

APPROVED

By Olivia Yu at 4:06 pm, Aug 14, 2018

NMOCD approves of the
delineation completed for
1RP-4935.

JULY
2018

State of New Mexico Energy, Minerals, and Natural Resources Oil Conservation Division (OCD) Stage II Remediation Plan

Prepared For

Venable's Construction
West Texas / New Mexico Division
1315 West County Road 114
Midland, TX 79706

Case Number: 1RP-4935

Subject Property

North Hobbs Satellite 31 East CO2
32.71476°, -103.17909°

Prepared By:



Civil • Environmental • Safety
Texas Registered Engineering Firm F-9992
Texas Licensed Survey Firm 10193863
Texas Licensed Asbestos Consultant Agency 100535

5012 50th Street, Suite 204
Lubbock, TX 79414
(806) 783-9944
(806) 783-9966 fax
www.R2Meng.com

Table of Contents

1.0	Summary	1
2.0	Abatement	2
2.1	Proposed Soil Remediation	2
2.2	Regulatory Requirements	2
2.3	Reseeding	2
2.4	Backfill Request	2
3.0	Signature	3
4.0	Appendices	4
	Appendix A	Testing Summary Tables
	Appendix B.....	Figures
	Appendix C.....	Soil Test Data – Xenco Labs, Inc.
	Appendix D	Photo Log

1.0 Summary

A release of produced water and hydrocarbon mix occurred on the North Hobbs Satellite 31 East CO2 facility located in Unit J, Section 29, Township 18 South, Range 38 East, in Lea County, Hobbs, New Mexico on January 9, 2018, with the latitude of 32.714805° and longitude of -103.178939°. The release was caused by a 3rd-party line strike that resulted in the release of 150 barrels (bbls) of produced water and 10 bbls of oil. A volume of 150 bbls was recovered by vacuum truck shortly after the release occurred, to remedy the situation. The release's surficial flow was contained by the excavated trench. Overspray from the release was directed by strong winds to the northwest during the release. Stockpiles of material that had been excavated during construction of the trench had covered the ground next to the trench. The stockpiles prevented overspray from impacting the ground's natural surface near the opening of the trench. A natural depression located where overspray had contacted the ground surface allowed liquids to collect and be contained. Pooled liquids in the depression were then removed by vacuum truck shortly after the release had occurred. Staining is present where overspray had contacted the surface. This area is shown in Appendix B. The site's surficial runoff gradient is to the east and southeast, with a gentle slope of approximately 10-15 ft. to the mile. Site elevation indicates a gentle drop of elevation from 3,650 ft. to the northwest to an elevation of 3,639 ft. to the southeast.

The first round of sampling was conducted Wednesday, March 28, 2018; the second and third rounds of sampling were conducted April 2-3, 2018. These rounds are detailed in this remediation plan dated May 2018.

On May 25, 2018, the fourth round of sampling was conducted. Using GPS coordinates, soil boring locations were marked and additional samples were taken from thirteen borings (SB01-SB12 and SB17). The first figure in the appendices indicates the locations of the sampling locations. Samples were collected in 1-foot intervals below ground surface (bgs). Additionally, three grab samples were collected from the overspray area depicted in Appendix B. Material scrapped from the area is placed on poly-liner off of the affected area. Two grab samples from the stockpiles were collected. Samples were sent to Xenco Laboratories, a certified testing lab located in Lubbock, Texas. Xenco conducted all analytical testing for this case. These test results are found on the first table of the Testing Summary in the appendices and in Lab Report 587348 in Appendix C.

On May 31, 2018, the fifth round of sampling was conducted. Samples were collected from the thirteen soil borings in 1-foot intervals for further delineation. Three samples were collected in the trench area between SB1 and SB2, SB2 and SB3. The trench backfill material was removed to expose base of the trench. Samples were collected from 0-1 foot bgs from the base of trench, 6-7 foot below grade, by hand auger. Loose material in the open excavation was removed by means of backhoe to hard rock to where use of hammer attachment is needed to advance. Confirmation samples were taken from the approximate 10-foot side walls and bottom of the open excavation depicted in Appendix B. The materials removed were added to the stockpiles on location. Samples were taken from stockpiles and materials in roll-off containment. These test results are found on the second page of the Testing Summary in the appendices and in Lab Report 587854 in Appendix C.

On June 26, 2018, the sixth round of sampling was conducted. Using GPS coordinates, soil boring locations were marked and additional samples were taken from SB-10. Samples were collected in 1-foot intervals below ground surface (bgs) to 4 feet. Additionally, two shallow soil borings (SB-10A and SB-10B) were collected in 1-foot intervals to 2 feet bgs for further surface delineation near SB-10 and are depicted in Appendix B. Three grab samples (SF-4-6) were collected from the overspray area depicted in Appendix B. Additional samples were taken from the stockpiles on poly-liner to be analyzed. Samples were sent to Xenco Laboratories, and these test results are found on the third table of the Testing Summary in the appendices and in Lab Report 590437 in Appendix C.

2.0 Abatement

2.1 Proposed Soil Remediation

Based on the results of this assessment the following work is proposed. Venable's Construction will contour and restore property vegetation during the reseeding phase of the pipeline project right-of-way, later discussed. A map of the proposed seeding area is provided in Appendix B.

2.2 Regulatory Requirements

New Mexico Oil Conservation Division evaluates each release of produced water or oil according to the Recommended Remediation Action Levels (RRAL). NMOCD uses RRALs as a ranking system when evaluating each spill in terms of Depth to Groundwater, Distance to Surface Water, and Distance to Wellhead Protection Area.

The ranking score for this site is **10** based on the following:

Depth to ground water: (50'-100')	10
Wellhead Protection Area: > 1000'	0
Distance to Surface Water Body: > 1000'	0

2.3 Reseeding

Seeding of the location is recommended for June or July 2018. Seed will be planted a quarter-to half-inch deep using a disc type or similar rangeland drill sufficient to accommodate variations in seed sizes. If the broadcast method is exacted, seeding rates should be doubled. Seeding can be accomplished as early as late May 2018 given all dirt work for the location is stabilized. Soil in this area will be tilled to reduce compaction. Seed-bed preparation will be performed to provide a hospitable environment for germinating seed by breaking up impermeable soil layers that have formed and increasing void spaces for air and water. Ground shall be roughed-up prior to planting, by raking, harrowing or other methods. The seed mixture used will be approved by the New Mexico State Land office.

2.4 Backfill Request

Based on laboratory analytical results and field activities conducted to date, R2M requests permission on behalf of Venable's Construction to backfill the excavated area with locally-sourced and non-impacted material. Excavation backfill will be compacted and contoured to meet the needs of the facility.

3.0 Signature

This report has been prepared for the sole benefit of Venable's Construction. The report may not be relied upon by any other person or entity without the express written consent of R2M and Venable's Construction.

Environmental Professional

John E. Rantz, P.E.

Printed Name of Professional Engineer


Signature


Date



4.0 Appendix

Appendix A

Testing Summary

Summary of Release Analytical Results

Project Site: North Hobbs Satellite 31 East CO2

Date Reported: 6/1/2018

Testing By: Xenco Laboratory, Lubbock, TX

Chloride						
Lab Sample I.D.	Sample Description	Date Sampled	Matrix	RL Results	Unit	Field Screen Results (ppm)
587348-001	SB-17(0"-6")	5/25/2018	SOIL	268	mg/Kg	---
587348-002	SB-17(6"-12")	5/25/2018	SOIL	215	mg/Kg	---
587348-005	SB-8(0"-6")	5/25/2018	SOIL	314	mg/Kg	---
587348-006	SB-8(6"-18")	5/25/2018	SOIL	296	mg/Kg	---
587348-009	SB-9(0-12)	5/25/2018	SOIL	18.7	mg/Kg	---
587348-010	SB-9(1-2)	5/25/2018	SOIL	3.44	mg/Kg	---
587348-011	SB-6(0-1)	5/25/2018	SOIL	244	mg/Kg	---
587348-012	SB-6(1-2)	5/25/2018	SOIL	235	mg/Kg	---
587348-014	SB-7(0-1)	5/25/2018	SOIL	124	mg/Kg	---
587348-015	SB-7(1-2)	5/25/2018	SOIL	34	mg/Kg	---
587348-017	SB-5(0-1)	5/25/2018	SOIL	172	mg/Kg	---
587348-018	SB-5(1-2)	5/25/2018	SOIL	334	mg/Kg	---
587348-020	SB-10(0-1)	5/25/2018	SOIL	223	mg/Kg	---
587348-021	SB-10(1-2)	5/25/2018	SOIL	15.2	mg/Kg	---
587348-022	SB-11(0-1)	5/25/2018	SOIL	17.2	mg/Kg	---
587348-023	SB-11(1-2)	5/25/2018	SOIL	9.4	mg/Kg	---
587348-024	SB-12(0-1)	5/25/2018	SOIL	4.44	mg/Kg	---
587348-025	SB-12(1-2)	5/25/2018	SOIL	2.55	mg/Kg	---
587348-026	SB-1(0-1)	5/25/2018	SOIL	168	mg/Kg	---
587348-027	SB-1(1-2)	5/25/2018	SOIL	473	mg/Kg	---
587348-028	SB-2(0-1)	5/25/2018	SOIL	495	mg/Kg	---
587348-029	SB-2(1-2)	5/25/2018	SOIL	728	mg/Kg	---
587348-030	SB-3(0-1)	5/25/2018	SOIL	225	mg/Kg	---
587348-031	SB-3(1-2)	5/25/2018	SOIL	93.6	mg/Kg	---
587348-032	SB-4(0-1)	5/25/2018	SOIL	1.86	mg/Kg	---
587348-033	SB-4(1-2)	5/25/2018	SOIL	30.1	mg/Kg	---
587348-034	erspray Stockpil	5/25/2018	SOIL	578	mg/Kg	---
587348-035	erspray Stockpil	5/25/2018	SOIL	206	mg/Kg	---
587348-036	Surface 1(0-6)	5/25/2018	SOIL	574	mg/Kg	---
587348-037	Surface 2(0-6)	5/25/2018	SOIL	676	mg/Kg	---
587348-038	Surface 3 (0-6)	5/25/2018	SOIL	1110	mg/Kg	---

