In	570586-003



CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: Alpha A-2 Main

Project ID:

Work Order Number(s): 570586

Report Date: 02-JAN-18

Date Received: 12/07/2017

Sample receipt non conformances and comments:

12/16/17: Per Joel Lowry sample #2 and #3 possibly are misslabeled. Check in lab and re-run to confirm.

12/20/17: Report revision for above.

12/21/17: Report TPH 8015 Ext per Joel Lowry on revised report.

01/02/18: Revision to Project name per Joel.

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 570586



TRC Solutions, Inc, Midland, TX

Alpha A-2 Main

Sample Id: PS-2 @ 6'

Matrix: Soil

Date Received: 12.07.17 16.21

Lab Sample Id: 570586-001

Date Collected: 12.06.17 12.05

Sample Depth: 6' In

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: LRI

% Moisture:

Analyst: OJS

Date Prep: 12.11.17 16.20

Basis: Wet Weight

Seq Number: 3035612

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	30.6	4.92	mg/kg	12.11.17 19.18		1



Certificate of Analytical Results 570586



TRC Solutions, Inc, Midland, TX

Alpha A-2 Main

Sample Id: **12/6 HP In-Situ** Matrix: **Soil** Date Received: 12.07.17 16.21
Lab Sample Id: **570586-002** Date Collected: 12.06.17 12.10 Sample Depth: 6" In
Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P
Tech: **ARM** % Moisture:
Analyst: **ARM** Date Prep: **12.18.17 16.00** Basis: **Wet Weight**
Seq Number: **3036665**

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	272	74.9	mg/kg	12.19.17 01.13		5
Diesel Range Organics (DRO)	C10C28DRO	8890	74.9	mg/kg	12.19.17 01.13		5
Oil Range Hydrocarbons (ORO)	PHCG2835	1980	74.9	mg/kg	12.19.17 01.13		5
Total TPH	PHC635	11142	74.9	mg/kg	12.19.17 01.13		5
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane		111-85-3	98	%	70-135	12.19.17 01.13	
o-Terphenyl		84-15-1	97	%	70-135	12.19.17 01.13	



Certificate of Analytical Results 570586



TRC Solutions, Inc, Midland, TX

Alpha A-2 Main

Sample Id: **HP In-Situ @ 3'**

Matrix: Soil

Date Received: 12.07.17 16.21

Lab Sample Id: 570586-003

Date Collected: 12.06.17 12.15

Sample Depth: 3' In

Analytical Method: TPH by SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 12.18.17 16.00

Basis: Wet Weight

Seq Number: 3036665

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	12.19.17 01.35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	12.19.17 01.35	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	12.19.17 01.35	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	12.19.17 01.35	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane		111-85-3	91	%	70-135	12.19.17 01.35	
o-Terphenyl		84-15-1	93	%	70-135	12.19.17 01.35	



- 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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 1211 W Florida Ave, Midland, TX 79701
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Phone	Fax
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(214) 902 0300	(214) 351-9139
(210) 509-3334	(210) 509-3335
(432) 563-1800	(432) 563-1713
(602) 437-0330	



TRC Solutions, Inc

Alpha A-2 Main

Analytical Method: Inorganic Anions by EPA 300/300.1

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag	Prep Method:
													E300P
Chloride	<5.00	250	251	100	255	102	90-110	2	20	mg/kg	12.11.17 17:19		

Analytical Method: Inorganic Anions by EPA 300/300.1

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag	Prep Method:
													E300P
Chloride	5.89	247	265	105	263	104	90-110	1	20	mg/kg	12.11.17 19:00		

Analytical Method: Inorganic Anions by EPA 300/300.1

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag	Prep Method:
													E300P
Chloride	71.9	247	331	105	327	103	90-110	1	20	mg/kg	12.11.17 17:37		

Analytical Method: TPH by SW8015 Mod

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag	Prep Method:
													TX1005P
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	1050	105	944	94	70-135	11	35	mg/kg	12.18.17 17:44		
Diesel Range Organics (DRO)	<15.0	1000	1070	107	949	95	70-135	12	35	mg/kg	12.18.17 17:44		
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units		Analysis Date	
1-Chlorooctane	92		106		91		70-135			%	12.18.17 17:44		
o-Terphenyl	97		111		96		70-135			%	12.18.17 17:44		

MS/MSD Percent Recovery
 Relative Percent Difference
 LCS/LCSD Recovery

[D] = 100*(C-A) / B
 RPD = 200* | (C-E) / (C+E) |
 [D] = 100 * (C) / [B]

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec

CHAIN OF CUSTODY

Page 1 Of 1

San Antonio, Texas (210-569-3334)

Phoenix, Arizona (480-355-0900)

Midland, Texas (432-704-5251)

www.xenco.com

Client / Reporting Information		Project Information		Analytical Information		Matrix Codes	
Company Name / Branch: TRC Environmental	Project Name/Number: A-Z Wauia	Project Location: Lea Co., NM					
Company Address: 205 Commerce Drive Midland, TX 79703	Phone No:	Email: lowry@trcsolutions.com					
Project Contact: Joel Lowry							
Sampler's Name Joel Lowry							
No.	Field ID / Point of Collection	Collection		Number of preserved bottles			
	Sample Depth	Date	Time	Matrix	# of bottles	HCl	NaOH/Zn Acetate
1	PS-2 @ 6'	12/6/17	12:05	S	1		HNO3
2	12/6 HP In-Situ	6"	12:10	S	1		H2SO4
3	HP In-Situ @ 3'	3'	17:15	S	1		NaOH
4							NaHSO4
5							MEOH
6							NONE
7							
8							
9							
10							
Turnaround Time (Business days)		Date Deliverable Information		Notes:		Field Comments:	
<input type="checkbox"/> Same Day TAT		<input type="checkbox"/> 6 Day TAT <input type="checkbox"/> 7 Day TAT		<input type="checkbox"/> Level II Std QC <input type="checkbox"/> Level III Std QC+ Forms		<input type="checkbox"/> Level IV (Full Data Pkg / raw data) <input type="checkbox"/> TRRP Level IV	
<input type="checkbox"/> Next Day EMERGENCY		<input type="checkbox"/> 2 Day EMERGENCY		<input checked="" type="checkbox"/> Contract TAT <input type="checkbox"/> Level 3 (CLP Forms) <input type="checkbox"/> UST / RG -411		<input type="checkbox"/> TRRP Checklist	
<input type="checkbox"/> 3 Day EMERGENCY							
TAT Starts Day received by Lab, if received by 5:00 pm							
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY							
Relinquished by Sampler: Joel Lowry		Received By: Brittany Cox	Relinquished By: Brittany Cox	Date Time: 12/7 4:21	Received By: Brittany Cox	Date Time: 12/7 4:21	Received By:
Relinquished by: Joel Lowry		Received By: Brittany Cox	Relinquished By: Brittany Cox	Date Time: 12/8 11:10	Received By: Brittany Cox	Date Time: 12/8 11:10	Received By:
Relinquished by: Joel Lowry		Received By: Brittany Cox	Relinquished By: Brittany Cox	Date Time: 12/8 11:10	Received By: Brittany Cox	Date Time: 12/8 11:10	Received By:
FED-EX / UPS: Tracking #							
Preserved where applicable		On Ice		Cooler Temp.		Thermo. Cont. Factor	
<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the Client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at \$5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

CHAIN OF CUSTODY

Page 1 Of 1

 San Antonio, Texas (210-509-3334)
 Midland, Texas (432-704-5251)
www.xenco.com

Phoenix, Arizona (480-355-9900)

