APPROVED
By Olivia Yu at 9:50 am, Jul 09, 2018

NMOCD grants closure to remediated area for 1RP-4739 with the exception of the identified areas for deferral until time of abandonment, retrofit, or inactivity.

REMEDIATION SUMMARY AND

RISK-BASED SOIL CLOSURE REQUEST

ALPHA CRUDE LYNCH STATION
UL "B", SEC. 01, TOWNSHIP 21 SOUTH, RANGE 33 EAST
LEA COUNTY, NEW MEXICO
GPS: N 32.522267° W 103.524841°

NMOCD Reference 1RP-4739
Plains SRS #2017-102

Prepared for:

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

Prepared by:

TRC Environmental Corporation
2771 Highway 214
Denver City, Texas 79323

June 2018

Joel Lowry
Senior Project Manager

Curt Stanley
Senior Project Manager

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INTRODUCTION

TRC Environmental Corporation (TRC), on behalf of Plains Pipeline, LP (Plains), has prepared this *Remediation Summary and Risk-Based Soil Closure Request* for the Release Site known as Alpha Crude Lynch Station. The legal description of the Release Site is Unit Letter "B", Section 1, Township 21 South, Range 33 East, in Lea County, New Mexico. The subject property is administered by the New Mexico State Land Office (NMSLO). The GPS coordinates for the site are N 32.522267° W 103.524841°. Please reference Figure 1 for the Site Location Map and Figure 2 for the Site & Sample Location Map. The Release Notification and Corrective Action (Form C-141) is provided as Appendix D.

On June 16, 2017, Plains discovered a release at the Alpha Crude Lynch Station. The initial Release Notification and Corrective Action (Form C-141) indicated failure of the OAL single expansion joint, due to pressure build up, resulting in the release of approximately 50 barrels (bbls) of crude oil. The crude oil release affected an area measuring approximately 4,000 square feet within the facility. During initial response activities approximately 30 bbls of crude oil was recovered and heavily saturated soil was scraped up and placed on an impermeable polyurethane liner, pending final disposition. General photographs of the site are provided as Appendix B.

NMOCD SITE CLASSIFICATION

A groundwater database maintained by The New Mexico Office of the State Engineer (NMOSE) did not identify any registered water wells in Section 01, Township 21 South, Range 33 East. A reference map utilized by the NMOCD Hobbs District Office, indicates groundwater should be encountered at approximately eighty (80) feet (ft.) below ground surface (bgs). Based on the NMOCD site classification system, ten (10) points will be assigned to the Release Site as a result of this criterion.

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

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

The NMOCD guidelines indicate the Alpha Crude Lynch Station Site has a ranking score of ten (10). Based on this score, the soil remediation levels for a site with a ranking score of ten (10) points are as follows:

- Benzene – 10 mg/kg (ppm)
- Benzene, toluene, ethylbenzene, and xylenes (BTEX) – 50 mg/kg (ppm)
- Total Petroleum Hydrocarbons (TPH) – 1,000 mg/kg (ppm)
- Chloride – 600 mg/kg (ppm)

SUMMARY OF SOIL REMEDIATION ACTIVITIES

On June 21, 2017, remediation activities commenced at the Release Site. Impacted soil within the release margins was excavated and stockpiled onsite atop an impermeable liner, pending final disposition. The floor and sidewalls of the excavation were advanced until field observations suggested hydrocarbon impacts had been mitigated.

On July 5, 2017, Terracon collected five (5) delineation samples (DS-1 @ 1', DS-2 @ 1', DS-3 @ 1', DS-4 @ 6" and DS-5 @ 6"), and submitted them under chain-of-custody to Xenco Laboratories in Midland, TX for analysis of BTEX, TPH and chloride concentrations. Laboratory analytical results indicated benzene, BTEX and chloride concentrations were below the applicable NMOCD Recommended Remediation Action Levels (RRALs) in each of the submitted soil samples. TPH concentrations ranged from below the laboratory reporting limit (RL) in soil sample DS-4 @ 6" to 6,150 mg/kg in soil sample DS-1 @ 1'. TPH concentrations were below the applicable NMOCD RRAL in soil samples DS-3 @ 1' and DS-4 @ 6"; TPH concentrations exceeded the NMOCD RRAL in soil samples DS-1 @ 1', DS-2 @ 1' and DS-5 @ 6". Impacted soil represented by soil samples DS-1 @ 1', DS-2 @ 1' and DS-5 @ 6" was excavated.

In addition, Terracon collected thirteen (13) excavation confirmation soil samples (North Side Wall-1, North Side Wall-2, North Side Wall-3, East Side Wall-1, East Side Wall-2, South Side Wall-1, South Side Wall-2, South Side Wall-3, South Side Wall-4, West Side Wall-1, West Side Wall-2, West Side Wall-3 and FL-1 @ 6") from the floor and sidewalls of the excavated area and submitted them to the laboratory for analysis of BTEX and TPH concentrations. Laboratory analytical results indicated benzene concentrations were below the NMOCD RRAL in each of the submitted soil samples, with the exception of South Side Wall-3, which exhibited a concentration of 13.0 mg/kg. Analytical results indicated BTEX concentrations ranged from below the applicable laboratory RL in soil samples North Side Wall -1, North Side Wall -3, East Side Wall -2, South Side Wall -1, South Side Wall -2, West Side Wall -2, West Side Wall -3 and FL-1 @ 6" to 612 mg/kg in soil sample South Sidewall -3; BTEX concentrations were below the NMOCD RRAL in each of the submitted soil samples, with the exception of soil samples North Side Wall-2 (58.0 mg/kg), East Side Wall-1 (137 mg/kg) and South Side Wall-3 (612 mg/kg). TPH concentrations ranged from below the laboratory RL in soil samples North Side Wall -3 and South Side Wall - 1 to 14,200 mg/kg in soil sample South Side Wall -3. Impacted soil represented by soil samples North Side Wall-1, North Side Wall-2, East Side Wall-1, South Side Wall-3, South Side Wall-4, West Side Wall-2 and West Side Wall-3 was excavated.

Furthermore, Terracon collected two (2) soil samples (FL-2 @ 6" (In-Situ) and FL-2 @ 18") from the area characterized by a resilient rock layer and above ground piping preventing further excavation in an effort to characterize affected soil remaining in-situ. The collected soil samples were submitted to the laboratory for analysis of BTEX and TPH concentrations. Laboratory analytical results indicated BTEX concentrations were below the NMOCD RRAL in each of the submitted soil samples. Analytical results indicated soil samples FL-2 @ 6" (In-Situ) and FL-2 @ 18" exhibited TPH concentrations of 9,450 mg/kg and 220 mg/kg, respectively. Review of laboratory analytical results indicated soil was not affected above the NMOCD RRAL beyond eighteen (18) inches (in.) in the area represented by sample point FL-2.

On July 10, 2017, TRC assumed environmental consulting responsibilities at the Release Site.

On August 10, 2017, TRC collected ten (10) excavation confirmation soil samples (DS-1 @ 1.5', DS-2 @ 2.5', DS-5 @ 1', Floor #1 @ 10", NSW #1b, NSW #2b, ESW #1b, SSW #3b, SSW #4b and WSW #3b) from the floor and sidewalls of the excavated area and submitted them to the laboratory for analysis of BTEX and/or TPH concentrations. Laboratory analytical results indicated BTEX concentrations were below the applicable laboratory RL in each of the analyzed soil samples (NSW #2b, ESW #1b and SSW #3b). TPH concentrations ranged from below the laboratory RL in soil sample WSW #3b to 3,270.3 mg/kg in soil sample DS-1 @ 1.5'. Impacted soil represented by soil samples DS-1 @ 1.5' and ESW-1b was excavated. Excavation of impacted soil represented by soil sample DS-2 @ 2.5' and FL-2 @ 6" (In-Situ) was precluded due to the presence of a resilient rock layer and the congested nature of the facility.

On September 6, 2017, TRC collected three (3) excavation confirmation soil samples (DS-1 @ 2', ESW #1C and WSW #2b) from the floor and sidewalls of the excavated area and submitted them to the laboratory for analysis of TPH concentrations. Laboratory analytical results indicated TPH concentrations were below the NMOCD RRAL in each of the submitted soil samples.

On September 17, 2017, representatives of Plains, TRC and NMOCD met to discuss the Release Site. During the meeting, it was determined further excavation in the area represented by soil samples DS-2 @ 2.5' and FL-2 @ 6" (In-Situ) was impracticable due to the resilient rock layer and the congested nature of the facility. Plains requested NMOCD and NMSLO approval to backfill portions of the excavation exhibiting TPH and BTEX concentration below the NMOCD RRAL. Affected areas represented by soil samples DS-2 @ 2.5' and FL-2 @ 6" would be treated with a Micro-Blaze® solution and resampled approximately thirty (30) days later; the request was subsequently approved.

Upon receiving NMOCD and NMSLO approval, the excavated areas characterized by confirmation soil samples exhibiting BTEX, TPH and/or chloride concentrations which were below the NMOCD RRAL were backfilled with locally sourced, non-impacted material. The affected area represented by soil samples DS-2 @ 2.5' and FL-2 @ 6" (In-Situ) was intentionally left open to facilitate flooding with a Micro-Blaze® solution.

On November 15, 2017, in accordance with the NMOCD, the portion of the excavation remaining open, characterized by soil samples DS-2 @ 2.5' and FL-2 @ 6" was flooded with a Micro-Blaze® solution in an effort to promote in-situ bioremediation.

On December 20, 2017, TRC collected two (2) soil samples (12/20 FL-1 @ 6" (In-Situ) and 12/20 DS-2 @ 2.5') from the treated area and submitted them to the laboratory for analysis of TPH concentrations, which were determined to be 5,742.1 and 8,140.3 mg/kg, respectively.

On January 26, 2018, upon receiving laboratory analytical results, TRC, on behalf of Plains, requested NMOCD and NMSLO permission to backfill the remaining portion of the excavation. The request was subsequently approved.

On March 8, 2018, upon receiving NMOCD and NMSLO permission, the remaining portion of the excavated area was backfilled with locally sourced, non-impacted material. Prior to backfilling, the final dimensions of the excavated area were approximately one hundred twenty (120) ft. in length, five (5) to twenty (20) ft. in width, and six (6) in. to two and one half (2.5) ft. in depth.

Between November 7 and 9, 2017, approximately three hundred thirty-two (332) cubic yards (cy) of impacted soil was transported to Lazy Ace Landfarm. (NMOCD Permit No. NM-01-0041) for disposal. A copy of the Request for Approval to Accept Solid Waste (Form C-138) is provided as Appendix C.

SITE CLOSURE REQUEST

Impacted soil within the release margins was excavated to the maximum extent practicable and transported to an NMOCD-permitted disposal facility. Laboratory analytical results from confirmation soil samples collected from the floor and sidewalls of the excavated area indicated benzene, BTEX, TPH and/or chloride concentrations were below the NMOCD RRAL in each of the submitted soil samples with the exception of the TPH concentrations in soil samples FL-2 @ 6" (In-Situ), DS-2 @ 2.5', 12/20 FL-1 @ 6" (In-Situ) and 12/20 DS-2 @ 2.5'. As per the NMOCD, impacted soil represented by soil samples FL-2 @ 6" (In-Situ), DS-2 @ 2.5', 12/20 FL-1 @ 6" (In-Situ) and 12/20 DS-2 @ 2.5'was treated with a Micro-Blaze ® solution in an effort to promote in-situ bioremediation. Upon receiving laboratory analytical results from confirmation soil samples and NMOCD permission, the excavation was backfilled with locally purchased, non-impacted backfill material.

Based on laboratory analytical results and field activities conducted to date, TRC recommends Plains provide copies of this *Remediation Summary and Risk-Based Soil Closure Request* and request the NMOCD and NMLSO grant closure status to the Alpha Crude Lynch Station Release Site. Affected soil impacted above the NMOCD RRAL potentially remaining in-situ represented by the soil samples FL-2 @ 6" (In-Situ), DS-2 @ 2.5', 12/20 FL-1 @ 6" (In-Situ) and 12/20 DS-2 @ 2.5' will be further investigated and/or remediated upon abandoning and decommissioning the facility (TOA).

LIMITATIONS

TRC has prepared this *Remediation Summary and Risk-Based Soil Closure Request* to the best of its ability. No other warranty, expressed or implied, is made or intended.

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

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

DISTRIBUTION

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New Mexico Energy, Minerals and Natural Resources Department
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Midland, Texas 79701

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Denver City, Texas 79323

FIGURES

Figure 1

Site Location Map

Plains Pipeline, LP

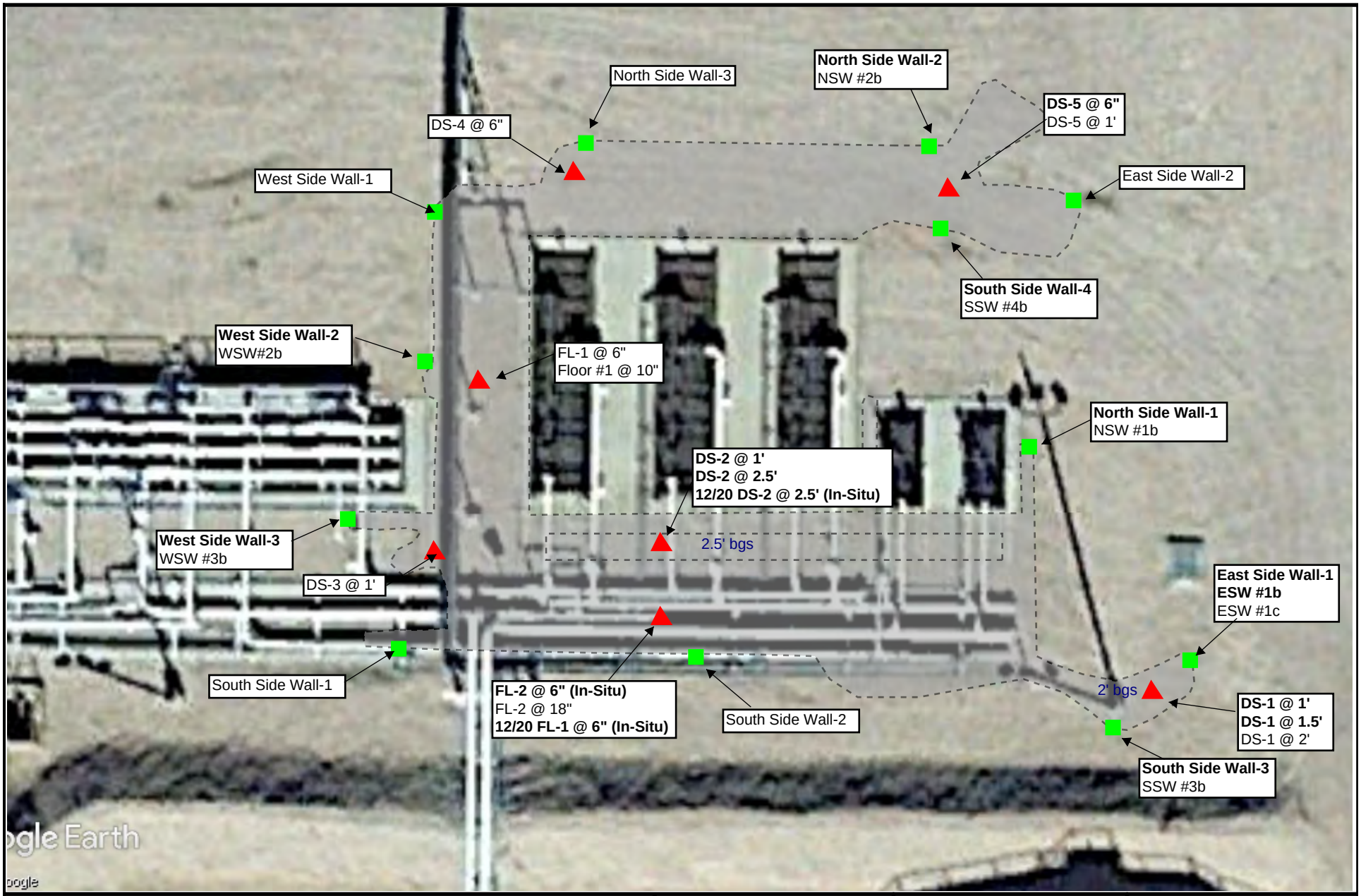
Alpha Crude Lynch Station

Lea County, NM

Scale 1" = ~6,000'	
Drafted by: ZC	Checked by: JL
Draft: March 14, 2017	
Lat. N 32.522267 Long. W 103.524841	
UL "B", Sec. 1, T21S, R33E	
TRC Proj. No.: 283491	

TRC
Results you can rely on

2771 Highway 217
Denver City, Texas 79323
432-466-4450



LEGEND:

- Confirmation "Sidewall" Sample Location
- Confirmation "Floor" Sample Location
- Excavated Area

Figure 2

Site & Sample Location Map
Plains Pipeline, L.P.
Alpha Crude Lynch Station
Lea County, NM

Scale 1" = 12'	
Drafted By: JL	Checked By: CS
Draft: January 16, 2018	
Lat. N 32.521555 Long. W103.524896	
TRC Proj. No.: 283491	

TRC
2057 Commerce Drive
Midland, Texas 79703
432.520.7720

TABLES

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH, AND CHLORIDE IN SOIL
ALPHA CRUDE LYNCH STATION
PLAINS PIPELINE, L.P.
LEA COUNTY, NM
PLAINS SRS NUMBER 2017-102