Summary of Release Analytical Results

Project Site: North Hobbs Satellite 31 East CO2

Date Reported: 6/1/2018

Testing By: Xenco Laboratory, Lubbock, TX

Total TPH						
Lab Sample I.D.	Sample Description	Date Sampled	Matrix	RL Results	Unit	Field Screen Results (ppm)
587348-001	SB-17(0"-6")	5/25/2018	SOIL	47.7	mg/Kg	---
587348-002	SB-17(6"-12")	5/25/2018	SOIL	0	mg/Kg	---
587348-005	SB-8(0"-6")	5/25/2018	SOIL	330	mg/Kg	---
587348-006	SB-8(6"-18")	5/25/2018	SOIL	246	mg/Kg	---
587348-009	SB-9(0-1')	5/25/2018	SOIL	55.5	mg/Kg	---
587348-010	SB-9(1-2)	5/25/2018	SOIL	49.7	mg/Kg	---
587348-011	SB-6(0-1)	5/25/2018	SOIL	253	mg/Kg	---
587348-012	SB-6(1-2)	5/25/2018	SOIL	337	mg/Kg	---
587348-014	SB-7(0-1)	5/25/2018	SOIL	116	mg/Kg	---
587348-015	SB-7(1-2)	5/25/2018	SOIL	73.8	mg/Kg	---
587348-017	SB-5(0-1)	5/25/2018	SOIL	397	mg/Kg	---
587348-018	SB-5(1-2)	5/25/2018	SOIL	975	mg/Kg	---
587348-020	SB-10(0-1)	5/25/2018	SOIL	1090	mg/Kg	---
587348-021	SB-10(1-2)	5/25/2018	SOIL	94	mg/Kg	---
587348-022	SB-11(0-1)	5/25/2018	SOIL	51	mg/Kg	---
587348-023	SB-11(1-2)	5/25/2018	SOIL	50.4	mg/Kg	---
587348-024	SB-12(0-1)	5/25/2018	SOIL	37.6	mg/Kg	---
587348-025	SB-12(1-2)	5/25/2018	SOIL	0	mg/Kg	---
587348-026	SB-1(0-1)	5/25/2018	SOIL	62.9	mg/Kg	---
587348-027	SB-1(1-2)	5/25/2018	SOIL	93.9	mg/Kg	---
587348-028	SB-2(0-1)	5/25/2018	SOIL	147	mg/Kg	---
587348-029	SB-2(1-2)	5/25/2018	SOIL	100	mg/Kg	---
587348-030	SB-3(0-1)	5/25/2018	SOIL	26.7	mg/Kg	---
587348-031	SB-3(1-2)	5/25/2018	SOIL	255	mg/Kg	---
587348-032	SB-4(0-1)	5/25/2018	SOIL	30.9	mg/Kg	---
587348-033	SB-4(1-2)	5/25/2018	SOIL	52.2	mg/Kg	---
587348-034	erspray Stockpil	5/25/2018	SOIL	1910	mg/Kg	---
587348-035	erspray Stockpil	5/25/2018	SOIL	1390	mg/Kg	---
587348-036	Surface 1(0-6)	5/25/2018	SOIL	221	mg/Kg	---
587348-037	Surface 2(0-6)	5/25/2018	SOIL	457	mg/Kg	---
587348-038	Surface 3(0-6)	5/25/2018	SOIL	566	mg/Kg	---

Summary of Release Analytical Results

Project Site: North Hobbs Satellite 31 East CO2

Date Reported: 6/1/2018

Testing By: Xenco Laboratory, Lubbock, TX

BTEX						
Lab Sample I.D.	Sample Description	Date Sampled	Matrix	RL Results	Unit	Field Screen Results (ppm)
587348-001	SB-17(0"-6")	5/25/2018	SOIL	0	mg/Kg	---
587348-002	SB-17(6"-12")	5/25/2018	SOIL	0	mg/Kg	---
587348-005	SB-8(0"-6")	5/25/2018	SOIL	0	mg/Kg	---
587348-006	SB-8(6"-18")	5/25/2018	SOIL	0	mg/Kg	---
587348-009	SB-9(0-12)	5/25/2018	SOIL	0	mg/Kg	---
587348-010	SB-9(1-2)	5/25/2018	SOIL	0	mg/Kg	---
587348-011	SB-6(0-1)	5/25/2018	SOIL	0.00473	mg/Kg	---
587348-012	SB-6(1-2)	5/25/2018	SOIL	0	mg/Kg	---
587348-014	SB-7(0-1)	5/25/2018	SOIL	0	mg/Kg	---
587348-015	SB-7(1-2)	5/25/2018	SOIL	0	mg/Kg	---
587348-017	SB-5(0-1)	5/25/2018	SOIL	0	mg/Kg	---
587348-018	SB-5(1-2)	5/25/2018	SOIL	0.000717	mg/Kg	---
587348-020	SB-10(0-1)	5/25/2018	SOIL	0	mg/Kg	---
587348-021	SB-10(1-2)	5/25/2018	SOIL	0	mg/Kg	---
587348-022	SB-11(0-1)	5/25/2018	SOIL	0	mg/Kg	---
587348-023	SB-11(1-2)	5/25/2018	SOIL	0	mg/Kg	---
587348-024	SB-12(0-1)	5/25/2018	SOIL	0	mg/Kg	---
587348-025	SB-12(1-2)	5/25/2018	SOIL	0	mg/Kg	---
587348-026	SB-1(0-1)	5/25/2018	SOIL	0	mg/Kg	---
587348-027	SB-1(1-2)	5/25/2018	SOIL	0	mg/Kg	---
587348-028	SB-2(0-1)	5/25/2018	SOIL	0	mg/Kg	---
587348-029	SB-2(1-2)	5/25/2018	SOIL	0	mg/Kg	---
587348-030	SB-3(0-1)	5/25/2018	SOIL	0	mg/Kg	---
587348-031	SB-3(1-2)	5/25/2018	SOIL	0	mg/Kg	---
587348-032	SB-4(0-1)	5/25/2018	SOIL	0	mg/Kg	---
587348-033	SB-4(1-2)	5/25/2018	SOIL	0	mg/Kg	---
587348-034	erspray Stockpil	5/25/2018	SOIL	0	mg/Kg	---
587348-035	erspray Stockpil	5/25/2018	SOIL	0	mg/Kg	---
587348-036	Surface 1(0-6)	5/25/2018	SOIL	0.00234	mg/Kg	---
587348-037	Surface 2(0-6)	5/25/2018	SOIL	0.000896	mg/Kg	---
587348-038	Surface 3 (0-6)	5/25/2018	SOIL	0.00333	mg/Kg	---