Xenco Quote #	Xenco Job #	510586

Client / Reporting Information		Project Information		Analytical Information		Matrix Codes	
Company Name / Branch: TRC Environmental	Project Name/Number: Midland J-Z Main	Project Location: Len CO, NM	Phone No.:	Invoice To: Plains Pipeline Co. Inc. W. Bryant	Invoice#: 2017-146		
Company Address: Midland, TX 79703 Email: llowry@trcsolutions.com	Project Contact: Joel Lowry	Sampler's Name: Joel Lowry					
No.	Field ID / Point of Collection	Collection		Number of preserved bottles			
1	PS-2 P61	6'	12/16/17	12:05	5	1	
2	1714 HP In-Situ	6"	12/10	1	1	1	X
3	HP In-Situ P31	3'	17-15	4	1	1	X
4							
5							
6							
7							
8							
9							
10							
Turnaround Time (Business days)		Data Deliverable Information				Notes:	
<input type="checkbox"/> Same Day TAT		<input type="checkbox"/> Level II Std QC <input type="checkbox"/> Level IV (Full Data Pkg /raw data)				Email Camille Bryant and Joel Lowry	
<input type="checkbox"/> Next Day EMERGENCY		<input type="checkbox"/> Level III Std QC+ Forms <input type="checkbox"/> TRRP Level IV				Temp: 3.5°C IR ID:R-8	
<input type="checkbox"/> 2 Day EMERGENCY		<input checked="" type="checkbox"/> Contract TAT <input type="checkbox"/> Level 3 (CLP Forms) <input type="checkbox"/> USP/NG-411				CF:(0.6- -0.2°C) (6.23- +0.2°C)	
<input type="checkbox"/> 3 Day EMERGENCY		<input type="checkbox"/> TRRP Checklist				FED-EX Corrected Temp: 3.3°C	
TAT Starts Day received by Lab, if received by 5:00 pm							
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY							
Relinquished by Sampler: 1. <i>Joel Lowry</i> Refurbished by: 3. <i>Joel Lowry</i>		Received By: 1. <i>Brittany Cox</i>	Date Time: 12/17 10:10	Relinquished By: 2. <i>Brittany Cox</i>	Date Time: 12/17 4:21	Received By: 1. <i>Muneeb Mith</i>	On Ice
Relinquished by: 5. <i>Joel Lowry</i>		Received By: 2. <i>Brittany Cox</i>	Date Time: 12/17 4:21	Relinquished By: 3. <i>Brittany Cox</i>	Date Time: 12/17 4:21	Received By: 4. <i>Muneeb Mith</i>	Cooler Temp. 0.0
		Custody Seal #	Preserved where applicable				Thermo. Corr. Factor

Notice: Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples, and shall not assume any responsibility for any losses or expenses incurred by the Client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at \$5 per sample. These terms will be enforced unless previously negotiated under a duly executed client contract.



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In



Client: TRC Solutions, Inc

Date/ Time Received: 12/07/2017 04:21:00 PM

Work Order #: 570586

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.3
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	No
#5 Custody Seals intact on sample bottles?	N/A
#6* Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

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

Analyst:

PH Device/Lot#:

Checklist completed by:

Connie Hernandez

Date: 12/08/2017

Checklist reviewed by:

Mike Kimmel

Date: 12/16/2017



Certificate of Analysis Summary 567618

TRC Solutions, Inc, Midland, TX

Project Name: Plains Smalls Federal

Project Id: 8021
Contact: Joel Lowry
Project Location: NM

Date Received in Lab: Tue Nov-07-17 09:05 am
Report Date: 10-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested		<i>Lab Id:</i>	567618-001					
		<i>Field Id:</i>	WCH-1					
		<i>Depth:</i>						
		<i>Matrix:</i>	SOIL					
		<i>Sampled:</i>	Nov-06-17 12:50					
TCLP BTEX by SW 8260B SUB: TX104704215-17-23		<i>Extracted:</i>	Nov-09-17 14:00					
		<i>Analyzed:</i>	Nov-09-17 16:57					
		<i>Units/RL:</i>	mg/L RL					
Benzene		<0.00500	0.00500					
Toluene		0.0140	0.00500					
Ethylbenzene		0.00665	0.00500					
m,p-Xylenes		0.0168	0.0100					
o-Xylene		0.0110	0.00500					
TCLP Mercury by SW-846 1311/7470A SUB: TX104704215-17-23		<i>Extracted:</i>	Nov-09-17 13:10					
		<i>Analyzed:</i>	Nov-09-17 17:43					
		<i>Units/RL:</i>	mg/L RL					
Mercury		<0.000200	0.000200					
TCLP Metals by SW 1311/6010B SUB: TX104704215-17-23		<i>Extracted:</i>	Nov-09-17 10:00					
		<i>Analyzed:</i>	Nov-09-17 15:20					
		<i>Units/RL:</i>	mg/L RL					
Arsenic		<0.0500	0.0500					
Barium		1.39	0.0500					
Cadmium		<0.0250	0.0250					
Chromium		<0.0500	0.0500					
Lead		<0.0500	0.0500					
Selenium		<0.100	0.100					
Silver		<0.100	0.100					

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Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Version: 1.%

Mike Kimmel
Client Services Manager



Certificate of Analysis Summary 567618

TRC Solutions, Inc, Midland, TX

Project Name: Plains Smalls Federal

Project Id: 8021

Contact: Joel Lowry

Project Location: NM

Date Received in Lab: Tue Nov-07-17 09:05 am

Report Date: 10-NOV-17

Project Manager: Kelsey Brooks

Analysis Requested		Lab Id: 567618-001 Field Id: WCH-1 Depth: Matrix: SOIL Sampled: Nov-06-17 12:50					
DRO-ORO By SW8015B		Extracted: Nov-07-17 11:45 Analyzed: Nov-08-17 09:25 Units/RL: mg/kg RL					
Diesel Range Organics (DRO)		5980 250					
Oil Range Hydrocarbons (ORO)		1110 250					
Flash Point (CC) SW-846 1010 SUB: TX104704215-17-23		Extracted: Analyzed: Nov-08-17 12:12 Units/RL: Deg F RL					
Flash Point		>180					

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Certificate of Analysis Summary 567618

TRC Solutions, Inc, Midland, TX

Project Name: Plains Smalls Federal

Project Id: 8021
Contact: Joel Lowry
Project Location: NM

Date Received in Lab: Tue Nov-07-17 09:05 am
Report Date: 10-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested	<i>Lab Id:</i> 567618-001	<i>Field Id:</i> WCH-1					
Gamma Spectroscopy by E901.1 SUB: T104704400-17-13	<i>Extracted:</i> Nov-07-17 18:00	<i>Analyzed:</i> pCi/g	<i>Units/RL:</i> RL				
Thorium-228	<						
Thorium-230	<						
Radium-226	<						
Radium-228	<						
Actinium 228	<						
Lead-210	<						
Iron-59	<						
Iron-55	<						
Cobalt-60	<						
Cesium-137	<						
Radium-224	<						
Ruthenium-103	<						
Ruthenium-106	<						
Strontium 85	<						
Thorium-234	<						
Uranium-234	<						
Uranium-235	<						
Radium-223	<						
Protactinium 234	<						
Protactinium 231	<						
Niobium-95	<						
Niobium-94	<						
Cesium-134	<						
Zirconium-95	<						

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Certificate of Analysis Summary 567618

