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Midland, TX 79703

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APPROVED

By Olivia Yu at 1:28 pm, Dec 01, 2017

NMOCD approves of the remedial activities and grants backfill approval for 1RP-4813.

November 27, 2017

Olivia Yu
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division, District 1
1625 French Drive
Hobbs, NM 88240

Amber Groves
Hobbs Field Office
New Mexico State Land Office
2827 N. Dal Paso St., Suite 117
Hobbs, New Mexico 88240

Re: Remediation Summary and Permission to Backfill Request
Alpha Gathering A-2 Main (1RP-4813)
GPS: N 32.355942° W 103.468296°
Unit Letter "P", Section 28, Township 22 South, Range 34 East
Lea County, New Mexico

Dear Ms. Yu and Ms. Groves,

TRC Environmental Corporation (TRC) has prepared the following *Remediation Summary and Permission to Backfill Request* on behalf of Plains Pipeline, L.P. (Plains), in regard to the Alpha Gathering A-2 Main crude oil Release Site (1RP-4813). The Release Site is located approximately eighteen (18) miles southeast 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).

Introduction

On September 8, 2017, a release was discovered on the LACT Unit at the Federal Smalls #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 square feet (sq. ft.); a majority of the release was confined to within the earthen containment.

A reference map utilized by the New Mexico Oil Conservation Division (NMOCD) indicated groundwater should be encountered at approximately one hundred twenty-five (125) ft. below ground surface (bgs). No surface waters or water wells were observed within one thousand (1,000) ft. of the Release Site. Based on the NMOCD Site Classification criteria, the Recommended Remediation Action Levels (RRAL) are 10 mg/kg for benzene, 50 mg/kg for benzene, toluene, ethylbenzene and xylene (BTEX), 5,000 mg/kg for total petroleum hydrocarbons (TPH) and 600 mg/kg for Chloride.

Background Information

On September 25, 2017, TRC submitted a *Delineation Plan and Remediation Strategy* to the NMOCD and NMSLO proposing the collection of four (4) representative soil samples from within the affected area at less than fifty (50) ft. intervals in an effort to determine the vertical extent of soil impact. In addition, Plains proposed excavating impacted soil from within the release margins until laboratory analytical results from confirmation soil samples indicated impacted soil exhibited BTEX and TPH concentrations above the NMOCD RRAL had been removed; select soil samples would be submitted to the laboratory for analysis of chloride concentrations. The *Delineation Plan and Remediation Strategy* was subsequently approved.

Remediation Summary

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 removed. 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 exhuming the high-pressure lines.

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 promote 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 WS1, 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-W 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

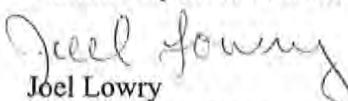
were determined to be 219 mg/kg, 891 mg/kg, 52.1 mg/kg and <25.0 mg/kg, respectively. Chloride concentrations were below the NMOCD RRAL in each of the submitted soil samples, with the exception of DS-2 Floor @ 2', which exhibited a chloride concentration of 891 mg/kg. Based upon the negative correlation between TPH and chloride concentrations and the absence of produced water in Plains' crude oil, Plains maintains that 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.

Permission to Backfill Request

Based on laboratory analytical results on field activities conducted to date, Plains request NMOCD and NMSLO permission to backfill the excavated area with locally purchased, non-impacted caliche. Excavated soil currently stockpiled on-site, will be transported to an NMOCD-permitted facility for disposal. Impacted soil remaining in-situ will be remediated and/or further investigated at time of abandonment (TOA).

Upon completion of remediation activities, a *Remediation Summary and Risk-Based Soil Closure Request* will be prepared summarizing field activities and laboratory analytical results from confirmation soil samples. If you have any questions or need any additional information, please feel free to contact Camille Bryant or Joel Lowry by phone or email.