Summary of Release Analytical Results

Project Site: North Hobbs Satellite 31 East CO2

Date Reported: 6/15/2018

Testing By: Xenco Laboratory, Lubbock, TX

Chloride						
Lab Sample I.D.	Sample Description	Date Sampled	Matrix	RL Results	Unit	Field Screen Results (ppm)
587854-001	Con 2001	5/31/2018	SOIL	592	mg/Kg	---
587854-003	Con 2002	5/31/2018	SOIL	11.7	mg/Kg	---
587854-005	Con 2003	5/31/2018	SOIL	7.65	mg/Kg	---
587854-007	Con 2004	5/31/2018	SOIL	884	mg/Kg	---
587854-012	SB-2.2	5/31/2018	SOIL	13.2	mg/Kg	---
587854-013	SB-2.3	5/31/2018	SOIL	17.6	mg/Kg	---
587854-014	SB-2.4	5/31/2018	SOIL	35.8	mg/Kg	---
587854-023	Stockpile 3	5/31/2018	SOIL	477	mg/Kg	---
587854-024	Stockpile 4	5/31/2018	SOIL	65.4	mg/Kg	---
587854-025	Pit Bottom	5/31/2018	SOIL	10.6	mg/Kg	---
587854-026	SW Confirmation 0-1	5/31/2018	SOIL	1.64	mg/Kg	---
587854-027	SW Confirmation 1-2	5/31/2018	SOIL	2.97	mg/Kg	---
587854-028	SW Confirmation 2-3	5/31/2018	SOIL	1.5	mg/Kg	---
587854-029	SW Confirmation 3-4	5/31/2018	SOIL	1.04	mg/Kg	---
587854-030	SW Confirmation 4-5	5/31/2018	SOIL	3.1	mg/Kg	---
587854-031	SW Confirmation 5-6	5/31/2018	SOIL	4.84	mg/Kg	---
587854-032	SW Confirmation 6-7	5/31/2018	SOIL	16.3	mg/Kg	---
587854-033	SW Confirmation 7-8	5/31/2018	SOIL	21.5	mg/Kg	---
587854-034	SW Confirmation 8-9	5/31/2018	SOIL	18.3	mg/Kg	---
587854-035	SW Confirmation 9-10	5/31/2018	SOIL	8.76	mg/Kg	---
587854-036	SE Confirmation 0-1	5/31/2018	SOIL	2.97	mg/Kg	---
587854-037	SE Confirmation 1-2	5/31/2018	SOIL	3.05	mg/Kg	---
587854-038	SE Confirmation 2-3	5/31/2018	SOIL	2.27	mg/Kg	---
587854-039	SE Confirmation 3-4	5/31/2018	SOIL	2.43	mg/Kg	---
587854-040	SE Confirmation 4-5	5/31/2018	SOIL	4.55	mg/Kg	---
587854-041	SE Confirmation 5-6	5/31/2018	SOIL	3.2	mg/Kg	---
587854-042	SE Confirmation 6-7	5/31/2018	SOIL	3.22	mg/Kg	---
587854-043	SE Confirmation 7-8	5/31/2018	SOIL	3.67	mg/Kg	---
587854-044	SE Confirmation 8-9	5/31/2018	SOIL	2.23	mg/Kg	---
587854-045	SE Confirmation 9-10	5/31/2018	SOIL	2.4	mg/Kg	---
587854-046	NW Confirmation 0-1	5/31/2018	SOIL	31.5	mg/Kg	---
587854-047	NW Confirmation 1-2	5/31/2018	SOIL	26.9	mg/Kg	---
587854-048	NW Confirmation 2-3	5/31/2018	SOIL	22.3	mg/Kg	---
587854-049	NW Confirmation 3-4	5/31/2018	SOIL	28.2	mg/Kg	---
587854-050	NW Confirmation 4-5	5/31/2018	SOIL	4.48	mg/Kg	---
587854-051	NW Confirmation 5-6	5/31/2018	SOIL	5.21	mg/Kg	---
587854-052	NW Confirmation 6-7	5/31/2018	SOIL	5.95	mg/Kg	---
587854-053	NW Confirmation 7-8	5/31/2018	SOIL	5.74	mg/Kg	---
587854-054	NW Confirmation 8-9	5/31/2018	SOIL	2.77	mg/Kg	---
587854-055	NW Confirmation 9-10	5/31/2018	SOIL	6.33	mg/Kg	---
587854-056	NE Confirmation 0-1	5/31/2018	SOIL	9.39	mg/Kg	---
587854-057	NE Confirmation 1-2	5/31/2018	SOIL	18	mg/Kg	---
587854-058	NE Confirmation 2-3	5/31/2018	SOIL	29.7	mg/Kg	---
587854-059	NE Confirmation 3-4	5/31/2018	SOIL	18.2	mg/Kg	---
587854-060	NE Confirmation 4-5	5/31/2018	SOIL	2.25	mg/Kg	---
587854-061	NE Confirmation 5-6	5/31/2018	SOIL	3.55	mg/Kg	---
587854-062	NE Confirmation 6-7	5/31/2018	SOIL	9.39	mg/Kg	---
587854-063	NE Confirmation 7-8	5/31/2018	SOIL	1.51	mg/Kg	---
587854-064	NE Confirmation 8-9	5/31/2018	SOIL	3.5	mg/Kg	---
587854-065	NE Confirmation 9-10	5/31/2018	SOIL	10.3	mg/Kg	---
1) Note: Results preceded by "<" indicate a negative result below the indicated detection limit.						

Summary of Release Analytical Results

Project Site: North Hobbs Satellite 31 East CO2

Date Reported: 6/15/2018

Testing By: Xenco Laboratory, Lubbock, TX

Total TPH						
Lab Sample I.D.	Sample Description	Date Sampled	Matrix	RL Results	Unit	Field Screen Results (ppm)
587854-001	Con 2001	5/31/2018	SOIL	2320	mg/Kg	---
587854-003	Con 2002	5/31/2018	SOIL	1070	mg/Kg	---
587854-005	Con 2003	5/31/2018	SOIL	2190	mg/Kg	---
587854-007	Con 2004	5/31/2018	SOIL	4790	mg/Kg	---
587854-012	SB-2.2	5/31/2018	SOIL	0	mg/Kg	---
587854-013	SB-2.3	5/31/2018	SOIL	0	mg/Kg	---
587854-014	SB-2.4	5/31/2018	SOIL	0	mg/Kg	---
587854-023	Stockpile 3	5/31/2018	SOIL	118	mg/Kg	---
587854-024	Stockpile 4	5/31/2018	SOIL	94.9	mg/Kg	---
587854-025	Pit Bottom	5/31/2018	SOIL	50	mg/Kg	---
587854-026	SW Confirmation 0-1	5/31/2018	SOIL	0	mg/Kg	---
587854-027	SW Confirmation 1-2	5/31/2018	SOIL	0	mg/Kg	---
587854-028	SW Confirmation 2-3	5/31/2018	SOIL	0	mg/Kg	---
587854-029	SW Confirmation 3-4	5/31/2018	SOIL	0	mg/Kg	---
587854-030	SW Confirmation 4-5	5/31/2018	SOIL	0	mg/Kg	---
587854-031	SW Confirmation 5-6	5/31/2018	SOIL	0	mg/Kg	---
587854-032	SW Confirmation 6-7	5/31/2018	SOIL	0	mg/Kg	---
587854-033	SW Confirmation 7-8	5/31/2018	SOIL	0	mg/Kg	---
587854-034	SW Confirmation 8-9	5/31/2018	SOIL	0	mg/Kg	---
587854-035	SW Confirmation 9-10	5/31/2018	SOIL	0	mg/Kg	---
587854-036	SE Confirmation 0-1	5/31/2018	SOIL	0	mg/Kg	---
587854-037	SE Confirmation 1-2	5/31/2018	SOIL	0	mg/Kg	---
587854-038	SE Confirmation 2-3	5/31/2018	SOIL	0	mg/Kg	---
587854-039	SE Confirmation 3-4	5/31/2018	SOIL	0	mg/Kg	---
587854-040	SE Confirmation 4-5	5/31/2018	SOIL	0	mg/Kg	---
587854-041	SE Confirmation 5-6	5/31/2018	SOIL	0	mg/Kg	---
587854-042	SE Confirmation 6-7	5/31/2018	SOIL	0	mg/Kg	---
587854-043	SE Confirmation 7-8	5/31/2018	SOIL	0	mg/Kg	---
587854-044	SE Confirmation 8-9	5/31/2018	SOIL	0	mg/Kg	---
587854-045	SE Confirmation 9-10	5/31/2018	SOIL	0	mg/Kg	---
587854-046	NW Confirmation 0-1	5/31/2018	SOIL	42.6	mg/Kg	---
587854-047	NW Confirmation 1-2	5/31/2018	SOIL	48.6	mg/Kg	---
587854-048	NW Confirmation 2-3	5/31/2018	SOIL	0	mg/Kg	---
587854-049	NW Confirmation 3-4	5/31/2018	SOIL	0	mg/Kg	---
587854-050	NW Confirmation 4-5	5/31/2018	SOIL	0	mg/Kg	---
587854-051	NW Confirmation 5-6	5/31/2018	SOIL	0	mg/Kg	---
587854-052	NW Confirmation 6-7	5/31/2018	SOIL	0	mg/Kg	---
587854-053	NW Confirmation 7-8	5/31/2018	SOIL	0	mg/Kg	---
587854-054	NW Confirmation 8-9	5/31/2018	SOIL	0	mg/Kg	---
587854-055	NW Confirmation 9-10	5/31/2018	SOIL	55	mg/Kg	---
587854-056	NE Confirmation 0-1	5/31/2018	SOIL	37.4	mg/Kg	---
587854-057	NE Confirmation 1-2	5/31/2018	SOIL	42.2	mg/Kg	---
587854-058	NE Confirmation 2-3	5/31/2018	SOIL	52.7	mg/Kg	---
587854-059	NE Confirmation 3-4	5/31/2018	SOIL	0	mg/Kg	---
587854-060	NE Confirmation 4-5	5/31/2018	SOIL	0	mg/Kg	---
587854-061	NE Confirmation 5-6	5/31/2018	SOIL	0	mg/Kg	---
587854-062	NE Confirmation 6-7	5/31/2018	SOIL	0	mg/Kg	---
587854-063	NE Confirmation 7-8	5/31/2018	SOIL	0	mg/Kg	---
587854-064	NE Confirmation 8-9	5/31/2018	SOIL	0	mg/Kg	---
587854-065	NE Confirmation 9-10	5/31/2018	SOIL	0	mg/Kg	---

1) Note: Results preceded by "<" indicate a negative result below the indicated detection limit.