SAMPLE LOCATION	SAMPLE DATE	SAMPLE DEPTH	STATUS	Methods: EPA SW 846-8021B, 5030						Methods:				Method:
										EPA SW 846-8015M				E300
				BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	m,p, XYLENE (mg/kg)	o-XYLENE (mg/kg)	TOTAL BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	TOTAL TPH (mg/kg)	CHLORIDE (mg/kg)
DS-1 @ 1'	7/5/2017	1'	Excavated	0.263	0.933	0.897	0.770	1.29	4.15	436	5,100	612	**6,150**	<25.0
DS-2 @ 1'	7/5/2017	1'	Excavated	2.10	7.47	3.26	5.00	5.85	23.7	227	886	82.3	**1,200**	<25.0
DS-3 @ 1'	7/5/2017	1'	In-Situ	<0.0193	<0.0193	<0.0193	<0.0387	<0.0193	<0.0387	<25.0	29.2	<25.0	29.2	28.4
DS-4 @ 6"	7/5/2017	6"	In-Situ	<0.0176	<0.0176	<0.0176	<0.0351	<0.0176	<0.0351	<25.0	<25.0	<25.0	<25.0	39.9
DS-5 @ 6"	7/5/2017	6"	Excavated	<0.0400	0.560	<0.0400	<0.0800	1.00	1.56	<25.0	1,190	165	**1,360**	34.7
North Side Wall-1	7/5/2017	3"	Excavated	<0.0397	<0.0397	<0.0397	<0.0794	<0.0397	<0.0794	128	1,880	226	**2,230**	-
North Side Wall-2	7/5/2017	6"	Excavated	0.284	8.36	14.5	21.0	13.9	**58.0**	1,670	5,730	688	**8,090**	-
North Side Wall-3	7/5/2017	6"	In-Situ	<0.196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0391	<25.0	<25.0	<25.0	<25.0	-
East Side Wall-1	7/5/2017	6"	Excavated	3.19	34.2	33.4	41.0	25.2	**137**	1,880	10,500	1,230	**13,600**	-
East Side Wall-2	7/5/2017	3"	In-Situ	<0.0198	<0.0198	<0.0198	<0.0396	<0.0198	<0.0396	<25.0	36.1	30.7	66.8	-
South Side Wall-1	7/5/2017	6"	In-Situ	<0.0189	<0.0189	<0.0189	<0.0379	<0.0189	<0.0379	<25.0	<25.0	<25.0	<25.0	-
South Side Wall-2	7/5/2017	6"	In-Situ	<0.0199	<0.0199	<0.0199	<0.0398	<0.0199	<0.0398	129	139	<25.0	268	-
South Side Wall-3	7/5/2017	6"	Excavated	**13.0**	144	137	212	106	**612**	4,160	9,100	901	**14,200**	-
South Side Wall-4	7/5/2017	3"	Excavated	<0.962	0.904	<0.0962	<0.192	0.135	1.04	45.4	1,500	198	**1,740**	-
West Side Wall-1	7/5/2017	3"	In-Situ	<0.0374	0.0598	<0.0374	<0.0748	0.120	0.180	<25.0	535	128	663	-
West Side Wall-2	7/5/2017	3"	Excavated	<0.0372	<0.372	<0.372	<0.0745	<0.372	<0.0745	46.4	1,840	259	**2,150**	-
West Side Wall-3	7/5/2017	3"	Excavated	<0.0199	<0.0199	<0.0199	<0.0398	<0.0199	<0.0398	38.0	1,930	265	**2,230**	-
FL-1 @ 6"	7/5/2017	6"	Excavated	<0.0185	<0.0185	<0.0185	<0.0370	<0.0185	<0.0370	<25.0	<25.0	34.7	34.7	-
FL-2 @ 6" (In-Situ)	7/5/2017	6"	Treated	0.566	8.89	6.36	8.39	9.03	33.2	1,260	7,280	907	**9,450**	-
FL-2 @ 18"	7/5/2017	18"	In-Situ	<0.0183	0.0932	0.0896	0.0914	0.0896	0.364	<25.0	191	28.6	220	-
DS-1 @ 1.5'	8/10/2017	1.5'	Excavated	-	-	-	-	-	-	15.3	2,540	715	**3,270.3**	-
DS-2 @ 2.5'	8/10/2017	2.5'	Treated	-	-	-	-	-	-	210	1,150	222	**1,582**	-
DS-5 @ 1'	8/10/2017	1'	In-Situ	-	-	-	-	-	-	<0.245	97.6	35.5	133.1	-
Floor #1 @ 10"	8/10/2017	10"	In-Situ	-	-	-	-	-	-	<0.262	729	238	967	-
NSW #1b	8/10/2017	6"	In-Situ	-	-	-	-	-	-	<0.266	50.6	32.8	83.4	-
NSW #2b	8/10/2017	6"	In-Situ	<0.00900	<0.00466	<0.00614	<0.00679	<0.00679	<0.00900	<0.270	79.4	30.4	109.8	-
ESW #1b	8/10/2017	6"	Excavated	<0.00825	<0.00427	<0.00562	<0.00622	<0.00622	<0.00825	<0.247	1,210	331	**1,541**	-
SSW #3b	8/10/2017	6"	In-Situ	<0.00789	<0.00408	<0.00538	<0.00595	<0.00595	<0.00789	<0.236	14.2	12.7	26.9	-
SSW #4b	8/10/2017	6"	In-Situ	-	-	-	-	-	-	<0.262	42.1	15.6	57.7	-
WSW #3b	8/10/2017	6"	In-Situ	-	-	-	-	-	-	<0.243	<7.48	<7.48	<7.48	-
DS-1 @ 2'	9/6/2017	2'	In-Situ	-	-	-	-	-	-	<0.270	57.0	8.14	65.1	-
ESW #1c	9/6/2017	1'	In-Situ	-	-	-	-	-	-	<0.269	<7.48	<7.48	<7.48	-
WSW #2b	9/6/2017	6"	In-Situ	-	-	-	-	-	-	<0.262	25.7	15.1	40.8	-
12/20 FL-1 @ 6" (In-Situ)	12/20/2017	6"	In-Situ	-	-	-	-	-	-	12.1	4,180	1,550	**5,742.1**	-
12/20 DS-2 @ 2.5'	12/20/2017	2.5'	In-Situ	-	-	-	-	-	-	30.3	5,970	2,140	**8,140.3**	-
NMOCD Regulatory Guideline				**10**	**-**	**-**	**-**	**-**	**50**	**-**	**-**	**-**	**1,000**	**600**

APPENDICES

APPENDIX A

Analytical Reports

Certificate of Analysis Summary 557031

Terracon Lubbock, Lubbock, TX

Project Name: Alpha Lynch Station

Project Id: AR177151
Contact: Joel Lowry
Project Location:

Date Received in Lab: Thu Jul-06-17 01:45 pm
Report Date: 25-JUL-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	557031-001		557031-002		557031-003		557031-004		557031-005		557031-006	
	Field Id:	DS-1 @ 1'		DS-2 @ 1'		DS-3 @ 1'		DS-4 @ 6"		DS-5 @ 6"		North Side Wall-1	
	Depth:	1 ft		1 ft		1 ft		6 In		6 In			
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jul-05-17 10:40		Jul-05-17 10:45		Jul-05-17 10:50		Jul-05-17 10:55		Jul-05-17 11:00		Jul-05-17 11:05	
BTEX by EPA 8021B	***Extracted:***	Jul-07-17 12:30		Jul-07-17 12:30		Jul-07-17 12:30		Jul-07-17 12:30		Jul-07-17 12:30		Jul-07-17 12:30	
	Analyzed:	Jul-07-17 18:47		Jul-07-17 20:36		Jul-07-17 12:55		Jul-07-17 13:22		Jul-07-17 21:03		Jul-07-17 21:30	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		0.263	0.0906	2.10	0.0351	<0.0193	0.0193	<0.0176	0.0176	<0.0400	0.0400	<0.0397	0.0397
Toluene		0.933	0.0906	7.47	0.0351	<0.0193	0.0193	<0.0176	0.0176	0.560	0.0400	<0.0397	0.0397
Ethylbenzene		0.897	0.0906	3.26	0.0351	<0.0193	0.0193	<0.0176	0.0176	<0.0400	0.0400	<0.0397	0.0397
m,p-Xylenes		0.770	0.181	5.00	0.0702	<0.0387	0.0387	<0.0351	0.0351	<0.0800	0.0800	<0.0794	0.0794
o-Xylene		1.29	0.0906	5.85	0.0351	<0.0193	0.0193	<0.0176	0.0176	1.00	0.0400	<0.0397	0.0397
Total Xylenes		2.06	0.0906	10.9	0.0351	<0.0193	0.0193	<0.0176	0.0176	1.00	0.0400	<0.0397	0.0397
Total BTEX		4.15	0.0906	23.7	0.0351	<0.0193	0.0193	<0.0176	0.0176	1.56	0.0400	<0.0397	0.0397
Chloride by EPA 300	***Extracted:***	Jul-11-17 12:30		Jul-11-17 12:30		Jul-11-17 12:30		Jul-11-17 12:30		Jul-11-17 12:30			
	Analyzed:	Jul-11-17 16:10		Jul-11-17 17:00		Jul-11-17 17:25		Jul-11-17 17:49		Jul-11-17 18:14			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Chloride		<25.0	25.0	<25.0	25.0	28.4	25.0	39.9	25.0	34.7	25.0		
TPH by SW 8015B	***Extracted:***	Jul-07-17 16:18		Jul-07-17 16:18		Jul-07-17 16:18		Jul-07-17 16:18		Jul-07-17 16:18		Jul-07-17 16:18	
	Analyzed:	Jul-10-17 15:23		Jul-08-17 01:58		Jul-08-17 02:32		Jul-08-17 04:12		Jul-08-17 04:45		Jul-08-17 05:51	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Range Hydrocarbons		436	125	227	25.0	<25.0	25.0	<25.0	25.0	<25.0	25.0	128	25.0
C12-C28 Range Hydrocarbons		5100	125	886	25.0	29.2	25.0	<25.0	25.0	1190	25.0	1880	25.0
C28-C35 Range Hydrocarbons		612	125	82.3	25.0	<25.0	25.0	<25.0	25.0	165	25.0	226	25.0
Total TPH		6150	125	1200	25.0	29.2	25.0	<25.0	25.0	1360	25.0	2230	25.0

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 557031

Terracon Lubbock, Lubbock, TX

Project Name: Alpha Lynch Station

Project Id: AR177151
Contact: Joel Lowry
Project Location:

Date Received in Lab: Thu Jul-06-17 01:45 pm
Report Date: 25-JUL-17
Project Manager: Kelsey Brooks

Analysis Requested	*Lab Id:*	557031-007		557031-008		557031-009		557031-010		557031-011		557031-012	
	Field Id:	North Side Wall-2		North Side Wall-3		East Side Wall-1		East Side Wall-2		South Side Wall-1		South Side Wall-2	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jul-05-17 11:10		Jul-05-17 11:15		Jul-05-17 11:20		Jul-05-17 11:25		Jul-05-17 11:30		Jul-05-17 11:35	
BTEX by EPA 8021B	*Extracted:*	Jul-07-17 12:30		Jul-07-17 12:30		Jul-07-17 12:30		Jul-07-17 12:30		Jul-07-17 12:30		Jul-07-17 12:30	
	Analyzed:	Jul-07-17 21:57		Jul-07-17 13:49		Jul-07-17 22:24		Jul-07-17 14:16		Jul-07-17 14:43		Jul-07-17 15:10	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		0.284	0.0917	<0.0196	0.0196	3.19	0.384	<0.0198	0.0198	<0.0189	0.0189	<0.0199	0.0199
Toluene		8.36	0.0917	<0.0196	0.0196	34.2	0.384	<0.0198	0.0198	<0.0189	0.0189	<0.0199	0.0199
Ethylbenzene		14.5	0.0917	<0.0196	0.0196	33.4	0.384	<0.0198	0.0198	<0.0189	0.0189	<0.0199	0.0199
m,p-Xylenes		21.0	0.183	<0.0391	0.0391	41.0	0.768	<0.0396	0.0396	<0.0379	0.0379	<0.0398	0.0398
o-Xylene		13.9	0.0917	<0.0196	0.0196	25.2	0.384	<0.0198	0.0198	<0.0189	0.0189	<0.0199	0.0199
Total Xylenes		34.9	0.0917	<0.0196	0.0196	66.2	0.384	<0.0198	0.0198	<0.0189	0.0189	<0.0199	0.0199
Total BTEX		58.0	0.0917	<0.0196	0.0196	137	0.384	<0.0198	0.0198	<0.0189	0.0189	<0.0199	0.0199
TPH by SW 8015B	*Extracted:*	Jul-07-17 16:18		Jul-07-17 16:18		Jul-07-17 16:18		Jul-07-17 16:18		Jul-07-17 16:18		Jul-07-17 16:18	
	Analyzed:	Jul-08-17 06:24		Jul-08-17 06:56		Jul-08-17 07:29		Jul-08-17 08:01		Jul-08-17 08:33		Jul-08-17 09:06	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Range Hydrocarbons		1670	125	<25.0	25.0	1880	125	<25.0	25.0	<25.0	25.0	129	25.0
C12-C28 Range Hydrocarbons		5730	125	<25.0	25.0	10500 E	125	36.1	25.0	<25.0	25.0	139	25.0
C28-C35 Range Hydrocarbons		688	125	<25.0	25.0	1230	125	30.7	25.0	<25.0	25.0	<25.0	25.0
Total TPH		8090	125	<25.0	25.0	13600	125	66.8	25.0	<25.0	25.0	268	25.0

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 557031

Terracon Lubbock, Lubbock, TX

Project Name: Alpha Lynch Station

Project Id: AR177151
Contact: Joel Lowry
Project Location:

Date Received in Lab: Thu Jul-06-17 01:45 pm
Report Date: 25-JUL-17
Project Manager: Kelsey Brooks

Analysis Requested	*Lab Id:*	557031-013		557031-014		557031-015		557031-016		557031-017		557031-018	
	Field Id:	South Side Wall-3		South Side Wall-4		West Side Wall-1		West Side Wall-2		West Side Wall-3		FL-1	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jul-05-17 11:40		Jul-05-17 11:45		Jul-05-17 11:50		Jul-05-17 11:55		Jul-05-17 12:00		Jul-05-17 12:05	
BTEX by EPA 8021B	*Extracted:*	Jul-07-17 12:30		Jul-07-17 12:30		Jul-07-17 12:30		Jul-07-17 12:30		Jul-07-17 12:30		Jul-07-17 12:30	
	Analyzed:	Jul-07-17 22:51		Jul-07-17 23:18		Jul-07-17 23:45		Jul-07-17 16:58		Jul-07-17 15:37		Jul-07-17 16:04	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		13.0	0.391	<0.0962	0.0962	<0.0374	0.0374	<0.0372	0.0372	<0.0199	0.0199	<0.0185	0.0185
Toluene		144	0.391	0.904	0.0962	0.0598	0.0374	<0.0372	0.0372	<0.0199	0.0199	<0.0185	0.0185
Ethylbenzene		137	0.391	<0.0962	0.0962	<0.0374	0.0374	<0.0372	0.0372	<0.0199	0.0199	<0.0185	0.0185
m,p-Xylenes		212	0.783	<0.192	0.192	<0.0748	0.0748	<0.0745	0.0745	<0.0398	0.0398	<0.0370	0.0370
o-Xylene		106	0.391	0.135	0.0962	0.120	0.0374	<0.0372	0.0372	<0.0199	0.0199	<0.0185	0.0185
Total Xylenes		318	0.391	0.135	0.0962	0.120	0.0374	<0.0372	0.0372	<0.0199	0.0199	<0.0185	0.0185
Total BTEX		612	0.391	1.04	0.0962	0.180	0.0374	<0.0372	0.0372	<0.0199	0.0199	<0.0185	0.0185
TPH by SW 8015B	*Extracted:*	Jul-07-17 16:18		Jul-07-17 16:18		Jul-07-17 16:18		Jul-07-17 16:18		Jul-07-17 16:18		Jul-07-17 16:18	
	Analyzed:	Jul-08-17 09:38		Jul-08-17 10:10		Jul-10-17 10:17		Jul-10-17 10:51		Jul-10-17 11:25		Jul-10-17 11:59	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Range Hydrocarbons		4160	125	45.4	25.0	<25.0	25.0	46.4	25.0	38.0	25.0	<25.0	25.0
C12-C28 Range Hydrocarbons		9100	125	1500	25.0	535	25.0	1840	25.0	1930	25.0	<25.0	25.0
C28-C35 Range Hydrocarbons		901	125	198	25.0	128	25.0	259	25.0	265	25.0	34.7	25.0
Total TPH		14200	125	1740	25.0	663	25.0	2150	25.0	2230	25.0	34.7	25.0

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 557031

Terracon Lubbock, Lubbock, TX

Project Name: Alpha Lynch Station

Project Id: AR177151
Contact: Joel Lowry
Project Location:

Date Received in Lab: Thu Jul-06-17 01:45 pm
Report Date: 25-JUL-17
Project Manager: Kelsey Brooks

Analysis Requested									
	Lab Id:	557031-019		557031-020					
	Field Id:	FL-2 @ 6" In-Site		FL-2 @ 18"					
	Depth:	6 In		18 In					
	Matrix:	SOIL		SOIL					
	Sampled:	Jul-05-17 12:10		Jul-05-17 12:15					
BTEX by EPA 8021B	***Extracted:***	Jul-07-17 12:30		Jul-07-17 12:30					
	Analyzed:	Jul-08-17 00:12		Jul-07-17 16:31					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Benzene		0.566	0.0898	<0.0183	0.0183				
Toluene		8.89	0.0898	0.0932	0.0183				
Ethylbenzene		6.36	0.0898	0.0896	0.0183				
m,p-Xylenes		8.39	0.180	0.0914	0.0366				
o-Xylene		9.03	0.0898	0.0896	0.0183				
Total Xylenes		17.4	0.0898	0.181	0.0183				
Total BTEX		33.2	0.0898	0.364	0.0183				
TPH by SW 8015B	***Extracted:***	Jul-07-17 16:18		Jul-07-17 16:18					
	Analyzed:	Jul-10-17 12:34		Jul-10-17 13:09					
	Units/RL:	mg/kg	RL	mg/kg	RL				
C6-C12 Range Hydrocarbons		1260	250	<25.0	25.0				
C12-C28 Range Hydrocarbons		7280	250	191	25.0				
C28-C35 Range Hydrocarbons		907	250	28.6	25.0				
Total TPH		9450	250	220	25.0				