Joel Lowry
Senior Project Manager
TRC Environmental Corporation

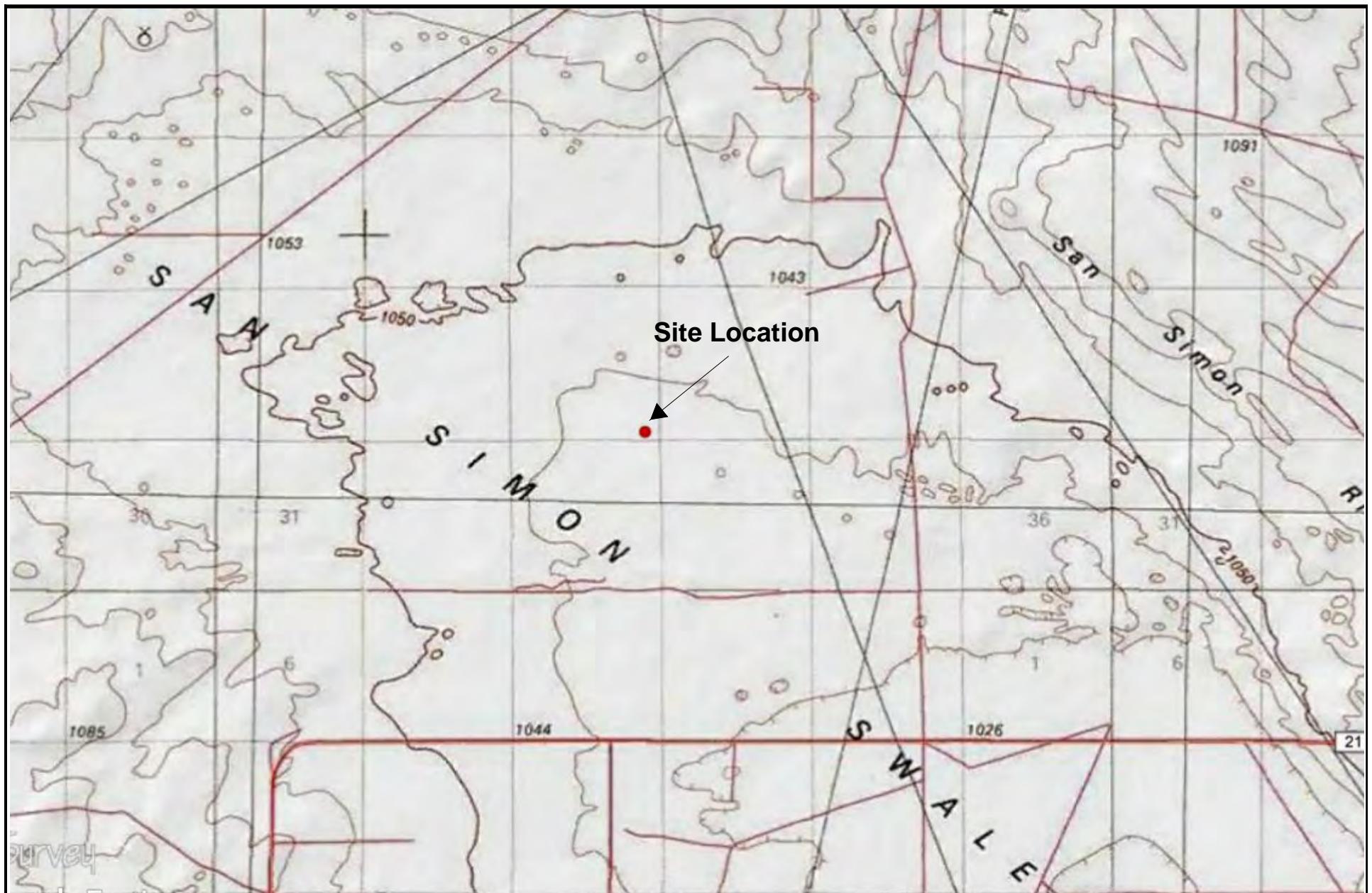

Curt Stanley
Senior Project Manager
TRC Environmental Corporation

Attachments:

- Figure 1 – Site Location Map
- Figure 2 – Site & Sample Location Map
- Concentrations of Benzene, BTEX, TPH and Chloride in Soil
- Photographic Log
- Release Notification and Corrective Action (Form C-141)

cc: Camille Bryant
Plains Pipeline, L.P.
577 US Highway 385 North
Seminole, TX 79360

File



LEGEND:

5000 2500 0 2500 5000


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: September 25, 2017	
Lat. N 32.35594 Long. W103.46829	
UL "P", Sec. 28, T22S, R34E	
TRC Proj. No.: 286973	