TRC Solutions, Inc, Midland, TX

Project Name: Plains Smalls Federal

Project Id: 8021
Contact: Joel Lowry
Project Location: NM

Date Received in Lab: Tue Nov-07-17 09:05 am
Report Date: 10-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested	<i>Lab Id:</i> 567618-001	<i>Field Id:</i> WCH-1					
Gamma Spectroscopy by E901.1 SUB: T104704400-17-13	<i>Extracted:</i> Nov-07-17 18:00	<i>Analyzed:</i> pCi/g	<i>Units/RL:</i> RL				
Germanium-68	<						
Chromium-51	<						
Zinc-65	<						
Tin 113	<						
Sodium-22	<						
Silver-110m (metastable)	<						
Cesium-136	<						
Radium-222	<						
Francium-223	<						
Protactinium 234M	<						
Antimony-124	<						
Antimony-125	<						
Barium-133	<						
Beryllium-7	<						
Bismuth-214	<						
Cadmium-109	<						
Cobalt-57	<						
Cobalt-58	<						
Iodine-131	<						
Lead-214	<						
Manganese-54	<						
Silver 108 (metastable)	<						
Thorium-227	<0.0000100 0.0000100						
Yttrium 88	<0.0000100 0.0000100						

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Client Services Manager



Certificate of Analysis Summary 567618

TRC Solutions, Inc, Midland, TX

Project Name: Plains Smalls Federal

Project Id: 8021
Contact: Joel Lowry
Project Location: NM

Date Received in Lab: Tue Nov-07-17 09:05 am
Report Date: 10-NOV-17
Project Manager: Kelsey Brooks

Analysis Requested		Lab Id:	567618-001					
		Field Id:	WCH-1					
		Depth:						
		Matrix:	SOIL					
		Sampled:	Nov-06-17 12:50					
Gamma Spectroscopy by E901.1 SUB: T104704400-17-13		Extracted:						
		Analyzed:	Nov-07-17 18:00					
		Units/RL:	pCi/g	RL				
Americium-241		<						
Potassium-40		<						
Thorium-232		<						
Paint Filter Liquids Test by SW-9095 SUB: TX104704215-17-23		Extracted:						
		Analyzed:	Nov-08-17 11:02					
		Units/RL:	PA/100mL	RL				
Paint Filter		Pass	1.0					
Reactive Cyanide by SW 846-Section 7.3.3 SUB: TX104704215-17-23		Extracted:	Nov-08-17 10:00					
		Analyzed:	Nov-08-17 12:19					
		Units/RL:	mg/kg	RL				
Cyanide		<0.0250	0.0250					
Reactive Sulfide by SW9034 SUB: TX104704215-17-23		Extracted:						
		Analyzed:	Nov-08-17 13:36					
		Units/RL:	mg/kg	RL				
Reactive Sulfide		<25.0	25.0					
Soil pH by EPA 9045C SUB: TX104704215-17-23		Extracted:						
		Analyzed:	Nov-08-17 13:00					
		Units/RL:	SU	RL				
pH		8.28						

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Client Services Manager



Certificate of Analysis Summary 567618

TRC Solutions, Inc, Midland, TX

Project Name: Plains Smalls Federal

Project Id: 8021

Contact: Joel Lowry

Project Location: NM

Date Received in Lab: Tue Nov-07-17 09:05 am

Report Date: 10-NOV-17

Project Manager: Kelsey Brooks

Analysis Requested	<i>Lab Id:</i> 567618-001 <i>Field Id:</i> WCH-1 <i>Depth:</i> <i>Matrix:</i> SOIL <i>Sampled:</i> Nov-06-17 12:50						
TPH GRO by EPA 8015 Mod.	<i>Extracted:</i> Nov-07-17 13:20 <i>Analyzed:</i> Nov-08-17 06:46 <i>Units/RL:</i> mg/kg RL						
TPH-GRO	127	19.3					

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Mike Kimmel
Client Services Manager

Analytical Report 567618

**for
TRC Solutions, Inc**

Project Manager: Joel Lowry

Plains Smalls Federal

10-NOV-17

Collected By: Client



6701 Aberdeen, Suite 9 Lubbock, TX 79424

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-17-23), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab code: TX01468):
Texas (T104704295-17-15), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-17-13)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)



10-NOV-17

Project Manager: **Joel Lowry**

TRC Solutions, Inc

2057 Commerce

Midland, TX 79703

Reference: XENCO Report No(s): **567618**

Plains Smalls Federal

Project Address: NM

Joel Lowry:

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(s) 567618. 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. 567618 will be filed for 45 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,

A handwritten signature in black ink, appearing to read "Mike Kimmel".

Mike Kimmel

Client Services Manager

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

Certified and approved by numerous States and Agencies.

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Sample Cross Reference 567618

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
WCH-1	S	11-06-17 12:50		567618-001



CASE NARRATIVE

*Client Name: TRC Solutions, Inc
Project Name: Plains Smalls Federal*

Project ID: 8021
Work Order Number(s): 567618

Report Date: 10-NOV-17
Date Received: 11/07/2017

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3032645 DRO-ORO By SW8015B

Surrogate Tricosane, Surrogate n-Triacontane recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 567618-001.



Certificate of Analytical Results 567618

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **WCH-1**
Lab Sample Id: 567618-001

Matrix: Soil
Date Collected: 11.06.17 12.50

Date Received: 11.07.17 09.05

Analytical Method: Reactive Cyanide by SW 846-Section7.3.3

Prep Method: SW9012P

Tech: KCS

% Moisture:

Analyst: KCS

Date Prep: 11.08.17 10.00

Basis: Wet Weight

Seq Number: 3032668

SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Cyanide	57-12-5	<0.0250	0.0250	mg/kg	11.08.17 12.19	U	5

Analytical Method: Flash Point (CC) SW-846 1010

% Moisture:

Tech: YAV

Basis: Wet Weight

Analyst: YAV

SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Flash Point		>180		Deg F	11.08.17 12.12	U	1

Analytical Method: Paint Filter Liquids Test by SW-9095

% Moisture:

Tech: YAV

Basis: Wet Weight

Analyst: YAV

SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Paint Filter	PAIFILTER	Pass	1.0	PA/100mL	11.08.17 11.02		1

Analytical Method: Reactive Sulfide by SW9034

% Moisture:

Tech: YAV

Basis: Wet Weight

Analyst: YAV

SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Reactive Sulfide	18496-25-8	<25.0	25.0	mg/kg	11.08.17 13.36	U	1



Certificate of Analytical Results 567618

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **WCH-1**
Lab Sample Id: 567618-001

Matrix: Soil
Date Collected: 11.06.17 12.50

Date Received: 11.07.17 09.05

Analytical Method: Soil pH by EPA 9045C

Tech: MJP

% Moisture:

Analyst: MJP

Basis: Wet Weight

Seq Number: 3032686

SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
pH	12408-02-5	8.28		SU	11.08.17 13.00		1

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: PGM

% Moisture:

Analyst: PGM

Date Prep: 11.07.17 11.45

Basis: Wet Weight

Seq Number: 3032645

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	5980	250	mg/kg	11.08.17 09.25		10
Oil Range Hydrocarbons (ORO)	PHCG2835	1110	250	mg/kg	11.08.17 09.25		10
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
Tricosane	638-67-5	2940	%	65-144	11.08.17 09.25	**	
n-Triacontane	638-68-6	1030	%	46-152	11.08.17 09.25	**	



Certificate of Analytical Results 567618

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **WCH-1**

Lab Sample Id: 567618-001

Matrix: Soil

Date Received: 11.07.17 09.05

Date Collected: 11.06.17 12.50

Analytical Method: Gamma Spectroscopy by E901.1

Tech: JUM

% Moisture:

Analyst: ALJ

Basis: Wet Weight

Seq Number: 3032702

SUB: T104704400-17-13

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Thorium-228	14274-82-9	<			pCi/g	11.07.17 18.00	U	1
Thorium-230	14269-63-7	<			pCi/g	11.07.17 18.00	U	1
Radium-226	13982-63-3	<			pCi/g	11.07.17 18.00	U	1
Radium-228	15262-20-1	<			pCi/g	11.07.17 18.00	U	1
Actinium 228	14331-83-0	<			pCi/g	11.07.17 18.00	U	1
Lead-210	14255-04-0	<			pCi/g	11.07.17 18.00	U	1
Iron-59	7439-89-6	<			pCi/g	11.07.17 18.00	U	1
Iron-55	14681-59-5	<			pCi/g	11.07.17 18.00	U	1
Cobalt-60		<			pCi/g	11.07.17 18.00	U	1
Cesium-137	7440-46-2	<			pCi/g	11.07.17 18.00	U	1
Antimony-124		<			pCi/g	11.07.17 18.00	U	1
Antimony-125		<			pCi/g	11.07.17 18.00	U	1
Barium-133	13981-41-4	<			pCi/g	11.07.17 18.00	U	1
Beryllium-7	137-10-0	<			pCi/g	11.07.17 18.00	U	1
Bismuth-214	14733-03-0	<			pCi/g	11.07.17 18.00	U	1
Cadmium-109	14109-32-1	<			pCi/g	11.07.17 18.00	U	1
Cesium-134	7440-46-2	<			pCi/g	11.07.17 18.00	U	1
Cesium-136	7440-46-2	<			pCi/g	11.07.17 18.00	U	1
Chromium-51	14392-02-0	<			pCi/g	11.07.17 18.00	U	1
Cobalt-57		<			pCi/g	11.07.17 18.00	U	1
Cobalt-58		<			pCi/g	11.07.17 18.00	U	1
Francium-223		<			pCi/g	11.07.17 18.00	U	1
Germanium-68		<			pCi/g	11.07.17 18.00	U	1
Iodine-131		<			pCi/g	11.07.17 18.00	U	1
Lead-214	15067-28-4	<			pCi/g	11.07.17 18.00	U	1
Manganese-54	13966-31-9	<			pCi/g	11.07.17 18.00	U	1
Niobium-94		<			pCi/g	11.07.17 18.00	U	1
Niobium-95		<			pCi/g	11.07.17 18.00	U	1
Protactinium 231	14331-85-2	<			pCi/g	11.07.17 18.00	U	1
Protactinium 234	15100-28-4	<			pCi/g	11.07.17 18.00	U	1
Protactinium 234M	15100-28-4	<			pCi/g	11.07.17 18.00	U	1
Radium-222		<			pCi/g	11.07.17 18.00	U	1
Radium-223		<			pCi/g	11.07.17 18.00	U	1
Radium-224		<			pCi/g	11.07.17 18.00	U	1
Ruthenium-103	7440-18-8	<			pCi/g	11.07.17 18.00	U	1
Ruthenium-106	7440-18-8	<			pCi/g	11.07.17 18.00	U	1
Silver 108 (metastable)		<			pCi/g	11.07.17 18.00	U	1
Silver-110m (metastable)		<			pCi/g	11.07.17 18.00	U	1
Sodium-22	13966-32-0	<			pCi/g	11.07.17 18.00	U	1



Certificate of Analytical Results 567618

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **WCH-1**

Matrix: Soil

Date Received: 11.07.17 09.05

Lab Sample Id: 567618-001

Date Collected: 11.06.17 12.50

Analytical Method: Gamma Spectroscopy by E901.1

Tech: JUM

% Moisture:

Analyst: ALJ

Basis: Wet Weight

Seq Number: 3032702

SUB: T104704400-17-13

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Strontium 85	13967-73-2	<			pCi/g	11.07.17 18.00	U	1
Thorium-234	15065-10-8	<			pCi/g	11.07.17 18.00	U	1
Tin 113	13966-06-8	<			pCi/g	11.07.17 18.00	U	1
Uranium-234	13966-29-5	<			pCi/g	11.07.17 18.00	U	1
Uranium-235	15117-96-1	<			pCi/g	11.07.17 18.00	U	1
Zinc-65	13982-39-3	<			pCi/g	11.07.17 18.00	U	1
Zirconium-95		<			pCi/g	11.07.17 18.00	U	1
Americium-241	14596-10-2	<			pCi/g	11.07.17 18.00	U	1
Potassium-40	13966-00-2	<			pCi/g	11.07.17 18.00	U	1
Thorium-232	2007440-29-1	<			pCi/g	11.07.17 18.00	U	1

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 11.07.17 13.20

Basis: Wet Weight

Seq Number: 3032644

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	127	19.3	mg/kg	11.08.17 06.46		5
Surrogate			% Recovery				
4-Bromofluorobenzene	460-00-4		111	%	76-123	11.08.17 06.46	
a,a,a-Trifluorotoluene	98-08-8		97	%	69-120	11.08.17 06.46	



Certificate of Analytical Results 567618

TRC Solutions, Inc, Midland, TX

Plains Smalls Federal

Sample Id: **WCH-1**
Lab Sample Id: 567618-001

Matrix: Soil
Date Collected: 11.06.17 12.50

Date Received: 11.07.17 09.05

Analytical Method: TCLP Mercury by SW-846 1311/7470A

Prep Method: SW7470P

Tech: AHI

% Moisture:

Analyst: ELW

Date Prep: 11.09.17 13.10

Seq Number: 3032875

SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Mercury	7439-97-6	<0.000200	0.000200	mg/L	11.09.17 17.43	U	1

Analytical Method: TCLP Metals by SW 1311/6010B

Prep Method: SW3010A

Tech: MLI

% Moisture:

Analyst: DEP

Date Prep: 11.09.17 10.00

Seq Number: 3032862

SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Arsenic	7440-38-2	<0.0500	0.0500	mg/L	11.09.17 15.20	U	1
Barium	7440-39-3	1.39	0.0500	mg/L	11.09.17 15.20		1
Cadmium	7440-43-9	<0.0250	0.0250	mg/L	11.09.17 15.20	U	1
Chromium	7440-47-3	<0.0500	0.0500	mg/L	11.09.17 15.20	U	1
Lead	7439-92-1	<0.0500	0.0500	mg/L	11.09.17 15.20	U	1
Selenium	7782-49-2	<0.100	0.100	mg/L	11.09.17 15.20	U	1
Silver	7440-22-4	<0.100	0.100	mg/L	11.09.17 15.20	U	1

Analytical Method: TCLP BTEX by SW 8260B

Prep Method: SW5030B

Tech: JTR

% Moisture:

Analyst: JTR

Date Prep: 11.09.17 14.00

Seq Number: 3032869

SUB: TX104704215-17-23

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00500	0.00500	mg/L	11.09.17 16.57	U	5
Toluene	108-88-3	0.0140	0.00500	mg/L	11.09.17 16.57		5
Ethylbenzene	100-41-4	0.00665	0.00500	mg/L	11.09.17 16.57		5
m,p-Xylenes	179601-23-1	0.0168	0.0100	mg/L	11.09.17 16.57		5
o-Xylene	95-47-6	0.0110	0.00500	mg/L	11.09.17 16.57		5
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
Dibromofluoromethane	1868-53-7	91	%	75-131	11.09.17 16.57		
1,2-Dichloroethane-D4	17060-07-0	94	%	63-144	11.09.17 16.57		
Toluene-D8	2037-26-5	90	%	80-117	11.09.17 16.57		

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

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

Certified and approved by numerous States and Agencies.