Kelsey Brooks
Project Manager

Analytical Report 557031

for

Terracon Lubbock

Project Manager: Joel Lowry

Alpha Lynch Station

AR177151

25-JUL-17

Collected By: Client

6701 Aberdeen, Suite 9 Lubbock, TX 79424

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
Oklahoma (9218)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400)
Xenco-San Antonio: Texas (T104704534)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

25-JUL-17

Project Manager: **Joel Lowry**
Terracon Lubbock
5827 50th st, Suite 1
Lubbock, TX 79424

Reference: XENCO Report No(s): **557031**
Alpha Lynch Station
Project Address:

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) 557031. 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. 557031 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 557031

Terracon Lubbock, Lubbock, TX

Alpha Lynch Station

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
DS-1 @ 1'	S	07-05-17 10:40	- 1 ft	557031-001
DS-2 @ 1'	S	07-05-17 10:45	- 1 ft	557031-002
DS-3 @ 1'	S	07-05-17 10:50	- 1 ft	557031-003
DS-4 @ 6"	S	07-05-17 10:55	- 6 In	557031-004
DS-5 @ 6"	S	07-05-17 11:00	- 6 In	557031-005
North Side Wall-1	S	07-05-17 11:05		557031-006
North Side Wall-2	S	07-05-17 11:10		557031-007
North Side Wall-3	S	07-05-17 11:15		557031-008
East Side Wall-1	S	07-05-17 11:20		557031-009
East Side Wall-2	S	07-05-17 11:25		557031-010
South Side Wall-1	S	07-05-17 11:30		557031-011
South Side Wall-2	S	07-05-17 11:35		557031-012
South Side Wall-3	S	07-05-17 11:40		557031-013
South Side Wall-4	S	07-05-17 11:45		557031-014
West Side Wall-1	S	07-05-17 11:50		557031-015
West Side Wall-2	S	07-05-17 11:55		557031-016
West Side Wall-3	S	07-05-17 12:00		557031-017
FL-1	S	07-05-17 12:05		557031-018
FL-2 @ 6" In-Site	S	07-05-17 12:10	- 6 In	557031-019
FL-2 @ 18"	S	07-05-17 12:15	- 18 In	557031-020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3021805 BTEX by EPA 8021B
Lab Sample ID 557031-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Ethylbenzene, Toluene, o-Xylene recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 557031-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013, -014, -015, -016, -017, -018, -019, -020.
The Laboratory Control Sample for Toluene, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.
Samples affected are: 557031-002,557031-007,557031-019,557031-013,557031-009.
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3021855 TPH by SW 8015B
Surrogate Tricosane recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.
Samples affected are: 557031-001,557031-020,557031-019,557031-017,557031-016,557031-015,557031-002,557031-013,557031-009,557031-007,557031-006,557031-005,557031-003,557031-014.
Surrogate n-Triacontane recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.
Samples affected are: 557031-003,557031-020,557031-019,557031-018,557031-017,557031-016,557031-015,557031-014,557031-013,557031-010,557031-009,557031-008,557031-007,557031-006,557031-002,557031-001,557031-005.

Lab Sample ID 557031-003 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). C12-C28 Range Hydrocarbons Relative Percent Difference (RPD) between matrix spike and duplicate was above quality control limits.
Samples in the analytical batch are: 557031-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013, -014, -015, -016, -017, -018, -019, -020

Outlier/s are due to possible matrix interference.

Certificate of Analytical Results 557031

Terracon Lubbock, Lubbock, TX

Alpha Lynch Station

Sample Id:	**DS-1 @ 1'**	Matrix:	Soil	Date Received:	07.06.17 13.45
Lab Sample Id:	557031-001	Date Collected:	07.05.17 10.40	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	07.11.17 12.30	Basis:	Wet Weight
Seq Number:	3022014				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<25.0	25.0	mg/kg	07.11.17 16.10	U	1

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	07.07.17 16.18	Basis:	Wet Weight
Seq Number:	3021855				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Range Hydrocarbons	PHC612	**436**	125	mg/kg	07.10.17 15.23		5
C12-C28 Range Hydrocarbons	PHCG1228	**5100**	125	mg/kg	07.10.17 15.23		5
C28-C35 Range Hydrocarbons	PHCG2835	**612**	125	mg/kg	07.10.17 15.23		5
Total TPH	PHC635	**6150**	125	mg/kg	07.10.17 15.23		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
n-Triacontane	638-68-6	3160	%	46-152	07.10.17 15.23	**
Tricosane	638-67-5	4740	%	65-144	07.10.17 15.23	**

Certificate of Analytical Results 557031

Terracon Lubbock, Lubbock, TX

Alpha Lynch Station

Sample Id:	**DS-1 @ 1'**	Matrix:	Soil	Date Received:	07.06.17 13.45
Lab Sample Id:	557031-001	Date Collected:	07.05.17 10.40	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	07.07.17 12.30	Basis:	Wet Weight
Seq Number:	3021805				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**0.263**	0.0906	mg/kg	07.07.17 18.47		5
Toluene	108-88-3	**0.933**	0.0906	mg/kg	07.07.17 18.47		5
Ethylbenzene	100-41-4	**0.897**	0.0906	mg/kg	07.07.17 18.47		5
m,p-Xylenes	179601-23-1	**0.770**	0.181	mg/kg	07.07.17 18.47		5
o-Xylene	95-47-6	**1.29**	0.0906	mg/kg	07.07.17 18.47		5
Total Xylenes	1330-20-7	**2.06**	0.0906	mg/kg	07.07.17 18.47		5
Total BTEX		**4.15**	0.0906	mg/kg	07.07.17 18.47		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	68-120	07.07.17 18.47	
a,a,a-Trifluorotoluene	98-08-8	97	%	71-121	07.07.17 18.47	

Certificate of Analytical Results 557031

Terracon Lubbock, Lubbock, TX

Alpha Lynch Station

Sample Id:	**DS-2 @ 1'**	Matrix:	Soil	Date Received:	07.06.17 13.45
Lab Sample Id:	557031-002	Date Collected:	07.05.17 10.45	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	07.11.17 12.30	Basis:	Wet Weight
Seq Number:	3022014				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<25.0	25.0	mg/kg	07.11.17 17.00	U	1

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	07.07.17 16.18	Basis:	Wet Weight
Seq Number:	3021855				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Range Hydrocarbons	PHC612	**227**	25.0	mg/kg	07.08.17 01.58		1
C12-C28 Range Hydrocarbons	PHCG1228	**886**	25.0	mg/kg	07.08.17 01.58		1
C28-C35 Range Hydrocarbons	PHCG2835	**82.3**	25.0	mg/kg	07.08.17 01.58		1
Total TPH	PHC635	**1200**	25.0	mg/kg	07.08.17 01.58		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
n-Triacontane	638-68-6	548	%	46-152	07.08.17 01.58	**
Tricosane	638-67-5	773	%	65-144	07.08.17 01.58	**

Certificate of Analytical Results 557031

Terracon Lubbock, Lubbock, TX

Alpha Lynch Station

Sample Id:	**DS-2 @ 1'**	Matrix:	Soil	Date Received:	07.06.17 13.45
Lab Sample Id:	557031-002	Date Collected:	07.05.17 10.45	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	07.07.17 12.30	Basis:	Wet Weight
Seq Number:	3021805				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**2.10**	0.0351	mg/kg	07.07.17 20.36		2
Toluene	108-88-3	**7.47**	0.0351	mg/kg	07.07.17 20.36		2
Ethylbenzene	100-41-4	**3.26**	0.0351	mg/kg	07.07.17 20.36		2
m,p-Xylenes	179601-23-1	**5.00**	0.0702	mg/kg	07.07.17 20.36		2
o-Xylene	95-47-6	**5.85**	0.0351	mg/kg	07.07.17 20.36		2
Total Xylenes	1330-20-7	**10.9**	0.0351	mg/kg	07.07.17 20.36		2
Total BTEX		**23.7**	0.0351	mg/kg	07.07.17 20.36		2

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	211	%	68-120	07.07.17 20.36	**
a,a,a-Trifluorotoluene	98-08-8	99	%	71-121	07.07.17 20.36	

Certificate of Analytical Results 557031

Terracon Lubbock, Lubbock, TX

Alpha Lynch Station

Sample Id:	**DS-3 @ 1'**	Matrix:	Soil	Date Received:	07.06.17 13.45
Lab Sample Id:	557031-003	Date Collected:	07.05.17 10.50	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	07.11.17 12.30	Basis:	Wet Weight
Seq Number:	3022014				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**28.4**	25.0	mg/kg	07.11.17 17.25		1

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	07.07.17 16.18	Basis:	Wet Weight
Seq Number:	3021855				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Range Hydrocarbons	PHC612	<25.0	25.0	mg/kg	07.08.17 02.32	U	1
C12-C28 Range Hydrocarbons	PHCG1228	**29.2**	25.0	mg/kg	07.08.17 02.32		1
C28-C35 Range Hydrocarbons	PHCG2835	<25.0	25.0	mg/kg	07.08.17 02.32	U	1
Total TPH	PHC635	**29.2**	25.0	mg/kg	07.08.17 02.32		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
n-Triacontane	638-68-6	197	%	46-152	07.08.17 02.32	**
Tricosane	638-67-5	168	%	65-144	07.08.17 02.32	**

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Terracon Lubbock, Lubbock, TX

Alpha Lynch Station

Sample Id:	**DS-3 @ 1'**	Matrix:	Soil	Date Received:	07.06.17 13.45
Lab Sample Id:	557031-003	Date Collected:	07.05.17 10.50	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	07.07.17 12.30	Basis:	Wet Weight
Seq Number:	3021805				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0193	0.0193	mg/kg	07.07.17 12.55	U	1
Toluene	108-88-3	<0.0193	0.0193	mg/kg	07.07.17 12.55	U	1
Ethylbenzene	100-41-4	<0.0193	0.0193	mg/kg	07.07.17 12.55	U	1
m,p-Xylenes	179601-23-1	<0.0387	0.0387	mg/kg	07.07.17 12.55	U	1
o-Xylene	95-47-6	<0.0193	0.0193	mg/kg	07.07.17 12.55	U	1
Total Xylenes	1330-20-7	<0.0193	0.0193	mg/kg	07.07.17 12.55	U	1
Total BTEX		<0.0193	0.0193	mg/kg	07.07.17 12.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	88	%	68-120	07.07.17 12.55	
a,a,a-Trifluorotoluene	98-08-8	95	%	71-121	07.07.17 12.55	

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Terracon Lubbock, Lubbock, TX

Alpha Lynch Station

Sample Id:	**DS-4 @ 6''**	Matrix:	Soil	Date Received:	07.06.17 13.45
Lab Sample Id:	557031-004	Date Collected:	07.05.17 10.55	Sample Depth:	6 In

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	07.11.17 12.30	Basis:	Wet Weight
Seq Number:	3022014				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**39.9**	25.0	mg/kg	07.11.17 17.49		1

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	07.07.17 16.18	Basis:	Wet Weight
Seq Number:	3021855				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Range Hydrocarbons	PHC612	<25.0	25.0	mg/kg	07.08.17 04.12	U	1
C12-C28 Range Hydrocarbons	PHCG1228	<25.0	25.0	mg/kg	07.08.17 04.12	U	1
C28-C35 Range Hydrocarbons	PHCG2835	<25.0	25.0	mg/kg	07.08.17 04.12	U	1
Total TPH	PHC635	<25.0	25.0	mg/kg	07.08.17 04.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
n-Triacontane	638-68-6	122	%	46-152	07.08.17 04.12	
Tricosane	638-67-5	92	%	65-144	07.08.17 04.12	

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Terracon Lubbock, Lubbock, TX

Alpha Lynch Station

Sample Id:	**DS-4 @ 6''**	Matrix:	Soil	Date Received:	07.06.17 13.45
Lab Sample Id:	557031-004	Date Collected:	07.05.17 10.55	Sample Depth:	6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	07.07.17 12.30	Basis:	Wet Weight
Seq Number:	3021805				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0176	0.0176	mg/kg	07.07.17 13.22	U	1
Toluene	108-88-3	<0.0176	0.0176	mg/kg	07.07.17 13.22	U	1
Ethylbenzene	100-41-4	<0.0176	0.0176	mg/kg	07.07.17 13.22	U	1
m,p-Xylenes	179601-23-1	<0.0351	0.0351	mg/kg	07.07.17 13.22	U	1
o-Xylene	95-47-6	<0.0176	0.0176	mg/kg	07.07.17 13.22	U	1
Total Xylenes	1330-20-7	<0.0176	0.0176	mg/kg	07.07.17 13.22	U	1
Total BTEX		<0.0176	0.0176	mg/kg	07.07.17 13.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	93	%	68-120	07.07.17 13.22	
a,a,a-Trifluorotoluene	98-08-8	97	%	71-121	07.07.17 13.22	

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Terracon Lubbock, Lubbock, TX

Alpha Lynch Station

Sample Id:	**DS-5 @ 6''**	Matrix:	Soil	Date Received:	07.06.17 13.45
Lab Sample Id:	557031-005	Date Collected:	07.05.17 11.00	Sample Depth:	6 In

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	07.11.17 12.30	Basis:	Wet Weight
Seq Number:	3022014				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**34.7**	25.0	mg/kg	07.11.17 18.14		1

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	07.07.17 16.18	Basis:	Wet Weight
Seq Number:	3021855				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Range Hydrocarbons	PHC612	<25.0	25.0	mg/kg	07.08.17 04.45	U	1
C12-C28 Range Hydrocarbons	PHCG1228	**1190**	25.0	mg/kg	07.08.17 04.45		1
C28-C35 Range Hydrocarbons	PHCG2835	**165**	25.0	mg/kg	07.08.17 04.45		1
Total TPH	PHC635	**1360**	25.0	mg/kg	07.08.17 04.45		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
n-Triacontane	638-68-6	853	%	46-152	07.08.17 04.45	**
Tricosane	638-67-5	1280	%	65-144	07.08.17 04.45	**

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Terracon Lubbock, Lubbock, TX

Alpha Lynch Station

Sample Id:	**DS-5 @ 6''**	Matrix:	Soil	Date Received:	07.06.17 13.45
Lab Sample Id:	557031-005	Date Collected:	07.05.17 11.00	Sample Depth:	6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	07.07.17 12.30	Basis:	Wet Weight
Seq Number:	3021805				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0400	0.0400	mg/kg	07.07.17 21.03	U	2
Toluene	108-88-3	**0.560**	0.0400	mg/kg	07.07.17 21.03		2
Ethylbenzene	100-41-4	<0.0400	0.0400	mg/kg	07.07.17 21.03	U	2
m,p-Xylenes	179601-23-1	<0.0800	0.0800	mg/kg	07.07.17 21.03	U	2
o-Xylene	95-47-6	**1.00**	0.0400	mg/kg	07.07.17 21.03		2
Total Xylenes	1330-20-7	**1.00**	0.0400	mg/kg	07.07.17 21.03		2
Total BTEX		**1.56**	0.0400	mg/kg	07.07.17 21.03		2

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107	%	68-120	07.07.17 21.03	
a,a,a-Trifluorotoluene	98-08-8	96	%	71-121	07.07.17 21.03	

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Terracon Lubbock, Lubbock, TX

Alpha Lynch Station

Sample Id:	**North Side Wall-1**	Matrix:	Soil	Date Received:	07.06.17 13.45
Lab Sample Id:	557031-006	Date Collected:	07.05.17 11.05		

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	07.07.17 16.18	Basis:	Wet Weight
Seq Number:	3021855				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Range Hydrocarbons	PHC612	**128**	25.0	mg/kg	07.08.17 05.51		1
C12-C28 Range Hydrocarbons	PHCG1228	**1880**	25.0	mg/kg	07.08.17 05.51		1
C28-C35 Range Hydrocarbons	PHCG2835	**226**	25.0	mg/kg	07.08.17 05.51		1
Total TPH	PHC635	**2230**	25.0	mg/kg	07.08.17 05.51		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
n-Triacontane	638-68-6	1000	%	46-152	07.08.17 05.51	**
Tricosane	638-67-5	1680	%	65-144	07.08.17 05.51	**

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	07.07.17 12.30	Basis:	Wet Weight
Seq Number:	3021805				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0397	0.0397	mg/kg	07.07.17 21.30	U	2
Toluene	108-88-3	<0.0397	0.0397	mg/kg	07.07.17 21.30	U	2
Ethylbenzene	100-41-4	<0.0397	0.0397	mg/kg	07.07.17 21.30	U	2
m,p-Xylenes	179601-23-1	<0.0794	0.0794	mg/kg	07.07.17 21.30	U	2
o-Xylene	95-47-6	<0.0397	0.0397	mg/kg	07.07.17 21.30	U	2
Total Xylenes	1330-20-7	<0.0397	0.0397	mg/kg	07.07.17 21.30	U	2
Total BTEX		<0.0397	0.0397	mg/kg	07.07.17 21.30	U	2

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	68-120	07.07.17 21.30	
a,a,a-Trifluorotoluene	98-08-8	96	%	71-121	07.07.17 21.30	

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Terracon Lubbock, Lubbock, TX

Alpha Lynch Station

Sample Id:	**North Side Wall-2**	Matrix:	Soil	Date Received:	07.06.17 13.45
Lab Sample Id:	557031-007	Date Collected:	07.05.17 11.10		