Summary of Release Analytical Results

Project Site: North Hobbs Satellite 31 East CO2

Date Reported: 6/15/2018

Testing By: Xenco Laboratory, Lubbock, TX

BTEX						
Lab Sample I.D.	Sample Description	Date Sampled	Matrix	RL Results	Unit	Field Screen Results (ppm)
587854-001	Con 2001	5/31/2018	SOIL	0	mg/Kg	---
587854-003	Con 2002	5/31/2018	SOIL	0	mg/Kg	---
587854-005	Con 2003	5/31/2018	SOIL	0.00361	mg/Kg	---
587854-007	Con 2004	5/31/2018	SOIL	0.00626	mg/Kg	---
587854-012	SB-2.2	5/31/2018	SOIL	0	mg/Kg	---
587854-013	SB-2.3	5/31/2018	SOIL	0	mg/Kg	---
587854-014	SB-2.4	5/31/2018	SOIL	0	mg/Kg	---
587854-023	Stockpile 3	5/31/2018	SOIL	0	mg/Kg	---
587854-024	Stockpile 4	5/31/2018	SOIL	0.00548	mg/Kg	---
587854-025	Pit Bottom	5/31/2018	SOIL	0	mg/Kg	---
587854-026	✓ Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-027	✓ Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-028	✓ Confirmation	5/31/2018	SOIL	0.000602	mg/Kg	---
587854-029	✓ Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-030	✓ Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-031	✓ Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-032	✓ Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-033	✓ Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-034	✓ Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-035	Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-036	Confirmation	5/31/2018	SOIL	0.00074	mg/Kg	---
587854-037	Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-038	Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-039	Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-040	Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-041	Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-042	Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-043	Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-044	Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-045	Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-046	✓ Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-047	✓ Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-048	✓ Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-049	✓ Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-050	✓ Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-051	✓ Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-052	✓ Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-053	✓ Confirmation	5/31/2018	SOIL	0.000918	mg/Kg	---
587854-054	✓ Confirmation	5/31/2018	SOIL	0.000634	mg/Kg	---
587854-055	✓ Confirmation	5/31/2018	SOIL	0.00163	mg/Kg	---
587854-056	✓ Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-057	✓ Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-058	✓ Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-059	✓ Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-060	✓ Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-061	✓ Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-062	✓ Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-063	✓ Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-064	✓ Confirmation	5/31/2018	SOIL	0	mg/Kg	---
587854-065	Confirmation	5/31/2018	SOIL	0	mg/Kg	---

Summary of Release Analytical Results

Project Site: North Hobbs Satellite 31 East CO2

Date Reported: 6/28/2018

Testing By: Xenco Laboratory, Lubbock, TX

Chloride						
Lab Sample I.D.	Sample Description	Date Sampled	Matrix	RL Results	Unit	Field Screen Results (ppm)
590437-001	Con 2001	6/26/2018	SOIL	219	mg/Kg	---
590437-002	Con 2002	6/26/2018	SOIL	74.6	mg/Kg	---
590437-003	Con 2003	6/26/2018	SOIL	51.6	mg/Kg	---
590437-004	Con 2004	6/26/2018	SOIL	58.9	mg/Kg	---
590437-005	SB-2.2	6/26/2018	SOIL	48.1	mg/Kg	---
590437-007	SB-2.3	6/26/2018	SOIL	19.6	mg/Kg	---
590437-009	SB-2.4	6/26/2018	SOIL	570	mg/Kg	---
590437-010	Stockpile 3	6/26/2018	SOIL	280	mg/Kg	---
590437-011	Stockpile 4	6/26/2018	SOIL	15.6	mg/Kg	---

Summary of Release Analytical Results

Project Site: North Hobbs Satellite 31 East CO2

Date Reported: 6/28/2018

Testing By: Xenco Laboratory, Lubbock, TX

Total TPH						
Lab Sample I.D.	Sample Description	Date Sampled	Matrix	RL Results	Unit	Field Screen Results (ppm)
590437-001	SB-10 0-1	6/26/2018	SOIL	157	mg/Kg	---
590437-001	SB-10 0-1	6/26/2018	SOIL	33.4	mg/Kg	---
590437-001	SB-10 0-1	6/26/2018	SOIL	0	mg/Kg	---
590437-002	SB-10 1-2	6/26/2018	SOIL	84.6	mg/Kg	---
590437-002	SB-10 1-2	6/26/2018	SOIL	17.3	mg/Kg	---
590437-002	SB-10 1-2	6/26/2018	SOIL	0	mg/Kg	---
590437-003	SB-10 2-3	6/26/2018	SOIL	61.9	mg/Kg	---
590437-003	SB-10 2-3	6/26/2018	SOIL	18.7	mg/Kg	---
590437-003	SB-10 2-3	6/26/2018	SOIL	0	mg/Kg	---
590437-004	SB-10 3-4	6/26/2018	SOIL	34.6	mg/Kg	---
590437-004	SB-10 3-4	6/26/2018	SOIL	11.2	mg/Kg	---
590437-004	SB-10 3-4	6/26/2018	SOIL	0	mg/Kg	---
590437-005	SB-10A 0-1	6/26/2018	SOIL	41.3	mg/Kg	---
590437-005	SB-10A 0-1	6/26/2018	SOIL	9.71	mg/Kg	---
590437-005	SB-10A 0-1	6/26/2018	SOIL	0	mg/Kg	---
590437-007	SB-10B 0-1	6/26/2018	SOIL	0	mg/Kg	---
590437-007	SB-10B 0-1	6/26/2018	SOIL	0	mg/Kg	---
590437-007	SB-10B 0-1	6/26/2018	SOIL	0	mg/Kg	---
590437-007	SB-10B 0-1	6/26/2018	SOIL	0	mg/Kg	---
590437-009	SF-4 0-1	6/26/2018	SOIL	501	mg/Kg	---
590437-009	SF-4 0-1	6/26/2018	SOIL	110	mg/Kg	---
590437-009	SF-4 0-1	6/26/2018	SOIL	0	mg/Kg	---
590437-010	SF-5 0-1	6/26/2018	SOIL	354	mg/Kg	---
590437-010	SF-5 0-1	6/26/2018	SOIL	80.5	mg/Kg	---
590437-010	SF-5 0-1	6/26/2018	SOIL	0	mg/Kg	---
590437-011	SF-6 0-1	6/26/2018	SOIL	0	mg/Kg	---
590437-011	SF-6 0-1	6/26/2018	SOIL	0	mg/Kg	---
590437-011	SF-6 0-1	6/26/2018	SOIL	0	mg/Kg	---
590437-011	SF-6 0-1	6/26/2018	SOIL	0	mg/Kg	---
590437-012	Stockpile 1	6/26/2018	SOIL	214	mg/Kg	---
590437-012	Stockpile 1	6/26/2018	SOIL	48.3	mg/Kg	---
590437-012	Stockpile 1	6/26/2018	SOIL	0	mg/Kg	---
590437-013	Stockpile 2	6/26/2018	SOIL	263	mg/Kg	---
590437-013	Stockpile 2	6/26/2018	SOIL	59	mg/Kg	---
590437-013	Stockpile 2	6/26/2018	SOIL	0	mg/Kg	---

1) Note: Results preceded by "<" indicate a negative result below the indicated detection limit.

Summary of Release Analytical Results

Project Site: North Hobbs Satellite 31 East CO2

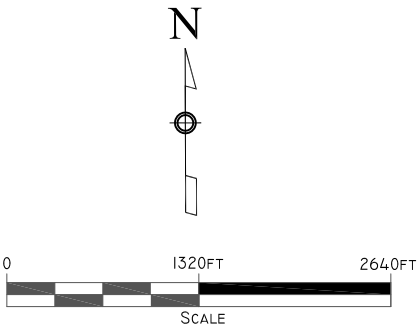
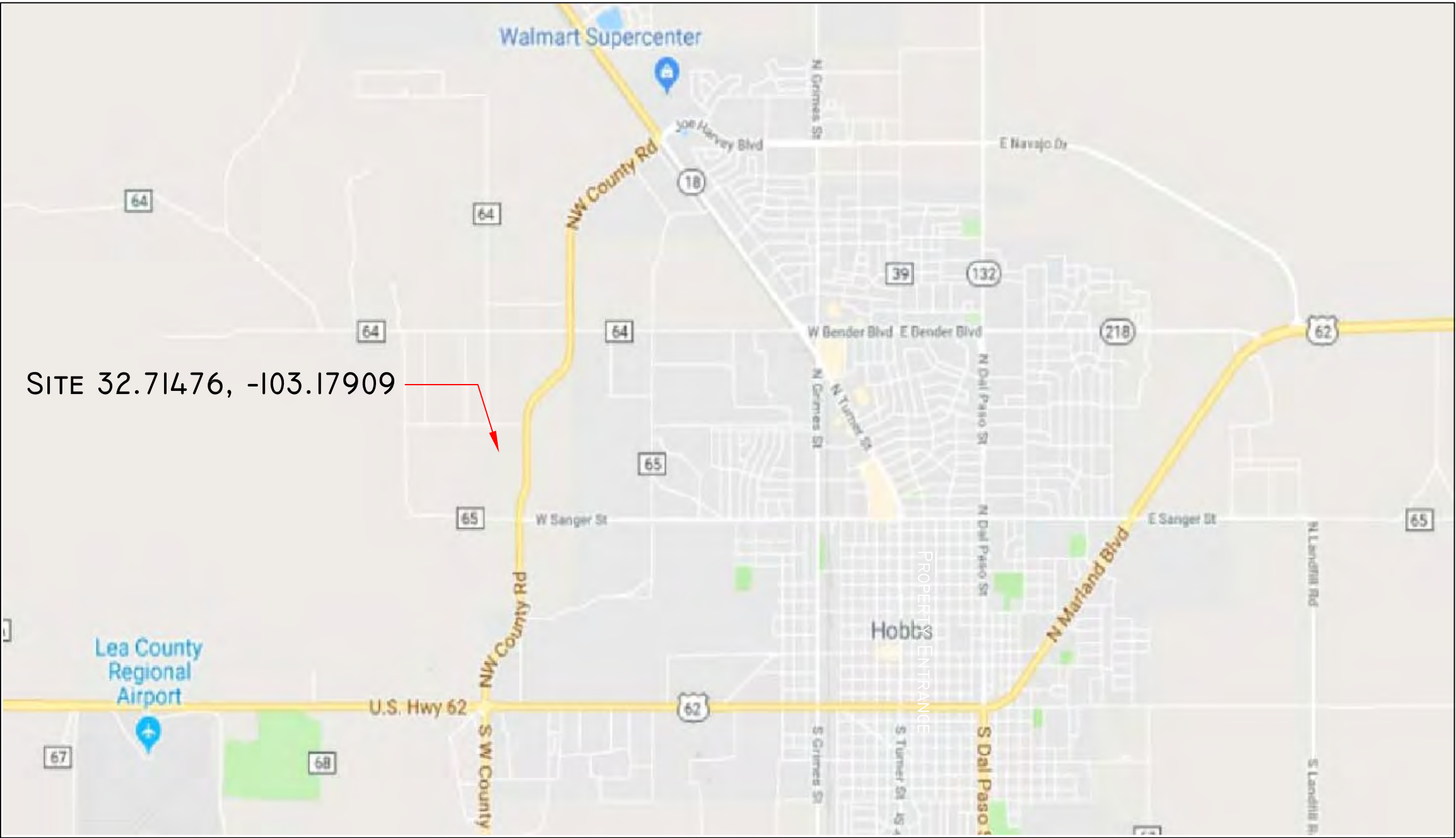
Date Reported: 6/28/2018