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 1211 W Florida Ave, Midland, TX 79701
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(281) 240-4200	(281) 240-4280
(214) 902 0300	(214) 351-9139
(210) 509-3334	(210) 509-3335
(432) 563-1800	(432) 563-1713
(602) 437-0330	



QC Summary 567618

TRC Solutions, Inc
Plains Smalls Federal

Analytical Method: Reactive Cyanide by SW 846-Section7.3.3										Prep Method: SW9012P				
Seq Number: 3032668		Matrix: Solid								Date Prep: 11.08.17				
MB Sample Id: 7633988-1-BLK		LCS Sample Id: 7633988-1-BKS								LCSD Sample Id: 7633988-1-BSD				
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag		
Cyanide	<0.125	20.0	2.63	13	2.66	13	5-40	1	20	mg/kg	11.08.17 12:16			
Analytical Method: Reactive Cyanide by SW 846-Section7.3.3										Prep Method: SW9012P				
Seq Number: 3032668		Matrix: Solid								Date Prep: 11.08.17				
Parent Sample Id: 567709-001		MD Sample Id: 567709-001 D												
Parameter	Parent Result	MD Result						%RPD	RPD Limit	Units	Analysis Date	Flag		
Cyanide	<0.0250	<0.0250						0	20	mg/kg	11.08.17 12:21	U		
Analytical Method: TCLP Mercury by SW-846 1311/7470A										Prep Method: SW7470P				
Seq Number: 3032875		Matrix: Water								Date Prep: 11.09.17				
MB Sample Id: 7634103-1-BLK		LCS Sample Id: 7634103-1-BKS								LCSD Sample Id: 7634103-1-BSD				
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag		
Mercury	<0.000200	0.00200	0.00206	103	0.00209	105	80-120	1	20	mg/L	11.09.17 17:33			
Analytical Method: TCLP Mercury by SW-846 1311/7470A										Prep Method: SW7470P				
Seq Number: 3032875		Matrix: Soil								Date Prep: 11.09.17				
Parent Sample Id: 567447-018		MS Sample Id: 567447-018 S								MSD Sample Id: 567447-018 SD				
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag		
Mercury	<0.000200	0.00200	0.00223	112	0.00221	111	75-125	1	20	mg/L	11.09.17 17:39			
Analytical Method: TCLP Mercury by SW-846 1311/7470A										Prep Method: SW7470P				
Seq Number: 3032875		Matrix: Soil								Date Prep: 11.09.17				
Parent Sample Id: 567447-019		MS Sample Id: 567447-019 S								MSD Sample Id: 567447-019 SD				
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag		
Mercury	<0.000200	0.00200	0.00229	115	0.00232	116	75-125	1	20	mg/L	11.09.17 17:58			



QC Summary 567618

TRC Solutions, Inc

Plains Smalls Federal

Analytical Method: TCLP Metals by SW 1311/6010B

Seq Number: 3032862

Matrix: Water

Prep Method: SW3010A

Date Prep: 11.09.17

MB Sample Id: 7634092-1-BLK

LCS Sample Id: 7634092-1-BKS

LCSD Sample Id: 7634092-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Arsenic	<0.0100	1.00	1.04	104	1.06	106	75-125	2	20	mg/L	11.09.17 15:12	
Barium	<0.0100	1.00	1.10	110	1.11	111	75-125	1	20	mg/L	11.09.17 15:12	
Cadmium	<0.00500	1.00	1.04	104	1.04	104	75-125	0	20	mg/L	11.09.17 15:12	
Chromium	<0.0100	1.00	1.11	111	1.11	111	75-125	0	20	mg/L	11.09.17 15:12	
Lead	<0.0100	1.00	1.03	103	1.04	104	75-125	1	20	mg/L	11.09.17 15:12	
Selenium	<0.0200	1.00	1.04	104	1.06	106	75-125	2	20	mg/L	11.09.17 15:12	
Silver	<0.0200	0.500	0.529	106	0.529	106	75-125	0	20	mg/L	11.09.17 15:12	

Analytical Method: TCLP Metals by SW 1311/6010B

Seq Number: 3032862

Matrix: Soil

Prep Method: SW3010A

Parent Sample Id: 567618-001

MS Sample Id: 567618-001 S

Date Prep: 11.09.17

MSD Sample Id: 567618-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Arsenic	<0.0500	5.00	5.20	104	5.28	106	75-125	2	20	mg/L	11.09.17 15:25	
Barium	1.39	5.00	6.77	108	6.84	109	75-125	1	20	mg/L	11.09.17 15:25	
Cadmium	<0.0250	5.00	5.26	105	5.29	106	75-125	1	20	mg/L	11.09.17 15:25	
Chromium	<0.0500	5.00	5.40	108	5.41	108	75-125	0	20	mg/L	11.09.17 15:25	
Lead	<0.0500	5.00	5.03	101	5.02	100	75-125	0	20	mg/L	11.09.17 15:25	
Selenium	<0.100	5.00	5.41	108	5.44	109	75-125	1	20	mg/L	11.09.17 15:25	
Silver	<0.100	2.50	2.63	105	2.65	106	75-125	1	20	mg/L	11.09.17 15:25	

Analytical Method: Flash Point (CC) SW-846 1010

Seq Number: 3032709

Matrix: Solid

Parent Sample Id: 567491-001

MD Sample Id: 567491-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Flash Point	>180	>180	0	25	Deg F	11.08.17 10:26	U

Analytical Method: Reactive Sulfide by SW9034

Seq Number: 3032718

Matrix: Solid

MB Sample Id: 3032718-1-BLK

LCS Sample Id: 3032718-1-BKS

LCSD Sample Id: 3032718-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Reactive Sulfide	<25.0	50.0	44.0	88	40.0	80	30-120	10	20	mg/kg	11.08.17 13:10	



QC Summary 567618

TRC Solutions, Inc
Plains Smalls Federal

Analytical Method: Reactive Sulfide by SW9034

Seq Number: 3032718 Matrix: Solid
Parent Sample Id: 567709-001 MD Sample Id: 567709-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Reactive Sulfide	<25.0	<25.0	0	20	mg/kg	11.08.17 13:10	U

Analytical Method: Soil pH by EPA 9045C

Seq Number: 3032686 Matrix: Soil
Parent Sample Id: 567618-001 MD Sample Id: 567618-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
pH	8.28	8.28	0	20	SU	11.08.17 13:00	

Analytical Method: DRO-ORO By SW8015B

Seq Number: 3032645 Matrix: Solid
MB Sample Id: 7633975-1-BLK LCS Sample Id: 7633975-1-BKS LCSD Sample Id: 7633975-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Diesel Range Organics (DRO)	<25.0	100	96.0	96	103	103	63-139	7	20	mg/kg	11.07.17 13:43	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
Tricosane	142		89		110		65-144			%	11.07.17 13:43	
n-Triacontane	81		48		58		46-152			%	11.07.17 13:43	

Analytical Method: DRO-ORO By SW8015B

Seq Number: 3032645 Matrix: Sludge
Parent Sample Id: 567537-001 MS Sample Id: 567537-001 S MSD Sample Id: 567537-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Diesel Range Organics (DRO)	213	100	260	47	285	72	63-139	9	20	mg/kg	11.07.17 15:21	X
Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits		Units	Analysis Date				
Tricosane			127		142		65-144			%	11.07.17 15:21	
n-Triacontane			65		68		46-152			%	11.07.17 15:21	