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	07.07.17 16.18	Basis:	Wet Weight
Seq Number:	3021855				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Range Hydrocarbons	PHC612	**1670**	125	mg/kg	07.08.17 06.24		5
C12-C28 Range Hydrocarbons	PHCG1228	**5730**	125	mg/kg	07.08.17 06.24		5
C28-C35 Range Hydrocarbons	PHCG2835	**688**	125	mg/kg	07.08.17 06.24		5
Total TPH	PHC635	**8090**	125	mg/kg	07.08.17 06.24		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
n-Triacontane	638-68-6	3150	%	46-152	07.08.17 06.24	**
Tricosane	638-67-5	4330	%	65-144	07.08.17 06.24	**

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	07.07.17 12.30	Basis:	Wet Weight
Seq Number:	3021805				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**0.284**	0.0917	mg/kg	07.07.17 21.57		5
Toluene	108-88-3	**8.36**	0.0917	mg/kg	07.07.17 21.57		5
Ethylbenzene	100-41-4	**14.5**	0.0917	mg/kg	07.07.17 21.57		5
m,p-Xylenes	179601-23-1	**21.0**	0.183	mg/kg	07.07.17 21.57		5
o-Xylene	95-47-6	**13.9**	0.0917	mg/kg	07.07.17 21.57		5
Total Xylenes	1330-20-7	**34.9**	0.0917	mg/kg	07.07.17 21.57		5
Total BTEX		**58.0**	0.0917	mg/kg	07.07.17 21.57		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	280	%	68-120	07.07.17 21.57	**
a,a,a-Trifluorotoluene	98-08-8	105	%	71-121	07.07.17 21.57	

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Terracon Lubbock, Lubbock, TX

Alpha Lynch Station

Sample Id:	**North Side Wall-3**	Matrix:	Soil	Date Received:	07.06.17 13.45
Lab Sample Id:	557031-008	Date Collected:	07.05.17 11.15		

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	07.07.17 16.18	Basis:	Wet Weight
Seq Number:	3021855				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Range Hydrocarbons	PHC612	<25.0	25.0	mg/kg	07.08.17 06.56	U	1
C12-C28 Range Hydrocarbons	PHCG1228	<25.0	25.0	mg/kg	07.08.17 06.56	U	1
C28-C35 Range Hydrocarbons	PHCG2835	<25.0	25.0	mg/kg	07.08.17 06.56	U	1
Total TPH	PHC635	<25.0	25.0	mg/kg	07.08.17 06.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
n-Triacontane	638-68-6	189	%	46-152	07.08.17 06.56	**
Tricosane	638-67-5	135	%	65-144	07.08.17 06.56	

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	07.07.17 12.30	Basis:	Wet Weight
Seq Number:	3021805				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0196	0.0196	mg/kg	07.07.17 13.49	U	1
Toluene	108-88-3	<0.0196	0.0196	mg/kg	07.07.17 13.49	U	1
Ethylbenzene	100-41-4	<0.0196	0.0196	mg/kg	07.07.17 13.49	U	1
m,p-Xylenes	179601-23-1	<0.0391	0.0391	mg/kg	07.07.17 13.49	U	1
o-Xylene	95-47-6	<0.0196	0.0196	mg/kg	07.07.17 13.49	U	1
Total Xylenes	1330-20-7	<0.0196	0.0196	mg/kg	07.07.17 13.49	U	1
Total BTEX		<0.0196	0.0196	mg/kg	07.07.17 13.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	68-120	07.07.17 13.49	
a,a,a-Trifluorotoluene	98-08-8	99	%	71-121	07.07.17 13.49	

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Terracon Lubbock, Lubbock, TX

Alpha Lynch Station

Sample Id:	**East Side Wall-1**	Matrix:	Soil	Date Received:	07.06.17 13.45
Lab Sample Id:	557031-009	Date Collected:	07.05.17 11.20		

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	07.07.17 16.18	Basis:	Wet Weight
Seq Number:	3021855				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Range Hydrocarbons	PHC612	**1880**	125	mg/kg	07.08.17 07.29		5
C12-C28 Range Hydrocarbons	PHCG1228	**10500**	125	mg/kg	07.08.17 07.29	E	5
C28-C35 Range Hydrocarbons	PHCG2835	**1230**	125	mg/kg	07.08.17 07.29		5
Total TPH	PHC635	**13600**	125	mg/kg	07.08.17 07.29		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
n-Triacontane	638-68-6	5390	%	46-152	07.08.17 07.29	**
Tricosane	638-67-5	8810	%	65-144	07.08.17 07.29	**

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	07.07.17 12.30	Basis:	Wet Weight
Seq Number:	3021805				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**3.19**	0.384	mg/kg	07.07.17 22.24		20
Toluene	108-88-3	**34.2**	0.384	mg/kg	07.07.17 22.24		20
Ethylbenzene	100-41-4	**33.4**	0.384	mg/kg	07.07.17 22.24		20
m,p-Xylenes	179601-23-1	**41.0**	0.768	mg/kg	07.07.17 22.24		20
o-Xylene	95-47-6	**25.2**	0.384	mg/kg	07.07.17 22.24		20
Total Xylenes	1330-20-7	**66.2**	0.384	mg/kg	07.07.17 22.24		20
Total BTEX		**137**	0.384	mg/kg	07.07.17 22.24		20

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	177	%	68-120	07.07.17 22.24	**
a,a,a-Trifluorotoluene	98-08-8	112	%	71-121	07.07.17 22.24	

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Terracon Lubbock, Lubbock, TX

Alpha Lynch Station

Sample Id:	**East Side Wall-2**	Matrix:	Soil	Date Received:	07.06.17 13.45
Lab Sample Id:	557031-010	Date Collected:	07.05.17 11.25		

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	07.07.17 16.18	Basis:	Wet Weight
Seq Number:	3021855				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Range Hydrocarbons	PHC612	<25.0	25.0	mg/kg	07.08.17 08.01	U	1
C12-C28 Range Hydrocarbons	PHCG1228	**36.1**	25.0	mg/kg	07.08.17 08.01		1
C28-C35 Range Hydrocarbons	PHCG2835	**30.7**	25.0	mg/kg	07.08.17 08.01		1
Total TPH	PHC635	**66.8**	25.0	mg/kg	07.08.17 08.01		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
n-Triacontane	638-68-6	193	%	46-152	07.08.17 08.01	**
Tricosane	638-67-5	144	%	65-144	07.08.17 08.01	

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	07.07.17 12.30	Basis:	Wet Weight
Seq Number:	3021805				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0198	0.0198	mg/kg	07.07.17 14.16	U	1
Toluene	108-88-3	<0.0198	0.0198	mg/kg	07.07.17 14.16	U	1
Ethylbenzene	100-41-4	<0.0198	0.0198	mg/kg	07.07.17 14.16	U	1
m,p-Xylenes	179601-23-1	<0.0396	0.0396	mg/kg	07.07.17 14.16	U	1
o-Xylene	95-47-6	<0.0198	0.0198	mg/kg	07.07.17 14.16	U	1
Total Xylenes	1330-20-7	<0.0198	0.0198	mg/kg	07.07.17 14.16	U	1
Total BTEX		<0.0198	0.0198	mg/kg	07.07.17 14.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	89	%	68-120	07.07.17 14.16	
a,a,a-Trifluorotoluene	98-08-8	97	%	71-121	07.07.17 14.16	

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Terracon Lubbock, Lubbock, TX

Alpha Lynch Station

Sample Id:	**South Side Wall-1**	Matrix:	Soil	Date Received:	07.06.17 13.45
Lab Sample Id:	557031-011	Date Collected:	07.05.17 11.30		
Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	07.07.17 16.18	Basis:	Wet Weight
Seq Number:	3021855				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Range Hydrocarbons	PHC612	<25.0	25.0	mg/kg	07.08.17 08.33	U	1
C12-C28 Range Hydrocarbons	PHCG1228	<25.0	25.0	mg/kg	07.08.17 08.33	U	1
C28-C35 Range Hydrocarbons	PHCG2835	<25.0	25.0	mg/kg	07.08.17 08.33	U	1
Total TPH	PHC635	<25.0	25.0	mg/kg	07.08.17 08.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
n-Triacontane	638-68-6	114	%	46-152	07.08.17 08.33	
Tricosane	638-67-5	87	%	65-144	07.08.17 08.33	

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	07.07.17 12.30	Basis:	Wet Weight
Seq Number:	3021805				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0189	0.0189	mg/kg	07.07.17 14.43	U	1
Toluene	108-88-3	<0.0189	0.0189	mg/kg	07.07.17 14.43	U	1
Ethylbenzene	100-41-4	<0.0189	0.0189	mg/kg	07.07.17 14.43	U	1
m,p-Xylenes	179601-23-1	<0.0379	0.0379	mg/kg	07.07.17 14.43	U	1
o-Xylene	95-47-6	<0.0189	0.0189	mg/kg	07.07.17 14.43	U	1
Total Xylenes	1330-20-7	<0.0189	0.0189	mg/kg	07.07.17 14.43	U	1
Total BTEX		<0.0189	0.0189	mg/kg	07.07.17 14.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	68-120	07.07.17 14.43	
a,a,a-Trifluorotoluene	98-08-8	98	%	71-121	07.07.17 14.43	

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Terracon Lubbock, Lubbock, TX

Alpha Lynch Station

Sample Id:	**South Side Wall-2**	Matrix:	Soil	Date Received:	07.06.17 13.45
Lab Sample Id:	557031-012	Date Collected:	07.05.17 11.35		

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	07.07.17 16.18	Basis:	Wet Weight
Seq Number:	3021855				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Range Hydrocarbons	PHC612	**129**	25.0	mg/kg	07.08.17 09.06		1
C12-C28 Range Hydrocarbons	PHCG1228	**139**	25.0	mg/kg	07.08.17 09.06		1
C28-C35 Range Hydrocarbons	PHCG2835	<25.0	25.0	mg/kg	07.08.17 09.06	U	1
Total TPH	PHC635	**268**	25.0	mg/kg	07.08.17 09.06		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
n-Triacontane	638-68-6	69	%	46-152	07.08.17 09.06	
Tricosane	638-67-5	77	%	65-144	07.08.17 09.06	

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	07.07.17 12.30	Basis:	Wet Weight
Seq Number:	3021805				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0199	0.0199	mg/kg	07.07.17 15.10	U	1
Toluene	108-88-3	<0.0199	0.0199	mg/kg	07.07.17 15.10	U	1
Ethylbenzene	100-41-4	<0.0199	0.0199	mg/kg	07.07.17 15.10	U	1
m,p-Xylenes	179601-23-1	<0.0398	0.0398	mg/kg	07.07.17 15.10	U	1
o-Xylene	95-47-6	<0.0199	0.0199	mg/kg	07.07.17 15.10	U	1
Total Xylenes	1330-20-7	<0.0199	0.0199	mg/kg	07.07.17 15.10	U	1
Total BTEX		<0.0199	0.0199	mg/kg	07.07.17 15.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	90	%	68-120	07.07.17 15.10	
a,a,a-Trifluorotoluene	98-08-8	97	%	71-121	07.07.17 15.10	

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Terracon Lubbock, Lubbock, TX

Alpha Lynch Station

Sample Id:	**South Side Wall-3**	Matrix:	Soil	Date Received:	07.06.17 13.45
Lab Sample Id:	557031-013	Date Collected:	07.05.17 11.40		

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	07.07.17 16.18	Basis:	Wet Weight
Seq Number:	3021855				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Range Hydrocarbons	PHC612	**4160**	125	mg/kg	07.08.17 09.38		5
C12-C28 Range Hydrocarbons	PHCG1228	**9100**	125	mg/kg	07.08.17 09.38		5
C28-C35 Range Hydrocarbons	PHCG2835	**901**	125	mg/kg	07.08.17 09.38		5
Total TPH	PHC635	**14200**	125	mg/kg	07.08.17 09.38		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
n-Triacontane	638-68-6	4130	%	46-152	07.08.17 09.38	**
Tricosane	638-67-5	6700	%	65-144	07.08.17 09.38	**

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	07.07.17 12.30	Basis:	Wet Weight
Seq Number:	3021805				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**13.0**	0.391	mg/kg	07.07.17 22.51		20
Toluene	108-88-3	**144**	0.391	mg/kg	07.07.17 22.51		20
Ethylbenzene	100-41-4	**137**	0.391	mg/kg	07.07.17 22.51		20
m,p-Xylenes	179601-23-1	**212**	0.783	mg/kg	07.07.17 22.51		20
o-Xylene	95-47-6	**106**	0.391	mg/kg	07.07.17 22.51		20
Total Xylenes	1330-20-7	**318**	0.391	mg/kg	07.07.17 22.51		20
Total BTEX		**612**	0.391	mg/kg	07.07.17 22.51		20

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	356	%	68-120	07.07.17 22.51	**
a,a,a-Trifluorotoluene	98-08-8	98	%	71-121	07.07.17 22.51	

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Terracon Lubbock, Lubbock, TX

Alpha Lynch Station

Sample Id:	**South Side Wall-4**	Matrix:	Soil	Date Received:	07.06.17 13.45
Lab Sample Id:	557031-014	Date Collected:	07.05.17 11.45		

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	07.07.17 16.18	Basis:	Wet Weight
Seq Number:	3021855				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Range Hydrocarbons	PHC612	**45.4**	25.0	mg/kg	07.08.17 10.10		1
C12-C28 Range Hydrocarbons	PHCG1228	**1500**	25.0	mg/kg	07.08.17 10.10		1
C28-C35 Range Hydrocarbons	PHCG2835	**198**	25.0	mg/kg	07.08.17 10.10		1
Total TPH	PHC635	**1740**	25.0	mg/kg	07.08.17 10.10		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
n-Triacontane	638-68-6	880	%	46-152	07.08.17 10.10	**
Tricosane	638-67-5	1610	%	65-144	07.08.17 10.10	**

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	07.07.17 12.30	Basis:	Wet Weight
Seq Number:	3021805				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0962	0.0962	mg/kg	07.07.17 23.18	U	5
Toluene	108-88-3	**0.904**	0.0962	mg/kg	07.07.17 23.18		5
Ethylbenzene	100-41-4	<0.0962	0.0962	mg/kg	07.07.17 23.18	U	5
m,p-Xylenes	179601-23-1	<0.192	0.192	mg/kg	07.07.17 23.18	U	5
o-Xylene	95-47-6	**0.135**	0.0962	mg/kg	07.07.17 23.18		5
Total Xylenes	1330-20-7	**0.135**	0.0962	mg/kg	07.07.17 23.18		5
Total BTEX		**1.04**	0.0962	mg/kg	07.07.17 23.18		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	68-120	07.07.17 23.18	
a,a,a-Trifluorotoluene	98-08-8	99	%	71-121	07.07.17 23.18	

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Terracon Lubbock, Lubbock, TX

Alpha Lynch Station

Sample Id:	**West Side Wall-1**	Matrix:	Soil	Date Received:	07.06.17 13.45
Lab Sample Id:	557031-015	Date Collected:	07.05.17 11.50		

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	07.07.17 16.18	Basis:	Wet Weight
Seq Number:	3021855				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Range Hydrocarbons	PHC612	<25.0	25.0	mg/kg	07.10.17 10.17	U	1
C12-C28 Range Hydrocarbons	PHCG1228	**535**	25.0	mg/kg	07.10.17 10.17		1
C28-C35 Range Hydrocarbons	PHCG2835	**128**	25.0	mg/kg	07.10.17 10.17		1
Total TPH	PHC635	**663**	25.0	mg/kg	07.10.17 10.17		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
n-Triacontane	638-68-6	622	%	46-152	07.10.17 10.17	**
Tricosane	638-67-5	895	%	65-144	07.10.17 10.17	**

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	07.07.17 12.30	Basis:	Wet Weight
Seq Number:	3021805				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0374	0.0374	mg/kg	07.07.17 23.45	U	2
Toluene	108-88-3	**0.0598**	0.0374	mg/kg	07.07.17 23.45		2
Ethylbenzene	100-41-4	<0.0374	0.0374	mg/kg	07.07.17 23.45	U	2
m,p-Xylenes	179601-23-1	<0.0748	0.0748	mg/kg	07.07.17 23.45	U	2
o-Xylene	95-47-6	**0.120**	0.0374	mg/kg	07.07.17 23.45		2
Total Xylenes	1330-20-7	**0.120**	0.0374	mg/kg	07.07.17 23.45		2
Total BTEX		**0.180**	0.0374	mg/kg	07.07.17 23.45		2

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	68-120	07.07.17 23.45	
a,a,a-Trifluorotoluene	98-08-8	94	%	71-121	07.07.17 23.45	

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Terracon Lubbock, Lubbock, TX

Alpha Lynch Station

Sample Id:	**West Side Wall-2**	Matrix:	Soil	Date Received:	07.06.17 13.45
Lab Sample Id:	557031-016	Date Collected:	07.05.17 11.55		

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	07.07.17 16.18	Basis:	Wet Weight
Seq Number:	3021855				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Range Hydrocarbons	PHC612	**46.4**	25.0	mg/kg	07.10.17 10.51		1
C12-C28 Range Hydrocarbons	PHCG1228	**1840**	25.0	mg/kg	07.10.17 10.51		1
C28-C35 Range Hydrocarbons	PHCG2835	**259**	25.0	mg/kg	07.10.17 10.51		1
Total TPH	PHC635	**2150**	25.0	mg/kg	07.10.17 10.51		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
n-Triacontane	638-68-6	1140	%	46-152	07.10.17 10.51	**
Tricosane	638-67-5	1730	%	65-144	07.10.17 10.51	**