Testing By: Xenco Laboratory, Lubbock, TX

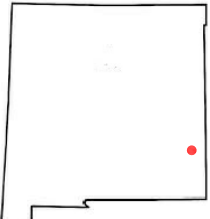
BTEX						
Lab Sample I.D.	Sample Description	Date Sampled	Matrix	RL Results	Unit	Field Screen Results (ppm)
590437-001	SB-10 0-1	6/26/2018	SOIL	0	mg/Kg	---
590437-002	SB-10 1-2	6/26/2018	SOIL	0	mg/Kg	---
590437-003	SB-10 2-3	6/26/2018	SOIL	0	mg/Kg	---
590437-004	SB-10 3-4	6/26/2018	SOIL	0	mg/Kg	---
590437-005	SB-10A 0-1	6/26/2018	SOIL	0	mg/Kg	---
590437-007	SB-10B 0-1	6/26/2018	SOIL	0	mg/Kg	---
590437-009	SF-4 0-1	6/26/2018	SOIL	0	mg/Kg	---
590437-010	SF-5 0-1	6/26/2018	SOIL	0	mg/Kg	---
590437-011	SF-6 0-1	6/26/2018	SOIL	0	mg/Kg	---

Appendix B

Figures



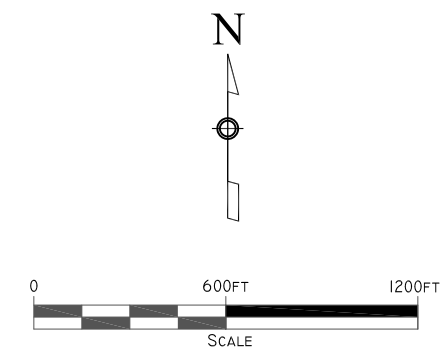
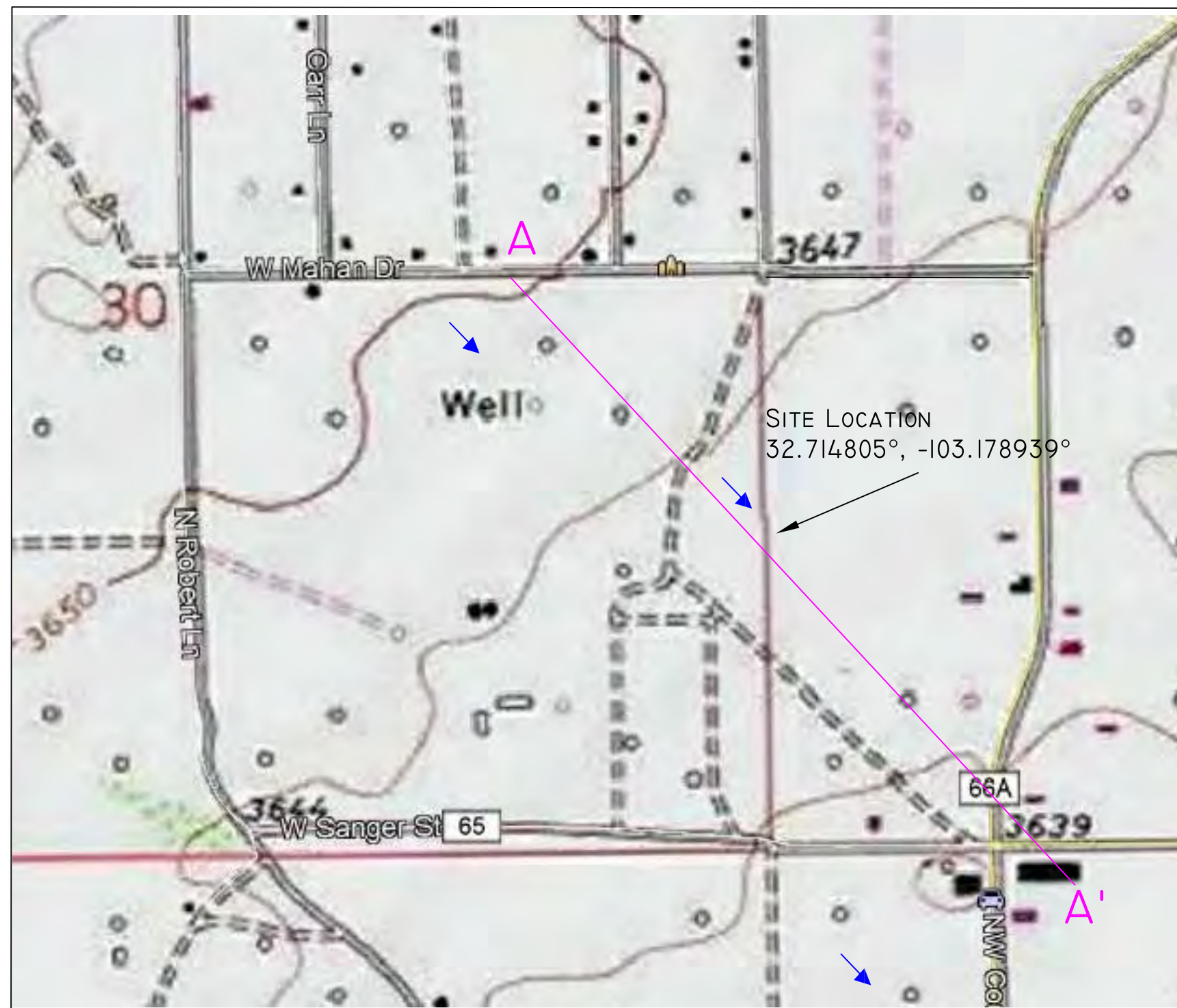
AREA MAP





Texas Registered Engineering Firm F-9992
Texas Licensed Surveying Firm 10193863
5012 50th Ste. 204 P: 806-783-9944
Lubbock, TX 79414 F: 806-783-9966
www.R2Meng.com