2057 Commerce Drive
 Midland, Texas 79703
 432.520.7720

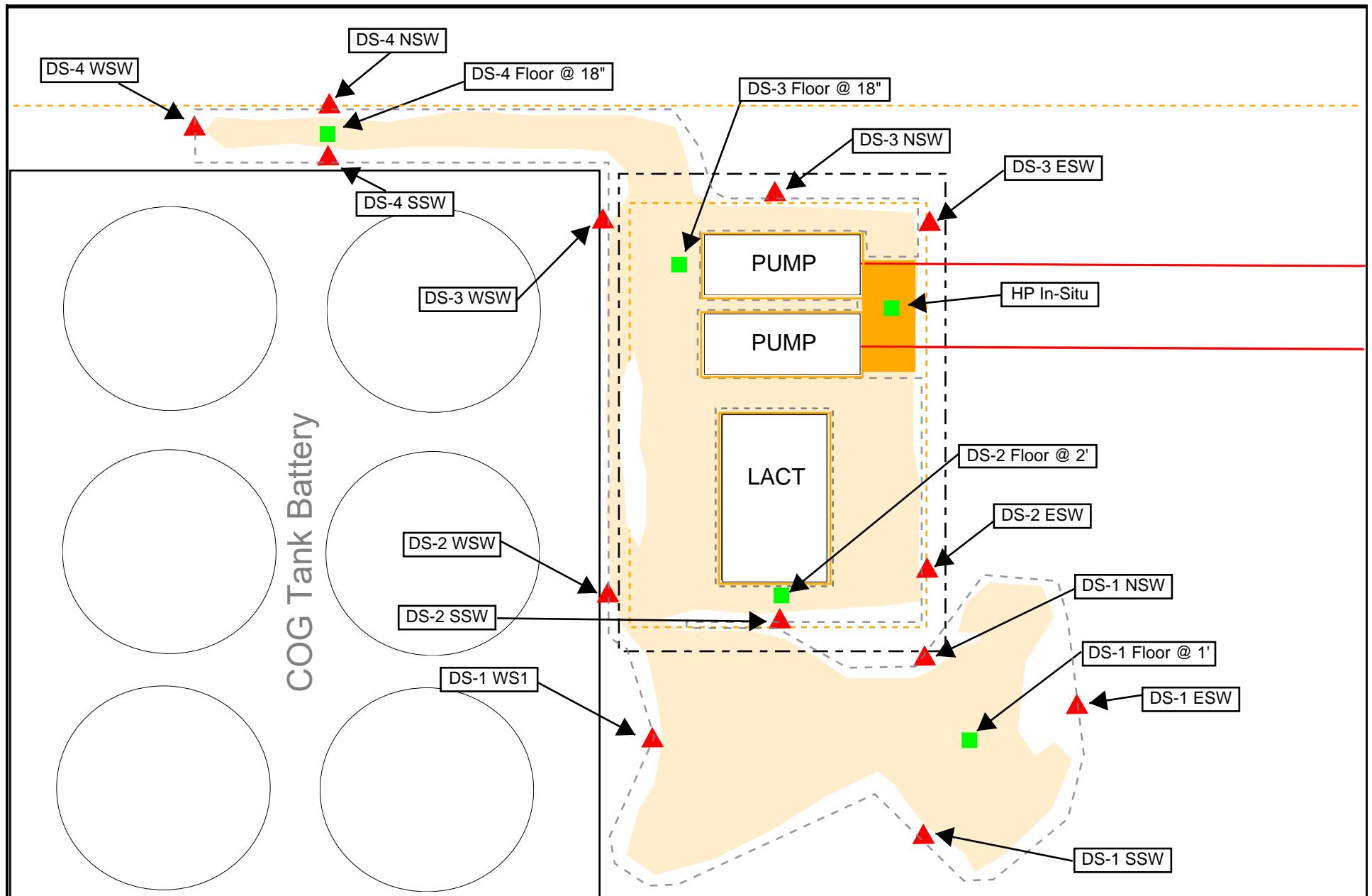


Figure 2
Site & Sample Location Map
PlainsPipeline, L.P.
Alphah Gathering A-2 Main
Lea County, NM

Scale 1" = 10'
Drafted By: JL Checked By: CS
Draft: September 25, 2017
Lat. N 32.35627 Long. W103.46843
UL "P", Sec. 28, T22S, R34E
TRC Proj. No.: 286973

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	0.321	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	-
NMOCD Regulatory Guideline				10	-	-	-	50	-	-	-	5,000	600

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.

Photographic Documentation



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: Representative view of impacted soil remaining in-situ adjacent to the LACT unit and high-pressure pipelines.