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	07.07.17 12.30	Basis:	Wet Weight
Seq Number:	3021805				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0372	0.0372	mg/kg	07.07.17 16.58	U	2
Toluene	108-88-3	<0.0372	0.0372	mg/kg	07.07.17 16.58	U	2
Ethylbenzene	100-41-4	<0.0372	0.0372	mg/kg	07.07.17 16.58	U	2
m,p-Xylenes	179601-23-1	<0.0745	0.0745	mg/kg	07.07.17 16.58	U	2
o-Xylene	95-47-6	<0.0372	0.0372	mg/kg	07.07.17 16.58	U	2
Total Xylenes	1330-20-7	<0.0372	0.0372	mg/kg	07.07.17 16.58	U	2
Total BTEX		<0.0372	0.0372	mg/kg	07.07.17 16.58	U	2

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	68-120	07.07.17 16.58	
a,a,a-Trifluorotoluene	98-08-8	98	%	71-121	07.07.17 16.58	

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Terracon Lubbock, Lubbock, TX

Alpha Lynch Station

Sample Id:	**West Side Wall-3**	Matrix:	Soil	Date Received:	07.06.17 13.45
Lab Sample Id:	557031-017	Date Collected:	07.05.17 12.00		

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	07.07.17 16.18	Basis:	Wet Weight
Seq Number:	3021855				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Range Hydrocarbons	PHC612	**38.0**	25.0	mg/kg	07.10.17 11.25		1
C12-C28 Range Hydrocarbons	PHCG1228	**1930**	25.0	mg/kg	07.10.17 11.25		1
C28-C35 Range Hydrocarbons	PHCG2835	**265**	25.0	mg/kg	07.10.17 11.25		1
Total TPH	PHC635	**2230**	25.0	mg/kg	07.10.17 11.25		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
n-Triacontane	638-68-6	1190	%	46-152	07.10.17 11.25	**
Tricosane	638-67-5	2040	%	65-144	07.10.17 11.25	**

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	07.07.17 12.30	Basis:	Wet Weight
Seq Number:	3021805				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0199	0.0199	mg/kg	07.07.17 15.37	U	1
Toluene	108-88-3	<0.0199	0.0199	mg/kg	07.07.17 15.37	U	1
Ethylbenzene	100-41-4	<0.0199	0.0199	mg/kg	07.07.17 15.37	U	1
m,p-Xylenes	179601-23-1	<0.0398	0.0398	mg/kg	07.07.17 15.37	U	1
o-Xylene	95-47-6	<0.0199	0.0199	mg/kg	07.07.17 15.37	U	1
Total Xylenes	1330-20-7	<0.0199	0.0199	mg/kg	07.07.17 15.37	U	1
Total BTEX		<0.0199	0.0199	mg/kg	07.07.17 15.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	68-120	07.07.17 15.37	
a,a,a-Trifluorotoluene	98-08-8	98	%	71-121	07.07.17 15.37	

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Terracon Lubbock, Lubbock, TX

Alpha Lynch Station

Sample Id:	**FL-1**	Matrix:	Soil	Date Received:	07.06.17 13.45
Lab Sample Id:	557031-018	Date Collected:	07.05.17 12.05		
Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	07.07.17 16.18	Basis:	Wet Weight
Seq Number:	3021855				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Range Hydrocarbons	PHC612	<25.0	25.0	mg/kg	07.10.17 11.59	U	1
C12-C28 Range Hydrocarbons	PHCG1228	<25.0	25.0	mg/kg	07.10.17 11.59	U	1
C28-C35 Range Hydrocarbons	PHCG2835	**34.7**	25.0	mg/kg	07.10.17 11.59		1
Total TPH	PHC635	**34.7**	25.0	mg/kg	07.10.17 11.59		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
n-Triacontane	638-68-6	209	%	46-152	07.10.17 11.59	**
Tricosane	638-67-5	126	%	65-144	07.10.17 11.59	

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	07.07.17 12.30	Basis:	Wet Weight
Seq Number:	3021805				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0185	0.0185	mg/kg	07.07.17 16.04	U	1
Toluene	108-88-3	<0.0185	0.0185	mg/kg	07.07.17 16.04	U	1
Ethylbenzene	100-41-4	<0.0185	0.0185	mg/kg	07.07.17 16.04	U	1
m,p-Xylenes	179601-23-1	<0.0370	0.0370	mg/kg	07.07.17 16.04	U	1
o-Xylene	95-47-6	<0.0185	0.0185	mg/kg	07.07.17 16.04	U	1
Total Xylenes	1330-20-7	<0.0185	0.0185	mg/kg	07.07.17 16.04	U	1
Total BTEX		<0.0185	0.0185	mg/kg	07.07.17 16.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	68-120	07.07.17 16.04	
a,a,a-Trifluorotoluene	98-08-8	99	%	71-121	07.07.17 16.04	

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Terracon Lubbock, Lubbock, TX

Alpha Lynch Station

Sample Id:	**FL-2 @ 6'' In-Site**	Matrix:	Soil	Date Received:	07.06.17 13.45
Lab Sample Id:	557031-019	Date Collected:	07.05.17 12.10	Sample Depth:	6 In

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	07.07.17 16.18	Basis:	Wet Weight
Seq Number:	3021855				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Range Hydrocarbons	PHC612	**1260**	250	mg/kg	07.10.17 12.34		10
C12-C28 Range Hydrocarbons	PHCG1228	**7280**	250	mg/kg	07.10.17 12.34		10
C28-C35 Range Hydrocarbons	PHCG2835	**907**	250	mg/kg	07.10.17 12.34		10
Total TPH	PHC635	**9450**	250	mg/kg	07.10.17 12.34		10

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
n-Triacontane	638-68-6	4850	%	46-152	07.10.17 12.34	**
Tricosane	638-67-5	6500	%	65-144	07.10.17 12.34	**

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	07.07.17 12.30	Basis:	Wet Weight
Seq Number:	3021805				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**0.566**	0.0898	mg/kg	07.08.17 00.12		5
Toluene	108-88-3	**8.89**	0.0898	mg/kg	07.08.17 00.12		5
Ethylbenzene	100-41-4	**6.36**	0.0898	mg/kg	07.08.17 00.12		5
m,p-Xylenes	179601-23-1	**8.39**	0.180	mg/kg	07.08.17 00.12		5
o-Xylene	95-47-6	**9.03**	0.0898	mg/kg	07.08.17 00.12		5
Total Xylenes	1330-20-7	**17.4**	0.0898	mg/kg	07.08.17 00.12		5
Total BTEX		**33.2**	0.0898	mg/kg	07.08.17 00.12		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	193	%	68-120	07.08.17 00.12	**
a,a,a-Trifluorotoluene	98-08-8	94	%	71-121	07.08.17 00.12	

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Terracon Lubbock, Lubbock, TX

Alpha Lynch Station

Sample Id:	**FL-2 @ 18''**	Matrix:	Soil	Date Received:	07.06.17 13.45
Lab Sample Id:	557031-020	Date Collected:	07.05.17 12.15	Sample Depth:	18 In

Analytical Method:	TPH by SW 8015B			Prep Method:	TX1005P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	07.07.17 16.18	Basis:	Wet Weight
Seq Number:	3021855				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Range Hydrocarbons	PHC612	<25.0	25.0	mg/kg	07.10.17 13.09	U	1
C12-C28 Range Hydrocarbons	PHCG1228	**191**	25.0	mg/kg	07.10.17 13.09		1
C28-C35 Range Hydrocarbons	PHCG2835	**28.6**	25.0	mg/kg	07.10.17 13.09		1
Total TPH	PHC635	**220**	25.0	mg/kg	07.10.17 13.09		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
n-Triacontane	638-68-6	248	%	46-152	07.10.17 13.09	**
Tricosane	638-67-5	266	%	65-144	07.10.17 13.09	**

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	07.07.17 12.30	Basis:	Wet Weight
Seq Number:	3021805				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0183	0.0183	mg/kg	07.07.17 16.31	U	1
Toluene	108-88-3	**0.0932**	0.0183	mg/kg	07.07.17 16.31		1
Ethylbenzene	100-41-4	**0.0896**	0.0183	mg/kg	07.07.17 16.31		1
m,p-Xylenes	179601-23-1	**0.0914**	0.0366	mg/kg	07.07.17 16.31		1
o-Xylene	95-47-6	**0.0896**	0.0183	mg/kg	07.07.17 16.31		1
Total Xylenes	1330-20-7	**0.181**	0.0183	mg/kg	07.07.17 16.31		1
Total BTEX		**0.364**	0.0183	mg/kg	07.07.17 16.31		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	68-120	07.07.17 16.31	
a,a,a-Trifluorotoluene	98-08-8	99	%	71-121	07.07.17 16.31	

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

QC Summary 557031

Terracon Lubbock

Alpha Lynch Station

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3022014 Matrix: Solid Date Prep: 07.11.17
MB Sample Id: 727490-1-BLK LCS Sample Id: 727490-1-BKS LCSD Sample Id: 727490-1-BSD

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	255	102	253	101	90-110	1	20	mg/kg	07.11.17 15:45	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3022014 Matrix: Soil Date Prep: 07.11.17
Parent Sample Id: 557031-001 MS Sample Id: 557031-001 S MSD Sample Id: 557031-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<50.0	250	256	102	258	103	80-120	1	20	mg/kg	07.11.17 16:35	

Analytical Method: **TPH by SW 8015B** Prep Method: TX1005P
Seq Number: 3021855 Matrix: Solid Date Prep: 07.07.17
MB Sample Id: 727382-1-BLK LCS Sample Id: 727382-1-BKS LCSD Sample Id: 727382-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C12 Range Hydrocarbons	<25.0	100	122	122	126	126	66-139	3	20	mg/kg	07.08.17 00:15	
C12-C28 Range Hydrocarbons	<25.0	100	113	113	109	109	63-139	4	20	mg/kg	07.08.17 00:15	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
n-Triacontane	144		82		97		46-152	%	07.08.17 00:15
Tricosane	104		97		93		65-144	%	07.08.17 00:15

Analytical Method: **TPH by SW 8015B** Prep Method: TX1005P
Seq Number: 3021855 Matrix: Soil Date Prep: 07.07.17
Parent Sample Id: 557031-003 MS Sample Id: 557031-003 S MSD Sample Id: 557031-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C12 Range Hydrocarbons	<25.0	100	99.0	99	96.9	97	66-139	2	20	mg/kg	07.08.17 03:05	
C12-C28 Range Hydrocarbons	29.2	100	116	87	92.3	63	63-139	23	20	mg/kg	07.08.17 03:05	F

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
n-Triacontane	134		125		46-152	%	07.08.17 03:05
Tricosane	133		110		65-144	%	07.08.17 03:05

QC Summary 557031

Terracon Lubbock

Alpha Lynch Station

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3021805 Matrix: Solid Date Prep: 07.07.17

MB Sample Id: 727365-1-BLK LCS Sample Id: 727365-1-BKS LCSD Sample Id: 727365-1-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	1.83	92	1.79	90	55-120	2	20	mg/kg	07.07.17 10:09	
Toluene	<0.0200	2.00	1.87	94	1.83	92	77-120	2	20	mg/kg	07.07.17 10:09	
Ethylbenzene	<0.0200	2.00	1.73	87	1.71	86	77-120	1	20	mg/kg	07.07.17 10:09	
m,p-Xylenes	<0.0400	4.00	3.51	88	3.46	87	78-120	1	20	mg/kg	07.07.17 10:09	
o-Xylene	<0.0200	2.00	1.76	88	1.74	87	78-120	1	20	mg/kg	07.07.17 10:09	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	88		84		86		68-120	%	07.07.17 10:09
a,a,a-Trifluorotoluene	88		90		89		71-121	%	07.07.17 10:09

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3021805 Matrix: Soil Date Prep: 07.07.17

Parent Sample Id: 557031-001 MS Sample Id: 557031-001 S MSD Sample Id: 557031-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.263	9.23	9.04	95	9.44	95	54-120	4	25	mg/kg	07.07.17 19:14	
Toluene	0.933	9.23	15.2	155	13.5	130	57-120	12	25	mg/kg	07.07.17 19:14	X
Ethylbenzene	0.897	9.23	17.0	174	15.8	155	58-131	7	25	mg/kg	07.07.17 19:14	X
m,p-Xylenes	0.770	18.5	20.1	104	22.5	113	62-124	11	25	mg/kg	07.07.17 19:14	
o-Xylene	1.29	9.23	18.8	190	19.3	187	62-124	3	25	mg/kg	07.07.17 19:14	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	119		119		68-120	%	07.07.17 19:14
a,a,a-Trifluorotoluene	109		108		71-121	%	07.07.17 19:14

557031

Terracon

CHAIN OF CUSTODY RECORD

Laboratory: Xenco Laboratories
Address: 1211 W. Florida Ave. Midland, TX 79701
Phone: 432-563-1800
Contact: Joel Lowry
PO/SO #:

Office Location: Lubbock
Project Manager: Joel Lowry
Sampler's Name: Zach Conder
Sampler's Signature:

Project Number: AR177151
Project Name: Alpha Lynch Station

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE: 7.13.17
TEMP OF COOLER WHEN RECEIVED (°C): 2.0

Page 1 of 1 2

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No. Type of Containers: 4 oz Glass	BTEX 8021B	TPH 8015 M. Ext	Chloride	Lab Sample ID
S	7-5-17	10:40		1	DS-1 @ 1'				X	X	X	001
		10:45		1	DS-2 @ 1'				X	X	X	002
		10:50		1	DS-3 @ 1'				X	X	X	003
		10:55		1	DS-4 @ 6"				X	X	X	004
		11:00		1	DS-5 @ 6"				X	X	X	005
		11:05		1	North Side Wall - 1				X	X		006
		11:10		1	North Side Wall - 2				X	X		007
		11:15		1	North Side Wall - 3				X	X		008
		11:20		1	East Side Wall - 1				X	X		009
		11:25		1	East Side Wall - 2				X	X		010

TURNAROUND TIME ☐ Normal ☐ 48-Hour Rush ☐ 24-Hour Rush

TRRP Laboratory Review Checklist ☐ Yes ☐ No

Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time
	7/6/17	13:45			
	7-6-17		TAC-XTO	7/6/17	13:45

NOTES:
Please Email Results to
erin.loyd@terracon.com
joel.lowry@terracon.com
zach.conder@terracon.com

Matrix: WW-Wastewater; W - Water; S - Soil; L - Liquid; A - Air Bag; C - Charcoal tube; SL - Sludge
Container: VOA - 40 ml vial; A/G - Amber Glass 1L; 250 ml = Glass wide mouth; P/O - Plastic or other

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Terracon Lubbock

Date/ Time Received: 07/07/2017 01:45:00 PM

Work Order #: 557031

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)?	1.9
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seal present on shipping container/ cooler?	**N/A**
#5 *Custody Seals intact on shipping container/ cooler?	**N/A**
#6 Custody Seals intact on sample bottles?	**N/A**
#7 *Custody Seals Signed and dated?	**N/A**
#8 *Chain of Custody present?	**Yes**
#9 Sample instructions complete on Chain of Custody?	**Yes**
#10 Any missing/extra samples?	**No**
#11 Chain of Custody signed when relinquished/ received?	**Yes**
#12 Chain of Custody agrees with sample label(s)?	**Yes**
#13 Container label(s) legible and intact?	**Yes**
#14 Sample matrix/ properties agree with Chain of Custody?	**Yes**
#15 Samples in proper container/ bottle?	**Yes**
#16 Samples properly preserved?	**Yes**
#17 Sample container(s) intact?	**Yes**
#18 Sufficient sample amount for indicated test(s)?	**Yes**
#19 All samples received within hold time?	**Yes**
#20 Subcontract of sample(s)?	**No**
#21 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: 07/07/2017
Brenda Ward

Checklist reviewed by: Kelsey Brooks Date: 07/07/2017
Kelsey Brooks

Certificate of Analysis Summary 560044

TRC Solutions, Inc, Midland, TX

Project Name: Alpha Lynch Station

Project Id:
Contact: Joel Lowry
Project Location:

Date Received in Lab: Fri Aug-11-17 03:25 pm
Report Date: 22-AUG-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	560044-001		560044-002		560044-003		560044-004		560044-005		560044-006	
	Field Id:	DS-1 @ 1.5		DS-2 @ 2.5		DS-5 @ 1		Floor #1 @ 10"		NSW #1b		NSW #12b	
	Depth:	1.5		2.5		1		6		6		6	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Aug-10-17 09:30		Aug-10-17 09:35		Aug-10-17 09:40		Aug-10-17 09:45		Aug-10-17 09:50		Aug-10-17 09:55	
BTEX by EPA 8021B	***Extracted:***											Aug-15-17 12:00	
	Analyzed:											Aug-15-17 23:41	
	Units/RL:											mg/kg	RL
Benzene												<0.00900	0.0199
Toluene												<0.00466	0.0199
Ethylbenzene												<0.00614	0.0199
m,p-Xylenes												<0.00679	0.0398
o-Xylene												<0.00679	0.0199
Total Xylenes												<0.00679	0.0199
Total BTEX												<0.00466	0.0199
DRO-ORO By SW8015B	***Extracted:***	Aug-14-17 13:30		Aug-14-17 13:30		Aug-14-17 13:30		Aug-14-17 13:30		Aug-14-17 13:30		Aug-14-17 13:30	
	Analyzed:	Aug-14-17 18:41		Aug-14-17 19:17		Aug-14-17 19:54		Aug-14-17 20:30		Aug-14-17 21:06		Aug-14-17 21:42	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Diesel Range Organics (DRO)		2540	125	1150	25.0	97.6	25.0	729	25.0	50.6	25.0	79.4	25.0
Oil Range Hydrocarbons (ORO)		715	125	222	25.0	35.5	25.0	238	25.0	32.8	25.0	30.4	25.0
TPH GRO by EPA 8015 Mod.	***Extracted:***	Aug-15-17 12:00		Aug-17-17 11:00		Aug-15-17 12:00		Aug-15-17 12:00		Aug-15-17 12:00		Aug-15-17 12:00	
	Analyzed:	Aug-16-17 04:07		Aug-18-17 16:43		Aug-15-17 22:47		Aug-16-17 01:27		Aug-15-17 23:14		Aug-15-17 23:41	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
TPH-GRO		15.3	7.97	210 X	17.9	<0.245	3.62	<0.262	3.87	<0.266	3.93	<0.270	3.98