COMPANY: VENABLE'S CONSTRUCTION
PROJECT: IRP-4935
TITLE: AREA MAP
LOCATION: HOBBS, NM
DATE: 4-2018



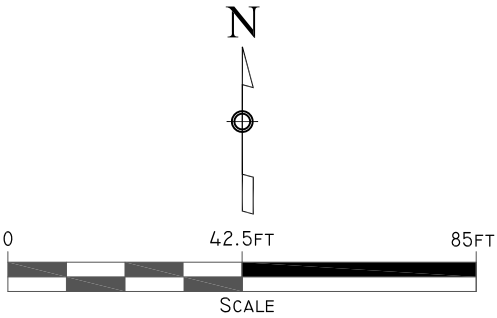
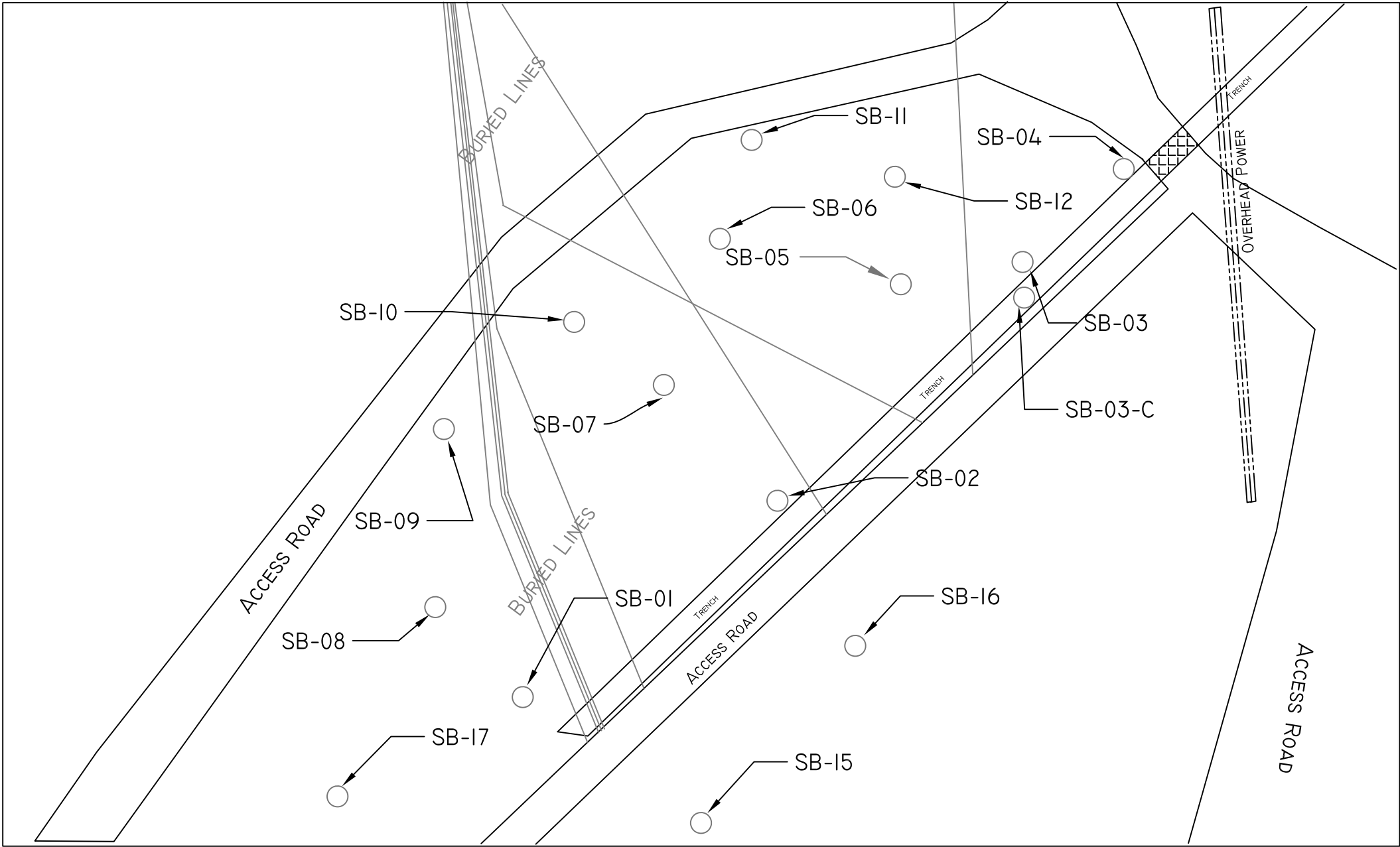
→ SURFACE WATER
FLOW

A 3,650 FT.

A' 3,639 FT.

TOPOGRAPHIC MAP

	 Texas Registered Engineering Firm F-9992 Texas Licensed Surveying Firm 10193863 5012 50th Ste. 204 P: 806-783-9944 Lubbock, TX 79414 F: 806-783-9966 www.R2Meng.com	COMPANY: VENABLE'S CONSTRUCTION
		PROJECT: IRP-4935
		TITLE: TOPOGRAPHIC MAP
		LOCATION: HOBBS, NM
		DATE: 4-2018



NAME	LATITUDE	LONGITUDE
SB-01	32.71466	-103.17957
SB-02	32.71479	-103.17933
SB-03	32.71484	-103.17941
SB-03-C	32.714979	-103.17921
SB-04	32.71511	-103.17899
SB-05	32.71496	-103.17924
SB-06	32.71494	-103.17942
SB-07	32.71491	-103.17943
SB-08	32.71469	-103.17962
SB-09	32.71485	-103.17963
SB-10	32.71494	-103.17952
SB-11	32.71507	-103.17937
SB-12	32.71503	-103.17924
SB-13	32.71523	-103.17928
SB-14	32.71502	-103.17964
SB-15	32.71456	-103.17941
SB-16	32.71469	-103.17928
SB-17	32.71458	-103.17973

○ SAMPLE LOCATION

SITE MAP

Texas Registered Engineering Firm F-9992
 Texas Licensed Surveying Firm 10193863
 5012 50th Ste. 204 P: 806-783-9944
 Lubbock, TX 79414 F: 806-783-9966
www.R2Meng.com

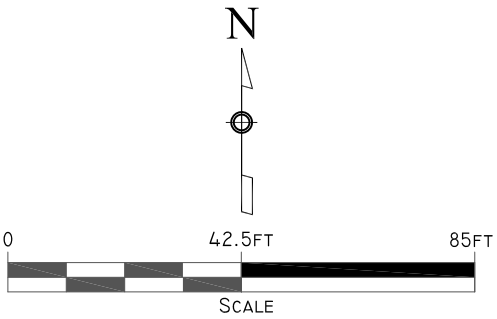
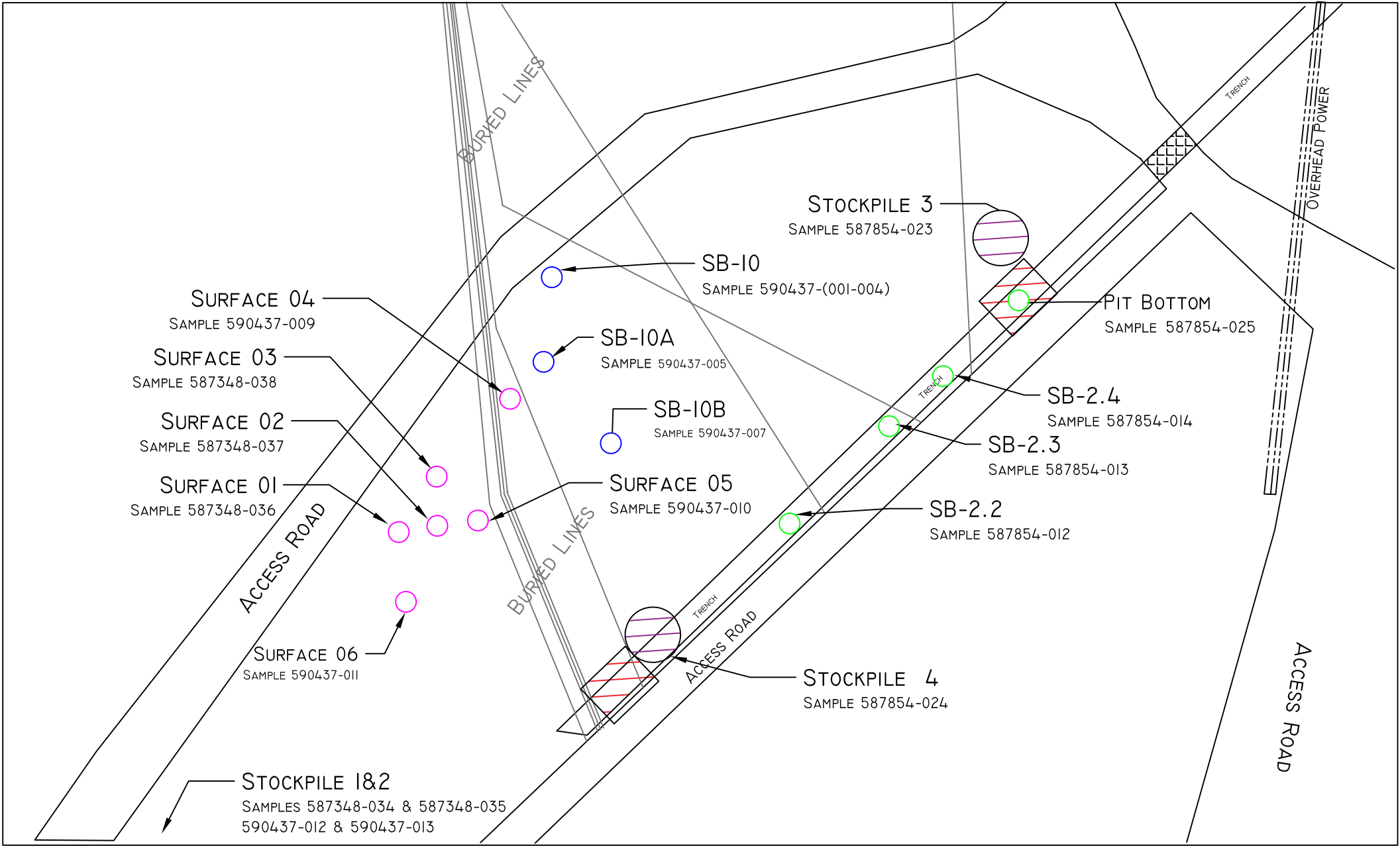
COMPANY: VENABLE'S CONSTRUCTION