QC Summary 567618

TRC Solutions, Inc
Plains Smalls Federal

Analytical Method: Gamma Spectroscopy by E901.1

Seq Number: 3032702

Matrix: Solid

MB Sample Id: 3032702-1-BLK

Parameter	Error (TPU)	MB Result	Units	Analysis Date	Flag
Thorium-228		<	pCi/g	11.07.17 18:00	
Thorium-230		<	pCi/g	11.07.17 18:00	
Radium-226		<	pCi/g	11.07.17 18:00	
Radium-228		<	pCi/g	11.07.17 18:00	
Actinium 228		<	pCi/g	11.07.17 18:00	
Lead-210		<	pCi/g	11.07.17 18:00	
Cadmium-109		<	pCi/g	11.07.17 18:00	

Analytical Method: TCLP BTEX by SW 8260B

Seq Number: 3032869

Matrix: Water

MB Sample Id: 7634117-1-BLK

LCS Sample Id: 7634117-1-BKS

Prep Method: SW5030B

Date Prep: 11.09.17

LCSD Sample Id: 7634117-1-BS

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00500	0.500	0.403	81	0.383	77	66-142	5	20	mg/L	11.09.17 12:29	
Toluene	<0.00500	0.500	0.435	87	0.410	82	59-139	6	20	mg/L	11.09.17 12:29	
Ethylbenzene	<0.00500	0.500	0.461	92	0.437	87	75-125	5	20	mg/L	11.09.17 12:29	
m,p-Xylenes	<0.0100	1.00	0.933	93	0.886	89	75-125	5	20	mg/L	11.09.17 12:29	
o-Xylene	<0.00500	0.500	0.462	92	0.449	90	75-125	3	20	mg/L	11.09.17 12:29	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
Dibromofluoromethane	90			88			89			75-131	%	11.09.17 12:29
1,2-Dichloroethane-D4	93			97			94			63-144	%	11.09.17 12:29
Toluene-D8	90			98			96			80-117	%	11.09.17 12:29

Analytical Method: TCLP BTEX by SW 8260B

Seq Number: 3032869

Matrix: Soil

Parent Sample Id: 567496-006

MS Sample Id: 567496-006 S

Prep Method: SW5030B

Date Prep: 11.09.17

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Benzene	<0.00500	0.500	0.388	78	66-142	mg/L	11.09.17 13:11	
Toluene	0.0149	0.500	0.430	83	59-139	mg/L	11.09.17 13:11	
Ethylbenzene	<0.00500	0.500	0.440	88	75-125	mg/L	11.09.17 13:11	
m,p-Xylenes	<0.0100	1.00	0.882	88	75-125	mg/L	11.09.17 13:11	
o-Xylene	<0.00500	0.500	0.453	91	75-125	mg/L	11.09.17 13:11	
Surrogate			MS %Rec	MS Flag	Limits	Units	Analysis Date	
Dibromofluoromethane			89		75-131	%	11.09.17 13:11	
1,2-Dichloroethane-D4			96		63-144	%	11.09.17 13:11	
Toluene-D8			100		80-117	%	11.09.17 13:11	



QC Summary 567618

TRC Solutions, Inc

Plains Smalls Federal

Analytical Method: TPH GRO by EPA 8015 Mod.

Seq Number:	3032644	Matrix:	Solid	Prep Method:	SW5030B						
MB Sample Id:	7633983-1-BLK	LCS Sample Id:	7633983-1-BKS	Date Prep:	11.07.17						
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date
TPH-GRO	<4.00	20.0	22.8	114	24.4	122	35-129	7	20	mg/kg	11.07.17 18:12
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date
4-Bromofluorobenzene	106		111		110		76-123			%	11.07.17 18:12
a,a,a-Trifluorotoluene	104		99		99		69-120			%	11.07.17 18:12

Analytical Method: TPH GRO by EPA 8015 Mod.

Seq Number:	3032644	Matrix:	Soil	Prep Method:	SW5030B						
Parent Sample Id:	567615-002	MS Sample Id:	567615-002 S	Date Prep:	11.07.17						
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date
TPH-GRO	<3.88	19.4	24.0	124	20.8	109	35-129	14	20	mg/kg	11.07.17 21:20
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits			Units	Analysis Date
4-Bromofluorobenzene			123		121		76-123			%	11.07.17 21:20
a,a,a-Trifluorotoluene			99		99		69-120			%	11.07.17 21:20

567618

CHAIN OF CUSTODY RECORD



Inter-Office Shipment

Page 1 of 1

IOS Number **1051451**

Date/Time:

11/07/17 11:02

Created by: Brenda Ward

Please send report to: Kelsey Brooks

Lab# From: **Lubbock**

Delivery Priority:

Address: 6701 Aberdeen, Suite 9 Lubbock, TX 79424

Lab# To: **Houston**

Air Bill No.: 808834394829

Phone:

E-Mail: kelsey.brooks@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
567618-001	S	WCH-1	11/06/17 12:50	SW1010	Flash Point (CC) SW-846 1010	11/08/17	12/06/17	KEB	FLASHPT	
567618-001	W	WCH-1	11/06/17 12:50	SW6010BTCLP	TCLP Metals by SW 1311/6010B	11/08/17	05/05/18	KEB	AG AS BA CD CR PB SE	
567618-001	W	WCH-1	11/06/17 12:50	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	11/08/17	12/04/17	KEB	HG	
567618-001	W	WCH-1	11/06/17 12:50	SW8260BTX_TCLP	TCLP BTEX by SW 8260B	11/08/17	11/20/17	KEB	BZ BZME EBZ XYLMP X	
567618-001	S	WCH-1	11/06/17 12:50	SW9012_RCI	Reactive Cyanide by SW 846-Section7.3.3	11/08/17	11/20/17	KEB	CN	
567618-001	S	WCH-1	11/06/17 12:50	SW9034_RCI	Reactive Sulfide by SW9034	11/08/17	11/20/17	KEB	RS	
567618-001	S	WCH-1	11/06/17 12:50	SW9045C	Soil pH by EPA 9045C	11/08/17	12/04/17	KEB		
567618-001	S	WCH-1	11/06/17 12:50	SW9095	Paint Filter Liquids Test by SW-9095	11/08/17	12/04/17	KEB	Paint Filter	

Inter Office Shipment or Sample Comments:

Relinquished By

Brenda Ward

Received By:

Rene Vandenberghe

Date Relinquished: 11/07/2017

Date Received: 11/08/2017 10:30

Cooler Temperature: 3.6

Inter-Office Shipment

Page 1 of 1

IOS Number 1051452

Date/Time:	11/07/17 11:03	Created by:	Brenda Ward	Please send report to:	Kelsey Brooks
Lab# From:	Lubbock	Delivery Priority:		Address:	6701 Aberdeen, Suite 9 Lubbock, TX 79424
Lab# To:	Midland	Air Bill No.:		Phone:	
				E-Mail:	kelsey.brooks@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
567618-001	S	WCH-1	11/06/17 12:50	E901.1	Gamma Spectroscopy by E901.1	11/08/17	05/05/18	KEB	Y	

Inter Office Shipment or Sample Comments:

Relinquished By



Brenda Ward

Received By:



Jessica Kramer

 Date Relinquished: 11/07/2017

 Date Received: 11/08/2017 11:05

Cooler Temperature: _____



XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 1051451

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sent By: Brenda Ward

Date Sent: 11/07/2017 11:02 AM

Received By: Rene Vandenberghe

Date Received: 11/08/2017 10:30 AM

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?		3.6
#2 *Shipping container in good condition?		Yes
#3 *Samples received with appropriate temperature?		Yes
#4 *Custody Seals intact on shipping container/ cooler?		Yes
#5 *Custody Seals Signed and dated for Containers/coolers		Yes
#6 *IOS present?		Yes
#7 Any missing/extra samples?		No
#8 IOS agrees with sample label(s)/matrix?		Yes
#9 Sample matrix/ properties agree with IOS?		Yes
#10 Samples in proper container/ bottle?		Yes
#11 Samples properly preserved?		Yes
#12 Sample container(s) intact?		Yes
#13 Sufficient sample amount for indicated test(s)?		Yes
#14 All samples received within hold time?		Yes

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____

Contacted by : _____

Date: _____

Checklist reviewed by:


Rene Vandenberghe

Date: 11/08/2017



XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Midland

IOS #: 1051452

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sent By: Brenda Ward

Date Sent: 11/07/2017 11:03 AM

Received By: Connie Hernandez

Date Received: 11/08/2017 11:05 AM

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	
#2 *Shipping container in good condition?	Yes
#3 *Samples received with appropriate temperature?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 *Custody Seals Signed and dated for Containers/coolers	Yes
#6 *IOS present?	No
#7 Any missing/extra samples?	No
#8 IOS agrees with sample label(s)/matrix?	Yes
#9 Sample matrix/ properties agree with IOS?	Yes
#10 Samples in proper container/ bottle?	Yes
#11 Samples properly preserved?	Yes
#12 Sample container(s) intact?	Yes
#13 Sufficient sample amount for indicated test(s)?	Yes
#14 All samples received within hold time?	Yes

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____

Contacted by : _____

Date: _____

Checklist reviewed by: _____

Jessica Kramer
Jessica Kramer

Date: 11/08/2017 _____



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 11/07/2017 09:05:00 AM

Work Order #: 567618

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used : IR-3

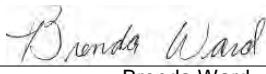
Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.7
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	No
#5 Custody Seals intact on sample bottles?	N/A
#6* Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	Yes
#18 Water VOC samples have zero headspace?	N/A
	Houston & Midland Xenco

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

Analyst:

PH Device/Lot#:

Checklist completed by:


Brenda Ward
Brenda Ward

Date: 11/07/2017

Checklist reviewed by:


Mike Kimmel

Date: 11/08/2017



TRC Solutions, Inc

ATTN: Joel Lowry
2057 Commerce
Midland, TX 79703
432-520-7720

Sample Type: Sludge
Sample Condition: Intact/ Ambient deg C
Lab ID#: 567618-001
Project Name: Plains Smalls Federal
Project #: N/A
Project Location: Plains Smalls Federal

Sample Date: 11/6/17
Sample Time: 12:50
Receiving Date: 11/07/17
Analysis Date: 11/08/17
Analysis Time: 11:21
Field Code: WCH-1

Analysis Description	Analysis Results pCi/G	Analysis Error +/- 2s	Analysis Results Bq/G	Analysis Error +/- 2s	Analysis Test Method	Analysis Technician
Ra-226	<2.89	N/A	<0.11	N/A	EPA 901.1M	JUM
Ra-228	<1.23	N/A	<0.05	N/A	EPA 901.1M	JUM
Th-228	<6.14	N/A	<0.23	N/A	EPA 901.1M	JUM
Pb-210	<3.14	N/A	<0.12	N/A	EPA 901.1M	JUM
Bi-214	<0.53	N/A	<0.02	N/A	EPA 901.1M	JUM
Total Activity	0.00	N/A	0.00	N/A	EPA 901.1M	JUM
Notes:						

Quality Assurance Review

Xenco Laboratories assumes no liability for the use or interpretation of any analytical results other than the cost of the performed analysis itself. Reproduction of this report in less than full requires the written consent of the client.

Xenco Laboratories 1211 W Florida Ave, Midland TX 79701 (432)-704-5440

APPENDIX C
(NMOCD Form C-138)

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., 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-138
Revised August 1, 2011

*Surface Waste Management Facility Operator
and Generator shall maintain and make this
Documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:

Plains Pipeline, LP
577 US Hwy 385N
Seminole, Texas 79360

Camille Bryant
432-520-7720
575-405-7210

2. Originating Site:

Smalls Federal #1 (Plains SRS #2017-146)

3. Location of Material (Street Address, City, State or ULSTR):

ULT "P", Section 28, Township 22 S, Range 34 East, Lea County, New Mexico

4. Source and Description of Waste:

Waste was generated due to a crude oil release of less than 5 bbls.

O/D soil

Estimated Volume 80 yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) yd³ / bbls

GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Camille Bryant, representative or authorized agent for Plains Pipeline, LP do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

- RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* Monthly Weekly Per Load
- RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)
- MSDS Information RCRA Hazardous Waste Analysis Process Knowledge Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Camille Bryant, representative for Plains Marketing, LP do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfills pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:
Various

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Sundance Services – NMOCD Permit #NM- O1 - 0003

Address of Facility: 1001 6th Street, New Mexico 42 Sundance Lane Eunice, NM 88231

Method of Treatment and/or Disposal:

- Evaporation Injection Treating Plant Landfarm Landfill Other

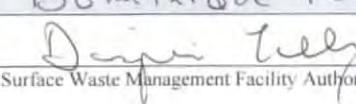
Waste Acceptance Status:

APPROVED

DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: Dominique Tellez

TITLE: Sales DATE: 11/30/17

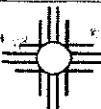
SIGNATURE: 

Surface Waste Management Facility Authorized Agent

TELEPHONE NO.: 575-408-2604

APPENDIX D

Non-Hazardous Waste Manifests



SUNDANCE SERVICES, Inc.

P.O. Box 1737 Eunice, New Mexico 88231
(575) 394-2511

TICKET No. 442819

LEASE OPERATOR/SHIPPER/COMPANY: *Plains Petroleum*

LEASE NAME: *John H. Danner*

TRANSPORTER COMPANY: *White Sundance*

DATE: 1-3-18

VEHICLE NO: *D*

TIME 11:16 AM/PM

GENERATOR COMPANY
MAN'S NAME: *Ward Burch*

CHARGE TO: *Plains Petroleum*

RIG NAME
AND NUMBER: *432-530-7750*

TYPE OF MATERIAL

Production Water

Drilling Fluids

Rinsate

Tank Bottoms

Contaminated Soil

Jet Out

Solids

BS&W Content:

Call Out

Description: *CID*

RRC or API #

C-133#

VOLUME OF MATERIAL BBLs. : *1* YARD *30* :

AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HEREWITHE IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, et seq., THE NM HEALTH AND SAF. CODE § 361.001 et seq., AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.

ALSO AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO SUNDANCE SERVICES, INC.'S FACILITY FOR DISPOSAL.

THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendered by the above described shipper. This will certify that no additional materials were added to this load, and that the material was delivered without incident.

DRIVER: *E. Tompkins*

(SIGNATURE)

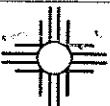
FACILITY REPRESENTATIVE: *S. Herrera*

(SIGNATURE)

White - Sundance

Canary - Sundance Acct #1

Pink - Transporter



SUNDANCE SERVICES, Inc.