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 560044

TRC Solutions, Inc, Midland, TX

Project Name: Alpha Lynch Station

Project Id:
Contact: Joel Lowry
Project Location:

Date Received in Lab: Fri Aug-11-17 03:25 pm
Report Date: 22-AUG-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	560044-007		560044-008		560044-009		560044-010					
	Field Id:	ESW #1b		SSW #3b		SSW #4b		WSW #3b					
	Depth:	6		6		6		6					
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Aug-10-17 09:58		Aug-10-17 10:05		Aug-10-17 10:10		Aug-10-17 10:15					
BTEX by EPA 8021B	***Extracted:***	Aug-15-17 12:00		Aug-15-17 12:00									
	Analyzed:	Aug-16-17 03:41		Aug-16-17 00:07									
	Units/RL:	mg/kg	RL	mg/kg	RL								
Benzene		<0.00825	0.0182	<0.00789	0.0175								
Toluene		<0.00427	0.0182	<0.00408	0.0175								
Ethylbenzene		<0.00562	0.0182	<0.00538	0.0175								
m,p-Xylenes		<0.00622	0.0365	<0.00595	0.0349								
o-Xylene		<0.00622	0.0182	<0.00595	0.0175								
Total Xylenes		<0.00622	0.0182	<0.00595	0.0175								
Total BTEX		<0.00427	0.0182	<0.00408	0.0175								
DRO-ORO By SW8015B	***Extracted:***	Aug-14-17 13:30		Aug-14-17 13:30		Aug-14-17 13:30		Aug-14-17 13:30					
	Analyzed:	Aug-14-17 22:18		Aug-14-17 22:53		Aug-14-17 23:28		Aug-15-17 00:02					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Diesel Range Organics (DRO)		1210	50.0	14.2 J	25.0	42.1	25.0	<7.48	25.0				
Oil Range Hydrocarbons (ORO)		331	50.0	12.7 J	25.0	15.6 J	25.0	<7.48	25.0				
TPH GRO by EPA 8015 Mod.	***Extracted:***	Aug-15-17 12:00		Aug-15-17 12:00		Aug-15-17 12:00		Aug-15-17 12:00					
	Analyzed:	Aug-16-17 03:41		Aug-16-17 00:07		Aug-16-17 00:34		Aug-16-17 01:00					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
TPH-GRO		<0.247	3.65	<0.236	3.49	<0.262	3.87	<0.243	3.59				

Kelsey Brooks
Project Manager

Analytical Report 560044

for

TRC Solutions, Inc

Project Manager: Joel Lowry

Alpha Lynch Station

22-AUG-17

Collected By: Client

6701 Aberdeen, Suite 9 Lubbock, TX 79424

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
Oklahoma (9218)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400)
Xenco-San Antonio: Texas (T104704534)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

22-AUG-17

Project Manager: **Joel Lowry**
TRC Solutions, Inc
2057 Commerce
Midland, TX 79703

Reference: XENCO Report No(s): **560044**
Alpha Lynch Station
Project Address:

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) 560044. 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. 560044 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,

Kelsey Brooks
Project Manager

Sample Cross Reference 560044

TRC Solutions, Inc, Midland, TX

Alpha Lynch Station

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
DS-1 @ 1.5	S	08-10-17 09:30	- 1.5	560044-001
DS-2 @ 2.5	S	08-10-17 09:35	- 2.5	560044-002
DS-5 @ 1	S	08-10-17 09:40	- 1	560044-003
Floor #1 @ 10"	S	08-10-17 09:45	- 6	560044-004
NSW #1b	S	08-10-17 09:50	- 6	560044-005
NSW #12b	S	08-10-17 09:55	- 6	560044-006
ESW #1b	S	08-10-17 09:58	- 6	560044-007
SSW #3b	S	08-10-17 10:05	- 6	560044-008
SSW #4b	S	08-10-17 10:10	- 6	560044-009
WSW #3b	S	08-10-17 10:15	- 6	560044-010

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3024921 DRO-ORO By SW8015B
Surrogate Tricosane recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.
Samples affected are: 560044-001,560044-002,560044-003,560044-004,560044-005,560044-006,560044-009,560044-007.
Surrogate n-Triacontane recovered above QC limits Data confirmed by re-analysis. Samples affected are: 729287-1-BKS,729287-1-BLK,729287-1-BSD,560043-001 S,560043-001 SD,560044-002,560044-003,560044-004,560044-010,560044-006,560044-007,560044-008,560044-009,560044-001,560044-005.

Batch: LBA-3025013 BTEX by EPA 8021B
Samples 560044-001 and 560044-002 were diluted due to hydrocarbons beyond xylene.

Batch: LBA-3025513 TPH GRO by EPA 8015 Mod.
Lab Sample ID 560044-002 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD).
TPH-GRO recovered below QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 560044-002.
The Laboratory Control Sample for TPH-GRO is within laboratory Control Limits, therefore the data was accepted.

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.
Samples affected are: 560044-002 S,560044-002 SD,560044-002.

Certificate of Analytical Results 560044

TRC Solutions, Inc, Midland, TX

Alpha Lynch Station

Sample Id:	**DS-1 @ 1.5**	Matrix:	Soil	Date Received:	08.11.17 15.25
Lab Sample Id:	560044-001	Date Collected:	08.10.17 09.30	Sample Depth:	1.5

Analytical Method:	DRO-ORO By SW8015B			Prep Method:	SW8015P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	08.14.17 13.30	Basis:	Wet Weight
Seq Number:	3024921				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	**2540**	125	37.4	mg/kg	08.14.17 18.41		5
Oil Range Hydrocarbons (ORO)	PHCG2835	**715**	125	37.4	mg/kg	08.14.17 18.41		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tricosane	638-67-5	1720	%	65-144	08.14.17 18.41	**
n-Triacontane	638-68-6	1100	%	46-152	08.14.17 18.41	**

Analytical Method:	TPH GRO by EPA 8015 Mod.			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	08.15.17 12.00	Basis:	Wet Weight
Seq Number:	3025015				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	**15.3**	7.97	0.540	mg/kg	08.16.17 04.07		2

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	76-123	08.16.17 04.07	
a,a,a-Trifluorotoluene	98-08-8	102	%	69-120	08.16.17 04.07	

Certificate of Analytical Results 560044

TRC Solutions, Inc, Midland, TX

Alpha Lynch Station

Sample Id:	**DS-2 @ 2.5**	Matrix:	Soil	Date Received:	08.11.17 15.25
Lab Sample Id:	560044-002	Date Collected:	08.10.17 09.35	Sample Depth:	2.5

Analytical Method:	DRO-ORO By SW8015B			Prep Method:	SW8015P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	08.14.17 13.30	Basis:	Wet Weight
Seq Number:	3024921				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	**1150**	25.0	7.48	mg/kg	08.14.17 19.17		1
Oil Range Hydrocarbons (ORO)	PHCG2835	**222**	25.0	7.48	mg/kg	08.14.17 19.17		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tricosane	638-67-5	798	%	65-144	08.14.17 19.17	**
n-Triacontane	638-68-6	540	%	46-152	08.14.17 19.17	**

Analytical Method:	TPH GRO by EPA 8015 Mod.			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	08.17.17 11.00	Basis:	Wet Weight
Seq Number:	3025513				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	**210**	17.9	1.21	mg/kg	08.18.17 16.43	X	5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	144	%	76-123	08.18.17 16.43	**
a,a,a-Trifluorotoluene	98-08-8	97	%	69-120	08.18.17 16.43	

Certificate of Analytical Results 560044

TRC Solutions, Inc, Midland, TX

Alpha Lynch Station

Sample Id:	**DS-5 @ 1**	Matrix:	Soil	Date Received:	08.11.17 15.25
Lab Sample Id:	560044-003	Date Collected:	08.10.17 09.40	Sample Depth:	1

Analytical Method:	DRO-ORO By SW8015B			Prep Method:	SW8015P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	08.14.17 13.30	Basis:	Wet Weight
Seq Number:	3024921				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	**97.6**	25.0	7.48	mg/kg	08.14.17 19.54		1
Oil Range Hydrocarbons (ORO)	PHCG2835	**35.5**	25.0	7.48	mg/kg	08.14.17 19.54		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tricosane	638-67-5	192	%	65-144	08.14.17 19.54	**
n-Triacontane	638-68-6	224	%	46-152	08.14.17 19.54	**

Analytical Method:	TPH GRO by EPA 8015 Mod.			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	08.15.17 12.00	Basis:	Wet Weight
Seq Number:	3025015				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<0.245	3.62	0.245	mg/kg	08.15.17 22.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	76-123	08.15.17 22.47	
a,a,a-Trifluorotoluene	98-08-8	106	%	69-120	08.15.17 22.47	

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TRC Solutions, Inc, Midland, TX

Alpha Lynch Station

Sample Id:	**Floor #1 @ 10''**	Matrix:	Soil	Date Received:	08.11.17 15.25
Lab Sample Id:	560044-004	Date Collected:	08.10.17 09.45	Sample Depth:	6

Analytical Method:	DRO-ORO By SW8015B			Prep Method:	SW8015P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	08.14.17 13.30	Basis:	Wet Weight
Seq Number:	3024921				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	**729**	25.0	7.48	mg/kg	08.14.17 20.30		1
Oil Range Hydrocarbons (ORO)	PHCG2835	**238**	25.0	7.48	mg/kg	08.14.17 20.30		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tricosane	638-67-5	790	%	65-144	08.14.17 20.30	**
n-Triacontane	638-68-6	533	%	46-152	08.14.17 20.30	**

Analytical Method:	TPH GRO by EPA 8015 Mod.			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	08.15.17 12.00	Basis:	Wet Weight
Seq Number:	3025015				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<0.262	3.87	0.262	mg/kg	08.16.17 01.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	92	%	76-123	08.16.17 01.27	
a,a,a-Trifluorotoluene	98-08-8	108	%	69-120	08.16.17 01.27	

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TRC Solutions, Inc, Midland, TX

Alpha Lynch Station

Sample Id:	**NSW #1b**	Matrix:	Soil	Date Received:	08.11.17 15.25
Lab Sample Id:	560044-005	Date Collected:	08.10.17 09.50	Sample Depth:	6

Analytical Method:	DRO-ORO By SW8015B			Prep Method:	SW8015P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	08.14.17 13.30	Basis:	Wet Weight
Seq Number:	3024921				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	**50.6**	25.0	7.48	mg/kg	08.14.17 21.06		1
Oil Range Hydrocarbons (ORO)	PHCG2835	**32.8**	25.0	7.48	mg/kg	08.14.17 21.06		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tricosane	638-67-5	152	%	65-144	08.14.17 21.06	**
n-Triacontane	638-68-6	212	%	46-152	08.14.17 21.06	**

Analytical Method:	TPH GRO by EPA 8015 Mod.			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	08.15.17 12.00	Basis:	Wet Weight
Seq Number:	3025015				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<0.266	3.93	0.266	mg/kg	08.15.17 23.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	93	%	76-123	08.15.17 23.14	
a,a,a-Trifluorotoluene	98-08-8	107	%	69-120	08.15.17 23.14	

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TRC Solutions, Inc, Midland, TX

Alpha Lynch Station

Sample Id:	**NSW #12b**	Matrix:	Soil	Date Received:	08.11.17 15.25
Lab Sample Id:	560044-006	Date Collected:	08.10.17 09.55	Sample Depth:	6

Analytical Method:	DRO-ORO By SW8015B			Prep Method:	SW8015P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	08.14.17 13.30	Basis:	Wet Weight
Seq Number:	3024921				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	**79.4**	25.0	7.48	mg/kg	08.14.17 21.42		1
Oil Range Hydrocarbons (ORO)	PHCG2835	**30.4**	25.0	7.48	mg/kg	08.14.17 21.42		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tricosane	638-67-5	180	%	65-144	08.14.17 21.42	**
n-Triacontane	638-68-6	217	%	46-152	08.14.17 21.42	**

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	08.15.17 12.00	Basis:	Wet Weight
Seq Number:	3025013				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00900	0.0199	0.00900	mg/kg	08.15.17 23.41	U	1
Toluene	108-88-3	<0.00466	0.0199	0.00466	mg/kg	08.15.17 23.41	U	1
Ethylbenzene	100-41-4	<0.00614	0.0199	0.00614	mg/kg	08.15.17 23.41	U	1
m,p-Xylenes	179601-23-1	<0.00679	0.0398	0.00679	mg/kg	08.15.17 23.41	U	1
o-Xylene	95-47-6	<0.00679	0.0199	0.00679	mg/kg	08.15.17 23.41	U	1
Total Xylenes	1330-20-7	<0.00679	0.0199	0.00679	mg/kg	08.15.17 23.41	U	1
Total BTEX		<0.00466	0.0199	0.00466	mg/kg	08.15.17 23.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	68-120	08.15.17 23.41	
a,a,a-Trifluorotoluene	98-08-8	96	%	71-121	08.15.17 23.41	

Certificate of Analytical Results 560044

TRC Solutions, Inc, Midland, TX

Alpha Lynch Station

Sample Id:	**NSW #12b**	Matrix:	Soil	Date Received:	08.11.17 15.25
Lab Sample Id:	560044-006	Date Collected:	08.10.17 09.55	Sample Depth:	6
Analytical Method:	TPH GRO by EPA 8015 Mod.			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	08.15.17 12.00	Basis:	Wet Weight
Seq Number:	3025015				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<0.270	3.98	0.270	mg/kg	08.15.17 23.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	76-123	08.15.17 23.41	
a,a,a-Trifluorotoluene	98-08-8	106	%	69-120	08.15.17 23.41	

Certificate of Analytical Results 560044

TRC Solutions, Inc, Midland, TX

Alpha Lynch Station

Sample Id:	**ESW #1b**	Matrix:	Soil	Date Received:	08.11.17 15.25
Lab Sample Id:	560044-007	Date Collected:	08.10.17 09.58	Sample Depth:	6

Analytical Method:	DRO-ORO By SW8015B			Prep Method:	SW8015P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	08.14.17 13.30	Basis:	Wet Weight
Seq Number:	3024921				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	**1210**	50.0	15.0	mg/kg	08.14.17 22.18		2
Oil Range Hydrocarbons (ORO)	PHCG2835	**331**	50.0	15.0	mg/kg	08.14.17 22.18		2

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tricosane	638-67-5	943	%	65-144	08.14.17 22.18	**
n-Triacontane	638-68-6	693	%	46-152	08.14.17 22.18	**

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	08.15.17 12.00	Basis:	Wet Weight
Seq Number:	3025013				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00825	0.0182	0.00825	mg/kg	08.16.17 03.41	U	1
Toluene	108-88-3	<0.00427	0.0182	0.00427	mg/kg	08.16.17 03.41	U	1
Ethylbenzene	100-41-4	<0.00562	0.0182	0.00562	mg/kg	08.16.17 03.41	U	1
m,p-Xylenes	179601-23-1	<0.00622	0.0365	0.00622	mg/kg	08.16.17 03.41	U	1
o-Xylene	95-47-6	<0.00622	0.0182	0.00622	mg/kg	08.16.17 03.41	U	1
Total Xylenes	1330-20-7	<0.00622	0.0182	0.00622	mg/kg	08.16.17 03.41	U	1
Total BTEX		<0.00427	0.0182	0.00427	mg/kg	08.16.17 03.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	93	%	68-120	08.16.17 03.41	
a,a,a-Trifluorotoluene	98-08-8	95	%	71-121	08.16.17 03.41	

Certificate of Analytical Results 560044

TRC Solutions, Inc, Midland, TX

Alpha Lynch Station

Sample Id:	**ESW #1b**	Matrix:	Soil	Date Received:	08.11.17 15.25
Lab Sample Id:	560044-007	Date Collected:	08.10.17 09.58	Sample Depth:	6
Analytical Method:	TPH GRO by EPA 8015 Mod.			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	08.15.17 12.00	Basis:	Wet Weight
Seq Number:	3025015				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<0.247	3.65	0.247	mg/kg	08.16.17 03.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	76-123	08.16.17 03.41	
a,a,a-Trifluorotoluene	98-08-8	105	%	69-120	08.16.17 03.41	

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TRC Solutions, Inc, Midland, TX

Alpha Lynch Station

Sample Id:	**SSW #3b**	Matrix:	Soil	Date Received:	08.11.17 15.25
Lab Sample Id:	560044-008	Date Collected:	08.10.17 10.05	Sample Depth:	6

Analytical Method:	DRO-ORO By SW8015B			Prep Method:	SW8015P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	08.14.17 13.30	Basis:	Wet Weight
Seq Number:	3024921				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	**14.2**	25.0	7.48	mg/kg	08.14.17 22.53	J	1
Oil Range Hydrocarbons (ORO)	PHCG2835	**12.7**	25.0	7.48	mg/kg	08.14.17 22.53	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tricosane	638-67-5	121	%	65-144	08.14.17 22.53	
n-Triacontane	638-68-6	187	%	46-152	08.14.17 22.53	**