PROJECT: IRP-4935

TITLE: SOIL BORING GPS

LOCATION: HOBBS, NM

DATE: 6-2018



- SAMPLE LOCATION OVER SPRAY AREA
- SAMPLE LOCATION INSIDE TRENCH
- SAMPLE LOCATION SB-10, SB-10A, SB-10B
- OPEN EXCAVATION
- STOCKPILE

SITE MAP

Texas Registered Engineering Firm F-9992
Texas Licensed Surveying Firm 10193863
5012 50th Ste. 204 P: 806-783-9944
Lubbock, TX 79414 F: 806-783-9966
www.R2Meng.com

COMPANY: VENABLE'S CONSTRUCTION
PROJECT: IRP-4935
TITLE: SAMPLE LOCATIONS
LOCATION: HOBBS, NM
DATE: 7-2018

Appendix C

Soil Test Data- Xenco Laboratory



Certificate of Analysis Summary 587348

R2M Engineering, Lubbock, TX

Project Name: Venables Construction

Project Id:

Contact: Mason Sanders

Project Location: Hobbs, NM

Date Received in Lab: Fri May-25-18 04:10 pm

Report Date: 11-JUN-18

Project Manager: Holly Taylor

Analysis Requested	Lab Id:	587348-001	587348-002	587348-005	587348-006	587348-009	587348-010
	Field Id:	SB-17(0"-6")	SB-17(6"-12")	SB-8(0"-6")	SB-8(6"-18")	SB-9(0-12)	SB-9(1-2)
	Depth:	0-6 In	6-12 In	0-6 In	6-12 In	0-1 ft	1-2 ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	May-25-18 11:25	May-25-18 11:25	May-25-18 11:25	May-25-18 11:25	May-25-18 11:25	May-25-18 11:25
BTEX by SW 8260B SUB: TX104704215-18-26	Extracted:	May-31-18 17:05	May-31-18 17:05	May-31-18 17:05	May-31-18 17:05	May-31-18 17:05	May-31-18 17:05
	Analyzed:	Jun-01-18 02:22	Jun-01-18 02:38	Jun-01-18 02:54	Jun-01-18 03:26	Jun-01-18 03:42	Jun-01-18 03:59
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.000502 0.00100	<0.000500 0.00100	<0.000499 0.000998	<0.000500 0.00100	<0.000500 0.00100	<0.000498 0.000996
Toluene		<0.000502 0.00100	<0.000500 0.00100	<0.000499 0.000998	<0.000500 0.00100	<0.000500 0.00100	<0.000498 0.000996
Ethylbenzene		<0.000502 0.00100	<0.000500 0.00100	<0.000499 0.000998	<0.000500 0.00100	<0.000500 0.00100	<0.000498 0.000996
m,p-Xylenes		<0.00100 0.00201	<0.00100 0.00200	<0.000998 0.00200	<0.00100 0.00200	<0.00100 0.00200	<0.000996 0.00199
o-Xylene		<0.000502 0.00100	<0.000500 0.00100	<0.000499 0.000998	<0.000500 0.00100	<0.000500 0.00100	<0.000498 0.000996
Total Xylenes		<0.000502 0.00100	<0.000500 0.00100	<0.000499 0.000998	<0.000500 0.00100	<0.000500 0.00100	<0.000498 0.000996
Total BTEX		<0.000502 0.00100	<0.000500 0.00100	<0.000499 0.000998	<0.000500 0.00100	<0.000500 0.00100	<0.000498 0.000996
Inorganic Anions by EPA 300/300.1 SUB: TX104704215-18-26	Extracted:	May-31-18 08:31	May-31-18 08:31	May-31-18 08:31	May-31-18 08:31	May-31-18 08:31	May-31-18 08:31
	Analyzed:	Jun-01-18 06:54	Jun-01-18 07:28	Jun-01-18 07:39	Jun-01-18 07:51	Jun-01-18 08:24	Jun-01-18 08:36
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		268 9.96	215 9.90	314 9.88	296 9.82	18.7 9.84	3.44 J 9.92
TPH by SW 8015B SUB: TX104704215-18-26	Extracted:	May-31-18 16:42	May-31-18 16:45	May-31-18 16:48	May-31-18 16:51	May-31-18 16:54	May-31-18 16:57
	Analyzed:	Jun-05-18 01:09	Jun-05-18 01:30	Jun-05-18 01:51	Jun-05-18 02:12	Jun-05-18 02:33	Jun-05-18 02:54
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
C6-C10 Gasoline Range Hydrocarbons		<9.81 14.9	<9.88 15.0	<9.87 15.0	<9.86 15.0	<9.87 15.0	<9.83 14.9
C10-C28 Diesel Range Organics		<9.81 14.9	<9.88 15.0	272 15.0	194 15.0	28.9 15.0	22.8 14.9
C28-C35 Oil Range Hydrocarbons		<9.81 14.9	<9.88 15.0	57.6 15.0	52.1 15.0	26.6 15.0	26.9 14.9
Total TPH		47.7 14.9	<9.88 15.0	330 15.0	246 15.0	55.5 15.0	49.7 14.9

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

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

Holly Taylor
Project Manager



Certificate of Analysis Summary 587348

R2M Engineering, Lubbock, TX

Project Name: Venables Construction

Project Id:

Contact: Mason Sanders

Project Location: Hobbs, NM

Date Received in Lab: Fri May-25-18 04:10 pm

Report Date: 11-JUN-18

Project Manager: Holly Taylor

Analysis Requested	Lab Id:	587348-011	587348-012	587348-014	587348-015	587348-017	587348-018
	Field Id:	SB-6(0-1)	SB-6(1-2)	SB-7(0-1)	SB-7(1-2)	SB-5(0-1)	SB-5(1-2)
	Depth:	0-1 ft	1-2 ft	0-1 ft	1-2 ft	0-1 ft	1-2 ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	May-25-18 12:30	May-25-18 12:30	May-25-18 12:45	May-25-18 12:45	May-25-18 13:11	May-25-18 13:11
BTEX by SW 8260B SUB: TX104704215-18-26	Extracted:	Jun-04-18 15:35	May-31-18 17:05	Jun-01-18 18:00	May-31-18 17:05	Jun-01-18 18:00	Jun-01-18 18:00
	Analyzed:	Jun-04-18 17:11	Jun-01-18 04:31	Jun-01-18 19:17	May-31-18 23:24	Jun-01-18 19:49	Jun-01-18 20:05
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.000495 0.000990	<0.000496 0.000992	<0.000499 0.000998	<0.000501 0.00100	<0.000499 0.000998	<0.000498 0.000996
Toluene		0.00313 0.000990	<0.000496 0.000992	<0.000499 0.000998	<0.000501 0.00100	<0.000499 0.000998	0.000717 J 0.000996
Ethylbenzene		<0.000495 0.000990	<0.000496 0.000992	<0.000499 0.000998	<0.000501 0.00100	<0.000499 0.000998	<0.000498 0.000996
m,p-Xylenes		0.00160 J 0.00198	<0.000992 0.00198	<0.000998 0.00200	<0.00100 0.00200	<0.000998 0.00200	<0.000996 0.00199
o-Xylene		<0.000495 0.000990	<0.000496 0.000992	<0.000499 0.000998	<0.000501 0.00100	<0.000499 0.000998	<0.000498 0.000996
Total Xylenes		0.00160 0.000990	<0.000496 0.000992	<0.000499 0.000998	<0.000501 0.00100	<0.000499 0.000998	<0.000498 0.000996
Total BTEX		0.00473 0.000990	<0.000496 0.000992	<0.000499 0.000998	<0.000501 0.00100	<0.000499 0.000998	0.000717 J 0.000996
Inorganic Anions by EPA 300/300.1 SUB: TX104704215-18-26	Extracted:	May-31-18 08:31	May-31-18 08:31	May-31-18 08:31	May-31-18 08:31	May-31-18 08:31	May-31-18 08:31
	Analyzed:	Jun-01-18 08:47	Jun-01-18 08:58	Jun-01-18 09:10	Jun-01-18 18:00	Jun-01-18 18:12	Jun-01-18 19:08
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		244 9.96	235 9.98	124 9.92	34.0 9.80	172 9.92	334 9.86
TPH by SW 8015B SUB: TX104704215-18-26	Extracted:	May-31-18 17:00	May-31-18 17:03	May-31-18 17:06	May-31-18 17:09	May-31-18 17:12	May-31-18 17:15
	Analyzed:	Jun-05-18 03:57	Jun-05-18 00:06	Jun-05-18 03:15	Jun-05-18 03:35	Jun-05-18 04:17	Jun-05-18 05:20
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
C6-C10 Gasoline Range Hydrocarbons		28.5 14.9	28.4 15.0	<9.86 15.0	<9.78 14.9	<9.78 14.9	<9.80 14.9
C10-C28 Diesel Range Organics		176 14.9	237 15.0	89.4 15.0	50.3 14.9	330 14.9	814 14.9
C28-C35 Oil Range Hydrocarbons		48.3 14.9	71.3 15.0	26.9 15.0	23.5 14.9	67.1 14.9	161 14.9
Total TPH		253 14.9	337 15.0	116 15.0	73.8 14.9	397 14.9	975 14.9