P.O. Box 1737 Eunice, New Mexico 88231
(575) 394-2511

TICKET No. 442820

LEASE OPERATOR/SHIPPER/COMPANY: *Plains Petroleum*

LEASE NAME: *John A. & Mary*

TRANSPORTER COMPANY: *M.W. Hucker*

DATE: *1/31/81* VEHICLE NO: *PSI*

TIME *11:15* AM/PM

GENERATOR COMPANY
MAN'S NAME: *David L. Hucker*

CHARGE TO: *Plains Petroleum*

RIG NAME
AND NUMBER: *1850700*

TYPE OF MATERIAL

Production Water

Drilling Fluids

Rinsate

Tank Bottoms

Contaminated Soil

Jet Out

Solids

BS&W Content:

Call Out

Description: *Oil*

RRC or API #

C-133#

VOLUME OF MATERIAL BBLS. : YARD

20

:

AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, et seq., THE NM HEALTH AND SAF. CODE § 361.001 et seq., AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.

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THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendered by the above described shipper. This will certify that no additional materials were added to this load, and that the material was delivered without incident.

DRIVER: *Alvin C*
(SIGNATURE)

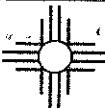
FACILITY REPRESENTATIVE: *D. Hawk*

(SIGNATURE)

White - Sundance

Canary - Sundance Acct #1

Pink - Transporter



SUNDANCE SERVICES, Inc.

P.O. Box 1737 Eunice, New Mexico 88231
(575) 394-2511

TICKET No. 442485

LEASE OPERATOR/SHIPPER/COMPANY:

Plains Pipeline

LEASE NAME: *Alpha H-2 Main*

TRANSPORTER COMPANY: *Montana Truckin'*

TIME 2:58 AM/PM

DATE: 12-21-07 VEHICLE NO: 130

GENERATOR COMPANY
MAN'S NAME: *Unicelby*

CHARGE TO: *Plains Pipeline*

RIG NAME
AND NUMBER

TYPE OF MATERIAL

Production Water

Drilling Fluids

Rinsate

Tank Bottoms

Contaminated Soil

Jet Out

Solids

BS&W Content

Call Out

Description: *010*

RRC or API #

C-133#

VOLUME OF MATERIAL BBLS. :

YARD *30* :

AS A CONDITION TO SUNDANCE SERVICES, INC'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, et seq., THE NM HEALTH AND SAF. CODE § 361.001 et seq., AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.

ALSO AS A CONDITION TO SUNDANCE SERVICES, INC'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO SUNDANCE SERVICES, INC'S FACILITY FOR DISPOSAL.

THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendered by the above described shipper. This will certify that no additional materials were added to this load, and that the material was delivered without incident.

DRIVER:

H. M. D.
(SIGNATURE)

FACILITY REPRESENTATIVE:

D. Hayes
(SIGNATURE)

White - Sundance

Canary - Sundance Acct #1

Pink - Transporter



SUNDANCE SERVICES, Inc.

P.O. Box 1737 Eunice, New Mexico 88231
(575) 394-2511

TICKET No. 442452

LEASE OPERATOR/SHIPPER/COMPANY:

LEASE NAME:

TRANSPORTER COMPANY:

DATE: 11-20-09

VEHICLE NO:

TIME 10:30 AM/PM

GENERATOR COMPANY
MAN'S NAME:

CHARGE TO:

RIG NAME
AND NUMBER

TYPE OF MATERIAL

Production Water

Drilling Fluids

Rinsate

Tank Bottoms

Contaminated Soil

Jet Out

Solids

BS&W Content

Call Out

Description:

010

RRC or API #

C-133#

VOLUME OF MATERIAL BBLS. :

YARD 10 :

AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HEREWITHE IS MATERIAL EXEMPT FROM THE RESOURCE CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, ET SEQ., THE NM HEALTH AND SAF. CODE § 361.001 ET SEQ., AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.

ALSO AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO SUNDANCE SERVICES, INC.'S FACILITY FOR DISPOSAL.

THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendered by the above described shipper. This will certify that no additional materials were added to this load, and that the material was delivered without incident.

DRIVER: *Linton*
(SIGNATURE)

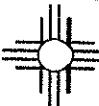
FACILITY REPRESENTATIVE: *S. Hillman*

(SIGNATURE)

White - Sundance

Canary - Sundance Acct #1

Pink - Transporter



SUNDANCE SERVICES, Inc.

P.O. Box 1737 Eunice, New Mexico 88231
(575) 394-2511

TICKET No. 442457

LEASE OPERATOR/SHIPPER/COMPANY: *Plano Pipeline*

LEASE NAME: *Alpha P-2 9000*

TRANSPORTER COMPANY: *Montana Fuelers*

DATE: 12/29/17 VEHICLE NO: 150

TIME 11:23 AM/PM

GENERATOR COMPANY
MAN'S NAME:

CHARGE TO: *Plano pipeline*

RIG NAME
AND NUMBER

TYPE OF MATERIAL

- | | | |
|---|--|-----------------------------------|
| <input type="checkbox"/> Production Water | <input type="checkbox"/> Drilling Fluids | <input type="checkbox"/> Rinsate |
| <input type="checkbox"/> Tank Bottoms | <input type="checkbox"/> Contaminated Soil | <input type="checkbox"/> Jet Out |
| <input type="checkbox"/> Solids | <input type="checkbox"/> BS&W Content: | <input type="checkbox"/> Call Out |

Description: *010*

RRC or API #

C-133#

VOLUME OF MATERIAL: BBLS. :

YARD

200

AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HEREWITHE IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, et seq., THE NM HEALTH AND SAF. CODE § 361.001 et seq., AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.

ALSO AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO SUNDANCE SERVICES, INC.'S FACILITY FOR DISPOSAL.

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DRIVER: *[Signature]*
(SIGNATURE)

FACILITY REPRESENTATIVE: *[Signature]*

(SIGNATURE)

White - Sundance

Canary - Sundance Acct #1

Pink - Transporter

APPENDIX E

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

District I
 1625 N. French Dr., Hobbs, NM 88240
District II
 811 S. First St., 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 April 3, 2017

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

Initial Report

Final Report

Name of Company	Plains Pipeline LP	Contact Camille Bryant
Address	577 US Hwy 385 N. Seminole, TX 79360	Telephone No 575.441.1099.
Facility Name	Alpha Gathering A-2 Main	Facility Type Pump

Surface Owner	New Mexico State Land Office	Mineral Owner	BLM	API No.
---------------	------------------------------	---------------	-----	---------

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	28	22S	34E					Lea

Latitude_32.355942 Longitude_103.468296 NAD83

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 12 barrels	Volume Recovered 10 barrels
Source of Release Pump	Date and Hour of Occurrence 09/08/2017 @ 06:00	Date and Hour of Discovery 09/08/2017 @ 06:00
Was Immediate Notice Given?	If YES, To Whom? Voicemail to Olivia Yu	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required		
By Whom? Camille Bryant	Date and Hour 09/08/2017 @ 13:25	
Was a Watercourse Reached?	If YES, Volume Impacting the Watercourse.	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

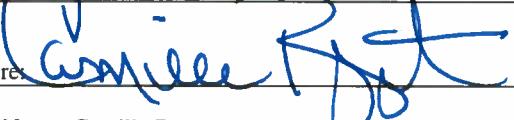
If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* Top plate on PD pump came loose resulting in a release of crude oil.

Describe Area Affected and Cleanup Action Taken.*

The released crude oil impacted an area of approximately 1,500 square of the facility. The impacted area will be remediated as 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: 

Printed Name: Camille Bryant

Title: Remediation Coordinator

E-mail Address: cjbjryant@paalp.com

Date: 9/18/2017

Phone: 515.441.1099

OIL CONSERVATION DIVISION

Approved by Environmental Specialist:



Approval Date: 9/18/2017 Expiration Date:

Conditions of Approval:

see attached directive

Attached

* Attach Additional Sheets If Necessary

FOY1726143954

1RP-4813

nOY1726144138

pOY1726144339