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	08.15.17 12.00	Basis:	Wet Weight
Seq Number:	3025013				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00789	0.0175	0.00789	mg/kg	08.16.17 00.07	U	1
Toluene	108-88-3	<0.00408	0.0175	0.00408	mg/kg	08.16.17 00.07	U	1
Ethylbenzene	100-41-4	<0.00538	0.0175	0.00538	mg/kg	08.16.17 00.07	U	1
m,p-Xylenes	179601-23-1	<0.00595	0.0349	0.00595	mg/kg	08.16.17 00.07	U	1
o-Xylene	95-47-6	<0.00595	0.0175	0.00595	mg/kg	08.16.17 00.07	U	1
Total Xylenes	1330-20-7	<0.00595	0.0175	0.00595	mg/kg	08.16.17 00.07	U	1
Total BTEX		<0.00408	0.0175	0.00408	mg/kg	08.16.17 00.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	91	%	68-120	08.16.17 00.07	
a,a,a-Trifluorotoluene	98-08-8	95	%	71-121	08.16.17 00.07	

Certificate of Analytical Results 560044

TRC Solutions, Inc, Midland, TX

Alpha Lynch Station

Sample Id:	**SSW #3b**	Matrix:	Soil	Date Received:	08.11.17 15.25
Lab Sample Id:	560044-008	Date Collected:	08.10.17 10.05	Sample Depth:	6
Analytical Method:	TPH GRO by EPA 8015 Mod.			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	08.15.17 12.00	Basis:	Wet Weight
Seq Number:	3025015				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<0.236	3.49	0.236	mg/kg	08.16.17 00.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	92	%	76-123	08.16.17 00.07	
a,a,a-Trifluorotoluene	98-08-8	105	%	69-120	08.16.17 00.07	

Certificate of Analytical Results 560044

TRC Solutions, Inc, Midland, TX

Alpha Lynch Station

Sample Id:	**SSW #4b**	Matrix:	Soil	Date Received:	08.11.17 15.25
Lab Sample Id:	560044-009	Date Collected:	08.10.17 10.10	Sample Depth:	6

Analytical Method:	DRO-ORO By SW8015B			Prep Method:	SW8015P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	08.14.17 13.30	Basis:	Wet Weight
Seq Number:	3024921				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	**42.1**	25.0	7.48	mg/kg	08.14.17 23.28		1
Oil Range Hydrocarbons (ORO)	PHCG2835	**15.6**	25.0	7.48	mg/kg	08.14.17 23.28	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tricosane	638-67-5	148	%	65-144	08.14.17 23.28	**
n-Triacontane	638-68-6	204	%	46-152	08.14.17 23.28	**

Analytical Method:	TPH GRO by EPA 8015 Mod.			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	08.15.17 12.00	Basis:	Wet Weight
Seq Number:	3025015				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<0.262	3.87	0.262	mg/kg	08.16.17 00.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	76-123	08.16.17 00.34	
a,a,a-Trifluorotoluene	98-08-8	106	%	69-120	08.16.17 00.34	

Certificate of Analytical Results 560044

TRC Solutions, Inc, Midland, TX

Alpha Lynch Station

Sample Id:	**WSW #3b**	Matrix:	Soil	Date Received:	08.11.17 15.25
Lab Sample Id:	560044-010	Date Collected:	08.10.17 10.15	Sample Depth:	6

Analytical Method:	DRO-ORO By SW8015B			Prep Method:	SW8015P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	08.14.17 13.30	Basis:	Wet Weight
Seq Number:	3024921				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	<7.48	25.0	7.48	mg/kg	08.15.17 00.02	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<7.48	25.0	7.48	mg/kg	08.15.17 00.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tricosane	638-67-5	135	%	65-144	08.15.17 00.02	
n-Triacontane	638-68-6	183	%	46-152	08.15.17 00.02	**

Analytical Method:	TPH GRO by EPA 8015 Mod.			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	08.15.17 12.00	Basis:	Wet Weight
Seq Number:	3025015				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<0.243	3.59	0.243	mg/kg	08.16.17 01.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	90	%	76-123	08.16.17 01.00	
a,a,a-Trifluorotoluene	98-08-8	103	%	69-120	08.16.17 01.00	

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

QC Summary 560044

TRC Solutions, Inc

Alpha Lynch Station

Analytical Method: **DRO-ORO By SW8015B** Prep Method: SW8015P

Seq Number: 3024921 Matrix: Solid Date Prep: 08.14.17

MB Sample Id: 729287-1-BLK LCS Sample Id: 729287-1-BKS LCSD Sample Id: 729287-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Diesel Range Organics (DRO)	<7.48	100	110	110	112	112	63-139	2	20	mg/kg	08.14.17 12:40	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Tricosane	125		134		135		65-144	%	08.14.17 12:40
n-Triacontane	190	**	185	**	187	**	46-152	%	08.14.17 12:40

Analytical Method: **DRO-ORO By SW8015B** Prep Method: SW8015P

Seq Number: 3024921 Matrix: Soil Date Prep: 08.14.17

Parent Sample Id: 560043-001 MS Sample Id: 560043-001 S MSD Sample Id: 560043-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Diesel Range Organics (DRO)	23.2	100	142	119	142	119	63-139	0	20	mg/kg	08.14.17 16:50	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Tricosane	143		136		65-144	%	08.14.17 16:50
n-Triacontane	186	**	186	**	46-152	%	08.14.17 16:50

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3025013 Matrix: Solid Date Prep: 08.15.17

MB Sample Id: 729311-1-BLK LCS Sample Id: 729311-1-BKS LCSD Sample Id: 729311-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00904	2.00	1.85	93	1.86	93	55-120	1	20	mg/kg	08.15.17 16:02	
Toluene	<0.00468	2.00	1.81	91	1.84	92	77-120	2	20	mg/kg	08.15.17 16:02	
Ethylbenzene	<0.00616	2.00	1.79	90	1.83	92	77-120	2	20	mg/kg	08.15.17 16:02	
m,p-Xylenes	<0.00682	4.00	3.60	90	3.67	92	78-120	2	20	mg/kg	08.15.17 16:02	
o-Xylene	<0.00682	2.00	1.78	89	1.83	92	78-120	3	20	mg/kg	08.15.17 16:02	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	91		89		89		68-120	%	08.15.17 16:02
a,a,a-Trifluorotoluene	89		85		86		71-121	%	08.15.17 16:02

QC Summary 560044

TRC Solutions, Inc

Alpha Lynch Station

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3025013 Matrix: Soil Date Prep: 08.15.17

Parent Sample Id: 560043-001 MS Sample Id: 560043-001 S MSD Sample Id: 560043-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00885	1.96	1.56	80	1.58	81	54-120	1	25	mg/kg	08.15.17 19:38	
Toluene	<0.00458	1.96	1.66	85	1.68	86	57-120	1	25	mg/kg	08.15.17 19:38	
Ethylbenzene	<0.00603	1.96	1.69	86	1.73	88	58-131	2	25	mg/kg	08.15.17 19:38	
m,p-Xylenes	<0.00667	3.91	3.43	88	3.50	89	62-124	2	25	mg/kg	08.15.17 19:38	
o-Xylene	<0.00667	1.96	1.68	86	1.72	88	62-124	2	25	mg/kg	08.15.17 19:38	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	95		95		68-120	%	08.15.17 19:38
a,a,a-Trifluorotoluene	97		96		71-121	%	08.15.17 19:38

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

Seq Number: 3025015 Matrix: Solid Date Prep: 08.15.17

MB Sample Id: 729313-1-BLK LCS Sample Id: 729313-1-BKS LCSD Sample Id: 729313-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
TPH-GRO	<0.271	20.0	16.9	85	19.2	96	35-129	13	20	mg/kg	08.15.17 16:56	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	93		98		96		76-123	%	08.15.17 16:56
a,a,a-Trifluorotoluene	104		100		100		69-120	%	08.15.17 16:56

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

Seq Number: 3025513 Matrix: Solid Date Prep: 08.17.17

MB Sample Id: 729517-1-BLK LCS Sample Id: 729517-1-BKS LCSD Sample Id: 729517-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
TPH-GRO	0.342	20.0	20.6	103	20.7	104	35-129	0	20	mg/kg	08.18.17 14:28	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	97		103		100		76-123	%	08.18.17 14:28
a,a,a-Trifluorotoluene	108		106		105		69-120	%	08.18.17 14:28

QC Summary 560044

TRC Solutions, Inc

Alpha Lynch Station

Analytical Method: **TPH GRO by EPA 8015 Mod.** Prep Method: SW5030B
Seq Number: 3025015 Matrix: Soil Date Prep: 08.15.17
Parent Sample Id: 560043-001 MS Sample Id: 560043-001 S MSD Sample Id: 560043-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
TPH-GRO	<0.244	18.0	9.97	55	10.4	57	35-129	4	20	mg/kg	08.15.17 20:32	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	101		105		76-123	%	08.15.17 20:32
a,a,a-Trifluorotoluene	101		97		69-120	%	08.15.17 20:32

Analytical Method: **TPH GRO by EPA 8015 Mod.** Prep Method: SW5030B
Seq Number: 3025513 Matrix: Soil Date Prep: 08.17.17
Parent Sample Id: 560044-002 MS Sample Id: 560044-002 S MSD Sample Id: 560044-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
TPH-GRO	210	95.6	240	31	243	38	35-129	1	20	mg/kg	08.18.17 17:10	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	134	**	137	**	76-123	%	08.18.17 17:10
a,a,a-Trifluorotoluene	89		89		69-120	%	08.18.17 17:10

CHAIN OF CUSTODY

Page 1 Of 1

Revision 2016.1

XENCO LABORATORIES

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www.xenco.com

Xenco Quote #

Xenco Job # 560044

Client / Reporting Information

Company Name / Branch: TRC Solutions

Company Address: 2057 Commerce

Email: Phone No:

Project Contact:

Samplers's Name:

Project Information

Project Name/Number: Alpha Lynch Station

Project Location:

Invoice To: Plains Pipeline / Camille

PO Number: 2017-102

Analytical Information

TPH 8015 w Ext.

BTEX 8021b

Matrix Codes

W = Water
S = Soil/Sed/Solid
GW = Ground Water
DW = Drinking Water
P = Product
SW = Surface Water
SL - Sludge
OW = Ocean/Sea Water
WI = Wipe
O = Oil
WW = Waste Water
A = Air

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	TPH 8015 w Ext.	BTEX 8021b	Field Comments
1	PS-1 @1.5	1.5	8/10/17	9:30	S	1									X		001
2	PS-2 @2.5	2.5		9:35		1											002
3	PS-5 @1'	1		9:40		1											003
4	Floor #1 @10"	6"		9:45		1											004
5	NSW #1b	6"		9:50		1											005
6	NSW #2b	6"		9:55		1										X	006
7	ESW #1b	6"		9:58		1										X	007
8	SSW #3b	6"		10:05		1										X	008
9	SSW #4b	6"		10:10		1											009
10	WSW #3b	6"		10:15		1											010

Turnaround Time (Business days)

- [ ] Same Day TAT
- [ ] 5 Day TAT
- [ ] Next Day EMERGENCY
- [ ] 7 Day TAT
- [ ] 2 Day EMERGENCY
- [x] Contract TAT
- [ ] 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 5:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] Level II Report with TRRP checklist

Notes: email to Joel & Camille

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		8/11 3:25	1	2		2
3	Relinquished by:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice ✓ Cooler Temp. 1R3 4.2/4.1 Thermo. Corr. Factor

TAL 8/11/17 15:25

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

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 08/11/2017 03:25:00 PM

Work Order #: 560044

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)?	4.1
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seal present on shipping container/ cooler?	**N/A**
#5 *Custody Seals intact on shipping container/ cooler?	**N/A**
#6 Custody Seals intact on sample bottles?	**N/A**
#7 *Custody Seals Signed and dated?	**N/A**
#8 *Chain of Custody present?	**Yes**
#9 Sample instructions complete on Chain of Custody?	**Yes**
#10 Any missing/extra samples?	**No**
#11 Chain of Custody signed when relinquished/ received?	**Yes**
#12 Chain of Custody agrees with sample label(s)?	**Yes**
#13 Container label(s) legible and intact?	**Yes**
#14 Sample matrix/ properties agree with Chain of Custody?	**Yes**
#15 Samples in proper container/ bottle?	**Yes**
#16 Samples properly preserved?	**Yes**
#17 Sample container(s) intact?	**Yes**
#18 Sufficient sample amount for indicated test(s)?	**Yes**
#19 All samples received within hold time?	**Yes**
#20 Subcontract of sample(s)?	**No**
#21 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: 08/14/2017
Brenda Ward

Checklist reviewed by: Kelsey Brooks Date: 08/14/2017
Kelsey Brooks

Certificate of Analysis Summary 562405

TRC Solutions, Inc, Midland, TX

Project Name: Alpha Crude Lynch Station

Project Id:
Contact: Joel Lowry
Project Location: Lea Co. NM

Date Received in Lab: Fri Sep-08-17 05:55 pm
Report Date: 19-SEP-17
Project Manager: Kelsey Brooks

Analysis Requested									
	Lab Id:	562405-001		562405-002		562405-003				
	Field Id:	PS-1 @ 2'		ESW #1C		WSW #2b				
	Depth:	2-ft.		1-ft.		1-ft.				
	Matrix:	SOIL		SOIL		SOIL				
	Sampled:	Sep-06-17 10:15		Sep-06-17 10:20		Sep-06-17 10:25				
DRO-ORO By SW8015B	***Extracted:***	Sep-13-17 14:15		Sep-13-17 14:15		Sep-13-17 14:15				
	Analyzed:	Sep-13-17 22:25		Sep-13-17 23:01		Sep-13-17 23:36				
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL			
Diesel Range Organics (DRO)		57.0	25.0	<7.48	25.0	25.7	25.0			
Oil Range Hydrocarbons (ORO)		8.14 J	25.0	<7.48	25.0	15.1 J	25.0			
TPH GRO by EPA 8015 Mod.	***Extracted:***	Sep-14-17 13:00		Sep-14-17 13:00		Sep-14-17 13:00				
	Analyzed:	Sep-14-17 17:44		Sep-14-17 19:32		Sep-14-17 19:58				
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL			
TPH-GRO		<0.270	3.98	<0.269	3.98	<0.262	3.86			

Kelsey Brooks
Project Manager

Table of Contents

Analytical Report 562405

for

TRC Solutions, Inc

Project Manager: Joel Lowry

Alpha Crude Lynch Station

19-SEP-17

Collected By: Client

6701 Aberdeen, Suite 9 Lubbock, TX 79424

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
Oklahoma (9218)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400)
Xenco-San Antonio: Texas (T104704534)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

19-SEP-17

Project Manager: **Joel Lowry**
TRC Solutions, Inc
2057 Commerce
Midland, TX 79703

Reference: XENCO Report No(s): **562405**
Alpha Crude Lynch Station
Project Address: Lea Co. NM

Joel Lowry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 562405. 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. 562405 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,

Kelsey Brooks
Project Manager

Sample Cross Reference 562405

TRC Solutions, Inc, Midland, TX

Alpha Crude Lynch Station

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PS-1 @ 2'	S	09-06-17 10:15	2 - ft.	562405-001
ESW #1C	S	09-06-17 10:20	1 - ft.	562405-002
WSW #2b	S	09-06-17 10:25	1 - ft.	562405-003

CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: Alpha Crude Lynch Station

Project ID:
Work Order Number(s): *562405*

Report Date: *19-SEP-17*
Date Received: *09/08/2017*

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3027529 DRO-ORO By SW8015B

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

Samples affected are: 562436-001 S,562436-001 SD,562405-001,562405-003.

Certificate of Analytical Results 562405

TRC Solutions, Inc, Midland, TX

Alpha Crude Lynch Station

Sample Id:	**PS-1 @ 2'**	Matrix:	Soil	Date Received:	09.08.17 17.55
Lab Sample Id:	562405-001	Date Collected:	09.06.17 10.15	Sample Depth:	2 - ft.

Analytical Method:	DRO-ORO By SW8015B			Prep Method:	SW8015P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	09.13.17 14.15	Basis:	Wet Weight
Seq Number:	3027529				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	**57.0**	25.0	7.48	mg/kg	09.13.17 22.25		1
Oil Range Hydrocarbons (ORO)	PHCG2835	**8.14**	25.0	7.48	mg/kg	09.13.17 22.25	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tricosane	638-67-5	176	%	65-144	09.13.17 22.25	**
n-Triacontane	638-68-6	135	%	46-152	09.13.17 22.25	

Analytical Method:	TPH GRO by EPA 8015 Mod.			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	09.14.17 13.00	Basis:	Wet Weight
Seq Number:	3027680				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<0.270	3.98	0.270	mg/kg	09.14.17 17.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	113	%	76-123	09.14.17 17.44	
a,a,a-Trifluorotoluene	98-08-8	114	%	69-120	09.14.17 17.44	

Certificate of Analytical Results 562405

TRC Solutions, Inc, Midland, TX

Alpha Crude Lynch Station

Sample Id:	**ESW #1C**	Matrix:	Soil	Date Received:	09.08.17 17.55
Lab Sample Id:	562405-002	Date Collected:	09.06.17 10.20	Sample Depth:	1 - ft.

Analytical Method:	DRO-ORO By SW8015B			Prep Method:	SW8015P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	09.13.17 14.15	Basis:	Wet Weight
Seq Number:	3027529				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	<7.48	25.0	7.48	mg/kg	09.13.17 23.01	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<7.48	25.0	7.48	mg/kg	09.13.17 23.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tricosane	638-67-5	138	%	65-144	09.13.17 23.01	
n-Triacontane	638-68-6	123	%	46-152	09.13.17 23.01	

Analytical Method:	TPH GRO by EPA 8015 Mod.			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	09.14.17 13.00	Basis:	Wet Weight
Seq Number:	3027680				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<0.269	3.98	0.269	mg/kg	09.14.17 19.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	113	%	76-123	09.14.17 19.32	
a,a,a-Trifluorotoluene	98-08-8	114	%	69-120	09.14.17 19.32	

Certificate of Analytical Results 562405

TRC Solutions, Inc, Midland, TX

Alpha Crude Lynch Station

Sample Id:	**WSW #2b**	Matrix:	Soil	Date Received:	09.08.17 17.55
Lab Sample Id:	562405-003	Date Collected:	09.06.17 10.25	Sample Depth:	1 - ft.