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	567615-002	567615-003	567615-004	567615-005	567615-006
		Field Id:	DS-1 Floor @ 1'	DS-1 NSW	DS-1 ESW	DS-1 SSW	DS-1 WS1	DS-2 Floor @ 2'
		Depth:	1- ft	0-	0-	0-	0-	2- ft
		Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Sampled:	Nov-06-17 11:30	Nov-06-17 11:35	Nov-06-17 11:40	Nov-06-17 11:45	Nov-06-17 11:50	Nov-06-17 11:55
BTEX by EPA 8021B		Extracted:	Nov-07-17 13:20					
		Analyzed:	Nov-07-17 22:41	Nov-07-17 20:00	Nov-07-17 23:08	Nov-07-17 23:35	Nov-08-17 08:07	Nov-08-17 05:52
		Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.0198	0.0198	<0.0199	0.0199	<0.0197	0.0194	<0.0197
Toluene		<0.0198	0.0198	<0.0199	0.0199	<0.0197	0.0197	<0.0198
Ethylbenzene		<0.0198	0.0198	<0.0199	0.0199	0.0197	0.0194	<0.0198
Xylenes, Total		<0.0198	0.0198	<0.0199	0.0199	0.0631	0.0194	0.3078
Total BTEX		<0.0198	0.0198	<0.0199	0.0199	0.0828	0.0197	0.4222
Chloride by EPA 300		Extracted:	Nov-07-17 15:00					Nov-07-17 15:00
		Analyzed:	Nov-08-17 09:46					Nov-08-17 10:36
		Units/RL:	mg/kg	RL				mg/kg
Chloride		219	25.0					891 D 125
DRO-ORO By SW8015B		Extracted:	Nov-07-17 11:45					
		Analyzed:	Nov-07-17 16:28	Nov-07-17 17:02	Nov-07-17 17:35	Nov-07-17 18:09	Nov-07-17 18:42	Nov-07-17 19:15
		Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL
Diesel Range Organics (DRO)		<25.0	25.0	<25.0	25.0	66.3	25.0	300
Oil Range Hydrocarbons (ORO)		<25.0	25.0	<25.0	25.0	<25.0	25.0	40.7
TPH GRO by EPA 8015 Mod.		Extracted:	Nov-07-17 13:20	Nov-07-17 13:20	Nov-07-17 13:20	Nov-07-17 13:20	Nov-08-17 12:45	Nov-07-17 13:20
		Analyzed:	Nov-07-17 22:41	Nov-07-17 20:00	Nov-07-17 23:08	Nov-07-17 23:35	Nov-08-17 18:14	Nov-08-17 05:52
		Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL
TPH-GRO		<3.96	3.96	<3.98	3.98	<3.94	3.94	22.0
						3.88	3.98	9.97
								<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.
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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:		Analyzed:		Units/RL:								Nov-07-17 15:00									
														Nov-08-17 11:00									
Chloride														mg/kg	RL								
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	25.0	<25.0	25.0		579	25.0		2720	50.0		240	25.0			
Oil Range Hydrocarbons (ORO)		<25.0	25.0	<25.0	25.0			<25.0	25.0	<25.0	25.0		90.3	25.0		460	50.0		36.9	25.0			
TPH GRO by EPA 8015 Mod.		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 18:41
TPH-GRO		57.5	3.86	<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



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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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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 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

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America



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			% Recovery				
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							
		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
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			% 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. Prep Method: SW5030B

Seq Number: 3032747 Matrix: Solid Date Prep: 11.08.17

MB Sample Id: 7634038-1-BLK LCS Sample Id: 7634038-1-BKS LCSD Sample Id: 7634038-1-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	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			
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. Prep Method: SW5030B

Seq Number: 3032644 Matrix: Soil 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
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			

Analytical Method: TPH GRO by EPA 8015 Mod. Prep Method: SW5030B

Seq Number: 3032747 Matrix: Soil Date Prep: 11.08.17

Parent Sample Id: 567615-013 MS Sample Id: 567615-013 S MSD Sample Id: 567615-013 SD

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	Limits	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			