Analytical Method:	DRO-ORO By SW8015B			Prep Method:	SW8015P
Tech:	PGM			% Moisture:	
Analyst:	PGM	Date Prep:	09.13.17 14.15	Basis:	Wet Weight
Seq Number:	3027529				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	**25.7**	25.0	7.48	mg/kg	09.13.17 23.36		1
Oil Range Hydrocarbons (ORO)	PHCG2835	**15.1**	25.0	7.48	mg/kg	09.13.17 23.36	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tricosane	638-67-5	164	%	65-144	09.13.17 23.36	**
n-Triacontane	638-68-6	143	%	46-152	09.13.17 23.36	

Analytical Method:	TPH GRO by EPA 8015 Mod.			Prep Method:	SW5030B
Tech:	MIT			% Moisture:	
Analyst:	MIT	Date Prep:	09.14.17 13.00	Basis:	Wet Weight
Seq Number:	3027680				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<0.262	3.86	0.262	mg/kg	09.14.17 19.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	76-123	09.14.17 19.58	
a,a,a-Trifluorotoluene	98-08-8	115	%	69-120	09.14.17 19.58	

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

	Phone	Fax
4147 Greenbriar Dr, Stafford, TX 77477	(281) 240-4200	(281) 240-4280
9701 Harry Hines Blvd , Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
1211 W Florida Ave, Midland, TX 79701	(432) 563-1800	(432) 563-1713
2525 W. Huntington Dr. - Suite 102, Tempe AZ 85282	(602) 437-0330	

QC Summary 562405

TRC Solutions, Inc

Alpha Crude Lynch Station

Analytical Method: **DRO-ORO By SW8015B** Prep Method: SW8015P
Seq Number: 3027529 Matrix: Solid Date Prep: 09.13.17
MB Sample Id: 730861-1-BLK LCS Sample Id: 730861-1-BKS LCSD Sample Id: 730861-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Diesel Range Organics (DRO)	<7.48	100	111	111	101	101	63-139	9	20	mg/kg	09.13.17 14:50	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Tricosane	109		137		139		65-144	%	09.13.17 14:50
n-Triacontane	96		111		121		46-152	%	09.13.17 14:50

Analytical Method: **DRO-ORO By SW8015B** Prep Method: SW8015P
Seq Number: 3027529 Matrix: Soil Date Prep: 09.13.17
Parent Sample Id: 562436-001 MS Sample Id: 562436-001 S MSD Sample Id: 562436-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Diesel Range Organics (DRO)	47.8	100	160	112	159	111	63-139	1	20	mg/kg	09.13.17 17:08	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Tricosane	189	**	193	**	65-144	%	09.13.17 17:08
n-Triacontane	137		143		46-152	%	09.13.17 17:08

Analytical Method: **TPH GRO by EPA 8015 Mod.** Prep Method: SW5030B
Seq Number: 3027680 Matrix: Solid Date Prep: 09.14.17
MB Sample Id: 730916-1-BLK LCS Sample Id: 730916-1-BKS LCSD Sample Id: 730916-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
TPH-GRO	<0.271	20.0	23.3	117	24.7	124	35-129	6	20	mg/kg	09.14.17 15:29	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	107		115		112		76-123	%	09.14.17 15:29
a,a,a-Trifluorotoluene	110		113		112		69-120	%	09.14.17 15:29

Analytical Method: **TPH GRO by EPA 8015 Mod.** Prep Method: SW5030B
Seq Number: 3027680 Matrix: Soil Date Prep: 09.14.17
Parent Sample Id: 562405-001 MS Sample Id: 562405-001 S MSD Sample Id: 562405-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
TPH-GRO	<0.260	19.2	15.4	80	17.7	91	35-129	14	20	mg/kg	09.14.17 18:11	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	119		122		76-123	%	09.14.17 18:11
a,a,a-Trifluorotoluene	102		105		69-120	%	09.14.17 18:11

CHAIN OF CUSTODY

Revision 2016.1

XENCO LABORATORIES

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Page ___ Of ___

Stafford, TX (281) 240-4200 | El Paso, TX (915) 585-3443 | Midland, TX (432) 704-5440 | Phoenix, AZ (480) 355-0900 | Service Center- Amarillo, TX (806)678-4514
Dallas, TX (214) 902-0300 | Lubbock, TX (806) 794-1296 | San Antonio, TX (210) 509-3334 | Service Center - Baton Rouge, LA (832) 712-8143 | Service Center- Hobbs, NM (575) 392-7550

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Xenco Quote # | Xenco Job # 562405

Client / Reporting Information

Company Name / Branch: TRC Solutions
Company Address: 2057 Commerce Drive
Email: jlowry@trcsolutions.com Phone No:
Project Contact: J. Lowry
Samplers's Name: J. Lowry

Project Information

Project Name/Number: Alpha Crude Lynch Station
Project Location: Lea Co, NM
Invoice To: Plains Pipeline c/o Caroline Bryant
PO Number: SRS Pending / On File

Analytical Information

TPH 8015 mod Ext

Matrix Codes

W = Water
S = Soil/Sed/Solid
GW = Ground Water
DW = Drinking Water
P = Product
SW = Surface Water
SL - Sludge
OW = Ocean/Sea Water
WI = Wipe
O = Oil
WW = Waste Water
A = Air

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Field Comments
1	PS-1 @ 2'	2'	9/6	10:15	S										001
2	ESW #1	1'	↓	10:20	S										002
3	WSW #2b	1'	↓	10:25	S										003
4															
5															
6															
7															
8															
9															
10															

Turnaround Time (Business days)

- [ ] Same Day TAT
- [ ] 5 Day TAT
- [ ] Next Day EMERGENCY
- [ ] 7 Day TAT
- [ ] 2 Day EMERGENCY
- [x] Contract TAT
- [ ] 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 5:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] Level II Report with TRRP checklist

Notes:

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Jul Jowry	9/8/17	1 5:55	2		2
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
			3	4		4
5	Relinquished by:	Date Time: 9/8/17	Received By: 5 5:55	Custody Seal #	Preserved where applicable	On Ice: Cooler Temp. 1R3 3.0 2.9 Thermo. Corr. Factor

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

Final 1.001

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 09/08/2017 05:55:00 PM

Work Order #: 562405

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)?	2.9
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6*Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**N/A**
#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: 09/11/2017

Brenda Ward

Checklist reviewed by: Date: 09/11/2017

Certificate of Analysis Summary 571955

TRC Solutions, Inc, Midland, TX

Project Name: Alpha Crude Lynch Station

Project Id:

Contact: Joel Lowry

Project Location: Lea Co,Nm

Date Received in Lab: Thu Dec-21-17 03:57 pm

Report Date: 28-DEC-17

Project Manager: Kelsey Brooks

Analysis Requested								
	Lab Id:	571955-001		571955-002				
	Field Id:	12/20 FL-2 @ 6' (In-Situ)		12/20 DS-2 @ 2.5'				
	Depth:	6- In		2.5- In				
	Matrix:	SOIL		SOIL				
	Sampled:	Dec-20-17 14:35		Dec-20-17 14:40				
TPH by SW8015 Mod	***Extracted:***	Dec-21-17 16:00		Dec-21-17 16:00				
	Analyzed:	Dec-22-17 11:30		Dec-22-17 12:10				
	Units/RL:	mg/kg	RL	mg/kg	RL			
Gasoline Range Hydrocarbons (GRO)		12.1 J	15.0	30.3	15.0			
Diesel Range Organics (DRO)		4180	15.0	5970	15.0			
Oil Range Hydrocarbons (ORO)		1550	15.0	2140	15.0			
Total TPH		5742.1	15	8140.3	15			

Kelsey Brooks
Project Manager

Analytical Report 571955

for

TRC Solutions, Inc

Project Manager: Joel Lowry

Alpha Crude Lynch Station

28-DEC-17

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

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

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

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

28-DEC-17

Project Manager: **Joel Lowry**
TRC Solutions, Inc
2057 Commerce
Midland, TX 79703

Reference: XENCO Report No(s): **571955**
Alpha Crude Lynch Station
Project Address: Lea Co,Nm

Joel Lowry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 571955. 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. 571955 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,

Kelsey Brooks
Project Manager

Sample Cross Reference 571955

TRC Solutions, Inc, Midland, TX

Alpha Crude Lynch Station

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
12/20 FL-1 @ 6' (In-Situ)	S	12-20-17 14:35	6 In	571955-001
12/20 DS-2 @ 2.5'	S	12-20-17 14:40	2.5 In	571955-002

CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: Alpha Crude Lynch Station

Project ID:
Work Order Number(s): *571955*

Report Date: *28-DEC-17*
Date Received: *12/21/2017*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analytical Results 571955

TRC Solutions, Inc, Midland, TX

Alpha Crude Lynch Station

Sample Id:	**12/20 FL-1 @ 6' (In-Situ)**	Matrix:	Soil	Date Received:	12.21.17 15.57
Lab Sample Id:	571955-001	Date Collected:	12.20.17 14.35	Sample Depth:	6 In
Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	12.21.17 16.00	Basis:	Wet Weight
Seq Number:	3036677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**12.1**	15.0	mg/kg	12.22.17 11.30	J	1
Diesel Range Organics (DRO)	C10C28DRO	**4180**	15.0	mg/kg	12.22.17 11.30		1
Oil Range Hydrocarbons (ORO)	PHCG2835	**1550**	15.0	mg/kg	12.22.17 11.30		1
Total TPH	PHC635	**5742.1**	15	mg/kg	12.22.17 11.30		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	76	%	70-135	12.22.17 11.30	
o-Terphenyl	84-15-1	75	%	70-135	12.22.17 11.30	

Certificate of Analytical Results 571955

TRC Solutions, Inc, Midland, TX

Alpha Crude Lynch Station

Sample Id:	**12/20 DS-2 @ 2.5'**	Matrix:	Soil	Date Received:	12.21.17 15.57
Lab Sample Id:	571955-002	Date Collected:	12.20.17 14.40	Sample Depth:	2.5 In
Analytical Method:	TPH by SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	12.21.17 16.00	Basis:	Wet Weight
Seq Number:	3036677				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**30.3**	15.0	mg/kg	12.22.17 12.10		1
Diesel Range Organics (DRO)	C10C28DRO	**5970**	15.0	mg/kg	12.22.17 12.10		1
Oil Range Hydrocarbons (ORO)	PHCG2835	**2140**	15.0	mg/kg	12.22.17 12.10		1
Total TPH	PHC635	**8140.3**	15	mg/kg	12.22.17 12.10		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-135	12.22.17 12.10	
o-Terphenyl	84-15-1	79	%	70-135	12.22.17 12.10	

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

	Phone	Fax
4147 Greenbriar Dr, Stafford, TX 77477	(281) 240-4200	(281) 240-4280
9701 Harry Hines Blvd , Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
1211 W Florida Ave, Midland, TX 79701	(432) 563-1800	(432) 563-1713
2525 W. Huntington Dr. - Suite 102, Tempe AZ 85282	(602) 437-0330	

QC Summary 571955

TRC Solutions, Inc

Alpha Crude Lynch Station

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P

Seq Number: 3036677 Matrix: Solid Date Prep: 12.21.17

MB Sample Id: 7636450-1-BLK LCS Sample Id: 7636450-1-BKS LCSD Sample Id: 7636450-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<8.00	1000	813	81	851	85	70-135	5	35	mg/kg	12.22.17 03:10	
Diesel Range Organics (DRO)	<8.13	1000	845	85	866	87	70-135	2	35	mg/kg	12.22.17 03:10	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	80		77		79		70-135	%	12.22.17 03:10
o-Terphenyl	83		81		84		70-135	%	12.22.17 03:10

Analytical Method: **TPH by SW8015 Mod** Prep Method: TX1005P

Seq Number: 3036677 Matrix: Soil Date Prep: 12.21.17

Parent Sample Id: 571800-013 MS Sample Id: 571800-013 S MSD Sample Id: 571800-013 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<7.99	998	823	82	830	83	70-135	1	35	mg/kg	12.22.17 04:14	
Diesel Range Organics (DRO)	<8.11	998	851	85	853	85	70-135	0	35	mg/kg	12.22.17 04:14	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	75		83		70-135	%	12.22.17 04:14
o-Terphenyl	81		87		70-135	%	12.22.17 04:14

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

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

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

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

XENCO LABORATORIES

Setting the Standard since 1990

CHAIN OF CUSTODY

Stafford,Texas (281-240-4200) | San Antonio, Texas (210-509-3334) | Phoenix, Arizona (480-355-0900)

Dallas Texas (214-902-0300) | Midland, Texas (432-704-5251)

www.xenco.com

Xenco Quote #

Xenco Job # 571955

Client / Reporting Information

Company Name / Branch: TRC Environmental

Company Address: 2057 Commerce Drive, Midland, TX 79703

Email: jlowry@trcsolutions.com

Phone No:

Project Contact: Joel Lowry

Samplers's Name Joel Lowry

Project Information

Project Name/Number: Alpha Crude Lynch Station

Project Location: Lea Co, NM

Invoice To: Plains Pipeline C/O Camille Bryant

Invoice: SRS 2017 - 102

Analytical Information

Matrix Codes

W = Water
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
OW =Ocean/Sea Water
WI = Wipe
O = Oil
WW= Waste Water
A = Air

No.	Field ID / Point of Collection	Sample Depth	Collection Date	Collection Time	Matrix	# of bottles	HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	TPH 8015 M Ext	Field Comments
1	12/20 FL-1 @ 6" (In-Situ)	6"	12/20/2017	2:35	s	1									1	
2	12/20 DS-2 @ 2.5'	2.5'	12/20/2017	2:40	s	1									1	
3																
4																
5																
6																
7																
8																
9																
10																

Turnaround Time (Business days)

- [ ] Same Day TAT
- [ ] 5 Day TAT
- [ ] Next Day EMERGENCY
- [ ] 7 Day TAT
- [ ] 2 Day EMERGENCY
- [x] Contract TAT
- [ ] 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 5:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] TRRP Checklist

Notes:

Email Camille Bryant and Joel Lowry

FED-E

Temp: 4.3 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 4.1

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

Relinquished by	Date Time	Received By	Relinquished By	Date Time	Received By
Relinquished by Sampler: [signature]	12/20 3:57	[signature]	2		2
3		3	4		4
5		5	Custody Seal #	Preserved where applicable	On Ice: X; Cooler Temp.; Thermo. Corr. Factor

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 12/21/2017 03:57:00 PM

Work Order #: 571955

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

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	4.1
#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: Shawnee Smith Date: 12/21/2017
Shawnee Smith

Checklist reviewed by: Mike Kimmel Date: 12/27/2017
Mike Kimmel

APPENDIX B

Photographs

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

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

Photo 3: View of portion of excavated area, facing east.

Photo 4: View of portion of excavated area, facing west.

Photo 5: View of the affected area characterized by soil sample FL-2 @ 6” (In-Situ).

Photo 6: View of the affected area after remediation activities, facing northwest.

Photo 7: View of the affected area after remediation activities, facing west.

APPENDIX C

Request for Approval to Accept Solid Waste

Form C-138

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-138
Revised August 1, 2011

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

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Plains Pipeline, LP Seminole, TX 79360
5777 US Hwy 385

2. Originating Site:
Alpha Crude Lynch Station

3. Location of Material (Street Address, City, State or ULSTR):
UL "B" Sec. 1, Township 21 South, Range 33 East

4. Source and Description of Waste:
Crude oil imacted soil from a pipeline release.

Estimated Volume 180 yd^3 / bbls Known Volume (to be entered by the operator at the end of the haul) 332 yd^3 / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

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

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

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

5. Transporter:

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Lazy Ace Landfarm - NMOCD Permit #NM-01-0041

Address of Facility: SW/2 SW/4 of Sec. 22, Township 20 South, Range 34 East, NMPM Lea County, NM

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☐ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Daniel Berry TITLE: owner DATE: 8-16-17

SIGNATURE: Daniel Berry TELEPHONE NO.: 575-393-6964

Surface Waste Management Facility Authorized Agent

APPENDIX D

Release Notification and Corrective Action

Form C-141

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

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 Lynch Station	Facility Type	Station

Surface Owner	Mineral Owner	Lease No.
New Mexico State Land Office		

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
"B"	1	21S	33E					Lea

Latitude N 32.522267° Longitude W 103.524841°

NATURE OF RELEASE

Type of Release: Crude Oil	Volume of Release: 50 bbls	Volume Recovered: 30 bbls
Source of Release: Pipeline	Date and Hour of Occurrence: 06/16/2017 @ 11:59	Date and Hour of Discovery: 06/16/2017 @ 11:59
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Voicemail to Olivia Yu	
By Whom? Camille Bryant	Date and Hour: 06/16/2017 @ 13:50	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

RECEIVED
By Olivia Yu at 7:46 am, Jun 29, 2017

Describe Cause of Problem and Remedial Action Taken.* Valve to low pressure relief was found in the closed position. Pressure build up from thermal expansion caused the OAL single expansion joint to fail resulting in a release of crude oil. All released fluid was contained inside the facility.

Describe Area Affected and Cleanup Action Taken. The released crude oil impacted an area of approximately 4,000 square feet inside 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: Camille Bryant

Printed Name: Camille Bryant

Title: Remediation Coordinator

E-mail Address: cjbryant@paalp.com

Date: 6/23/17 Phone: (575) 441-1099

OIL CONSERVATION DIVISION

Approved by District Supervisor:

Approval Date: 6/29/2017 Expiration Date:

Conditions of Approval: see attached directive

Attached ☑

* Attach Additional Sheets If Necessary

1RP-4739 nOY1718028593 fOY1718028354

pOY1718028490