569615

CHAIN OF CUSTODY RECORD									
Office Location	Millard			Laboratory: Xemco Address: 6701 Aberdeen Lubbock, Texas 79424	ANALYSIS REQUESTED	LAB USE ONLY DUE DATE: 12/1/11			
Project Manager Sampler's Name	Soil Survey Soil Survey			Phone: 932-466-4450 Contact: _____ PO/SO #: _____	TEMP OF COOLER WHEN RECEIVED (°C)	Page 1 of 32			
Project Number	TPH 2015 M			Sampler's Signature					
Matrix	Date	Time	Grab Comp	Identifying Marks of Sample(s)		No. Type of Containers			
				Start Depth	End Depth	4 oz Glass			
Soil	11:30	X	DS-1 Floor Q1	1	1		Lab Sample ID:		
	11:35	X	DS-1 USW						
	11:40	X	DS-1 ESW						
	11:45	X	DS-1 SSW						
	11:50	X	DS-1 WS1						
	11:55	X	DS-2 Floor Q2	2					
	12:00	X	DS-2 ESW						
	12:05	X	DS-2 SSW						
	12:10	X	DS-2 USW						
			DS-3 Floor Q1	19'					
TURNAROUND TIME	<input type="checkbox"/> Normal			<input type="checkbox"/> 48-Hour Rush			<input checked="" type="checkbox"/> 24-Hour Rush		
Received by (Signature)	Date: 11/11/11	Time: 05:05	Received by (Signature)			Received by (Signature)			
Relinquished by (Signature)	Date: 11/11/11	Time: 05:05	Received by (Signature)			Received by (Signature)			
Relinquished by (Signature)	Date: 11/11/11	Time: 05:05	Received by (Signature)			Received by (Signature)			
Relinquished by (Signature)	Date: 11/11/11	Time: 05:05	Received by (Signature)			Received by (Signature)			
Matrix	WW-Wastewater VGA-40 ml vial	W-Water A/G-Ambient Glass 1L	S-Soil	L-Liquid	A-Air Bag	C-Charcoal tube	P/O-Plastic or other	SL-Sludge	
Container			250 ml = Glass wide mouth						
TRRP Laboratory Review Checklist									
<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	NOTES: 12/4/11					
Date:	Time:	Date:	Time:	e-mail results to: Jewell@frustrations.com					

567615

CHAIN OF CUSTODY RECORD												
									LAB USE ONLY DUE DATE:			
									TEMP OF COOLER WHEN RECEIVED (°C)			
Office Location	Millard		Laboratory: Xenco	Address: 6701 Aberdeen	Phone: 432-466-4450							
Project Manager	Soil Survey		Contact: _____	PO/SO #:	Sampler's Signature: <i>[Signature]</i>				Page 2 of 2			
Sampler's Name	Soil Survey											
Project Number	Project Name <i>Plain's Smalls Federal</i>											
Matrix	Date	Time	Time	Grab	Comp	Identifying Marks of Sample(s)	No. Type of Containers					
3	11/11/15	12:15	X	DS-3	NSW	1	4 oz Glass					
	11/11/15	12:20	X	DS-3	NSW	1	4 oz Glass					
	11/11/15	12:25	X	DS-3	NSW	1	4 oz Glass					
	11/11/15	12:30	X	DS-21	Floor @ 18'	18	4 oz Glass					
	11/11/15	12:35	X	DS-21	NSW	1	4 oz Glass					
	11/11/15	12:40	X	DS-44	SSW	1	4 oz Glass					
	11/11/15	12:45	X	DS-44	SSW	1	4 oz Glass					
TURNAROUND TIME												
Submitted by (Signature)	<i>[Signature]</i>	<input type="checkbox"/> Normal	<input type="checkbox"/> 48-Hour Rush	<input checked="" type="checkbox"/> 24-Hour Rush	Received by (Signature)			TRRP Laboratory Review Checklist				
Retained by (Signature)	<i>[Signature]</i>	Date: 11/11/15	Time: 9:05	<i>[Signature]</i>	Date: 11/11/15	Time: 9:05	<i>[Signature]</i>	Date: 11/11/15	Time: 9:05	<i>[Signature]</i>	NOTES: <i>DUIS H</i>	
Retained by (Signature)	<i>[Signature]</i>	Date: _____	Time: _____	<i>[Signature]</i>	Date: _____	Time: _____	<i>[Signature]</i>	Date: _____	Time: _____	<i>[Signature]</i>	e-mail results to: <i>jlowry@resolutiontx.com</i>	
Retained by (Signature)	<i>[Signature]</i>	Date: _____	Time: _____	<i>[Signature]</i>	Date: _____	Time: _____	<i>[Signature]</i>	Date: _____	Time: _____	<i>[Signature]</i>		
Matrix Container	W/W/Wastewater VOA - 40 ml/ml	W - Water	S - Soil	I - Liquid	A - Air Bag	C - Charcoal tube	Sl - Sludge					
			250 ml = 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

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
(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 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

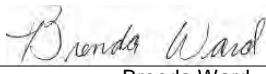
Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.2
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	No
#5 Custody Seals intact on sample bottles?	N/A
#6* Custody Seals Signed and dated?	N/A
#7 *Chain 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

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.
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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		

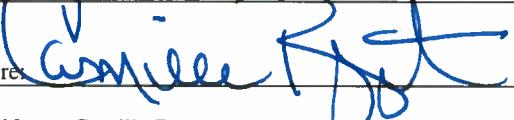
If a Watercourse was Impacted, Describe Fully.*

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

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nOY1726144138

pOY1726144339