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

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

Holly Taylor
Project Manager



Certificate of Analysis Summary 587348

R2M Engineering, Lubbock, TX

Project Name: Venables Construction

Project Id:

Contact: Mason Sanders

Project Location: Hobbs, NM

Date Received in Lab: Fri May-25-18 04:10 pm

Report Date: 11-JUN-18

Project Manager: Holly Taylor

Analysis Requested	Lab Id:	587348-020	587348-021	587348-022	587348-023	587348-024	587348-025
	Field Id:	SB-10(0-1)	SB-10(1-2)	SB-11(0-1)	SB-11(1-2)	SB-12(0-1)	SB-12(1-2)
	Depth:	0-1 ft	1-2 ft	0-1 ft	1-2 ft	0-1 ft	1-2 In
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	May-25-18 13:31	May-25-18 13:31	May-25-18 13:55	May-25-18 13:55	May-25-18 14:30	May-25-18 14:30
BTEX by SW 8260B SUB: TX104704215-18-26	Extracted:	Jun-01-18 18:00	Jun-01-18 18:00	Jun-01-18 18:00	Jun-01-18 18:00	Jun-01-18 18:00	Jun-01-18 18:00
	Analyzed:	Jun-01-18 20:21	Jun-01-18 20:37	Jun-02-18 01:44	Jun-02-18 02:00	Jun-02-18 02:16	Jun-02-18 02:33
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.000498 0.000996	<0.000498 0.000996	<0.000500 0.00100	<0.000496 0.000992	<0.000498 0.000996	<0.000501 0.00100
Toluene		<0.000498 0.000996	<0.000498 0.000996	<0.000500 0.00100	<0.000496 0.000992	<0.000498 0.000996	<0.000501 0.00100
Ethylbenzene		<0.000498 0.000996	<0.000498 0.000996	<0.000500 0.00100	<0.000496 0.000992	<0.000498 0.000996	<0.000501 0.00100
m,p-Xylenes		<0.000996 0.00199	<0.000996 0.00199	<0.00100 0.00200	<0.000992 0.00198	<0.000996 0.00199	<0.00100 0.00200
o-Xylene		<0.000498 0.000996	<0.000498 0.000996	<0.000500 0.00100	<0.000496 0.000992	<0.000498 0.000996	<0.000501 0.00100
Total Xylenes		<0.000498 0.000996	<0.000498 0.000996	<0.000500 0.00100	<0.000496 0.000992	<0.000498 0.000996	<0.000501 0.00100
Total BTEX		<0.000498 0.000996	<0.000498 0.000996	<0.000500 0.00100	<0.000496 0.000992	<0.000498 0.000996	<0.000501 0.00100
Inorganic Anions by EPA 300/300.1 SUB: TX104704215-18-26	Extracted:	May-31-18 08:31	May-31-18 08:31	May-31-18 08:31	May-31-18 08:31	May-31-18 08:31	May-31-18 08:31
	Analyzed:	Jun-01-18 19:19	Jun-01-18 19:31	Jun-01-18 19:42	Jun-01-18 19:53	Jun-01-18 20:05	Jun-01-18 20:16
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		223 9.84	15.2 9.88	17.2 9.94	9.40 J 9.82	4.44 J 9.92	2.55 J 9.90
TPH by SW 8015B SUB: TX104704215-18-26	Extracted:	Jun-01-18 12:33	Jun-01-18 12:42	Jun-01-18 12:45	Jun-01-18 12:48	Jun-01-18 12:51	Jun-01-18 12:54
	Analyzed:	Jun-09-18 14:38	Jun-09-18 15:41	Jun-09-18 16:02	Jun-09-18 16:23	Jun-09-18 16:44	Jun-09-18 17:05
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
C6-C10 Gasoline Range Hydrocarbons		27.9 15.0	<9.82 14.9	<9.87 15.0	<9.83 14.9	<9.81 14.9	<9.78 14.9
C10-C28 Diesel Range Organics		914 15.0	43.0 14.9	30.3 15.0	27.8 14.9	18.8 14.9	<9.78 14.9
C28-C35 Oil Range Hydrocarbons		152 15.0	51.0 14.9	20.7 15.0	22.6 14.9	18.8 14.9	<9.78 14.9
Total TPH		1090 15.0	94.0 14.9	51.0 15.0	50.4 14.9	37.6 14.9	<9.78 14.9

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

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

Holly Taylor
Project Manager



Certificate of Analysis Summary 587348

R2M Engineering, Lubbock, TX

Project Name: Venables Construction

Project Id:

Contact: Mason Sanders

Project Location: Hobbs, NM

Date Received in Lab: Fri May-25-18 04:10 pm

Report Date: 11-JUN-18

Project Manager: Holly Taylor

Analysis Requested	Lab Id:	587348-026	587348-027	587348-028	587348-029	587348-030	587348-031
	Field Id:	SB-1(0-1)	SB-1(1-2)	SB-2(0-1)	SB-2(1-2)	SB-3(0-1)	SB-3(1-2)
	Depth:	0-1 ft	1-2 ft	0-1 ft	1-2 ft	0-1 ft	1-2 ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	May-25-18 15:10	May-25-18 15:10	May-25-18 15:00	May-25-18 15:00	May-25-18 14:50	May-25-18 14:50
BTEX by SW 8260B SUB: TX104704215-18-26	Extracted:	Jun-01-18 18:00	Jun-01-18 18:00	Jun-01-18 18:00	Jun-01-18 18:00	Jun-01-18 18:00	Jun-01-18 18:00
	Analyzed:	Jun-02-18 02:49	Jun-02-18 03:05	Jun-02-18 03:21	Jun-02-18 03:37	Jun-02-18 03:53	Jun-02-18 04:09
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
		<0.000497 0.000994	<0.000502 0.00100	<0.000499 0.000998	<0.000501 0.00100	<0.000502 0.00100	<0.000498 0.000996
Benzene		<0.000497 0.000994	<0.000502 0.00100	<0.000499 0.000998	<0.000501 0.00100	<0.000502 0.00100	<0.000498 0.000996
Toluene		<0.000497 0.000994	<0.000502 0.00100	<0.000499 0.000998	<0.000501 0.00100	<0.000502 0.00100	<0.000498 0.000996
Ethylbenzene		<0.000497 0.000994	<0.000502 0.00100	<0.000499 0.000998	<0.000501 0.00100	<0.000502 0.00100	<0.000498 0.000996
m,p-Xylenes		<0.000994 0.00199	<0.00100 0.00201	<0.000998 0.00200	<0.00100 0.00200	<0.00100 0.00201	<0.000996 0.00199
o-Xylene		<0.000497 0.000994	<0.000502 0.00100	<0.000499 0.000998	<0.000501 0.00100	<0.000502 0.00100	<0.000498 0.000996
Total Xylenes		<0.000497 0.000994	<0.000502 0.00100	<0.000499 0.000998	<0.000501 0.00100	<0.000502 0.00100	<0.000498 0.000996
Total BTEX		<0.000497 0.000994	<0.000502 0.00100	<0.000499 0.000998	<0.000501 0.00100	<0.000502 0.00100	<0.000498 0.000996
Inorganic Anions by EPA 300/300.1 SUB: TX104704215-18-26	Extracted:	May-31-18 08:31	May-31-18 09:12	May-31-18 09:12	May-31-18 09:12	May-31-18 09:12	May-31-18 09:12
	Analyzed:	Jun-01-18 20:27	Jun-01-18 23:17	Jun-01-18 21:35	Jun-01-18 22:09	Jun-01-18 22:20	Jun-01-18 22:32
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
		168 9.94	473 9.86	495 9.90	728 9.82	225 9.78	93.6 9.75
Chloride		168 9.94	473 9.86	495 9.90	728 9.82	225 9.78	93.6 9.75
TPH by SW 8015B SUB: TX104704215-18-26	Extracted:	Jun-01-18 12:57	Jun-01-18 13:00	Jun-01-18 13:03	Jun-01-18 13:06	Jun-01-18 13:09	Jun-01-18 13:12
	Analyzed:	Jun-09-18 17:26	Jun-09-18 17:47	Jun-09-18 18:08	Jun-09-18 18:50	Jun-09-18 19:11	Jun-09-18 19:32
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
		26.3 15.0	28.7 14.9	27.6 15.0	27.5 14.9	<9.78 14.9	28.8 14.9
C6-C10 Gasoline Range Hydrocarbons		26.3 15.0	28.7 14.9	27.6 15.0	27.5 14.9	<9.78 14.9	28.8 14.9
C10-C28 Diesel Range Organics		22.9 15.0	44.2 14.9	90.7 15.0	50.9 14.9	14.8 J 14.9	148 14.9
C28-C35 Oil Range Hydrocarbons		13.7 J 15.0	21.0 14.9	29.0 15.0	22.0 14.9	11.9 J 14.9	78.0 14.9
Total TPH		62.9 15.0	93.9 14.9	147 15.0	100 14.9	26.7 14.9	255 14.9

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

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

Holly Taylor
Project Manager



Certificate of Analysis Summary 587348

R2M Engineering, Lubbock, TX

Project Name: Venables Construction

Project Id:

Contact: Mason Sanders

Project Location: Hobbs, NM

Date Received in Lab: Fri May-25-18 04:10 pm

Report Date: 11-JUN-18

Project Manager: Holly Taylor

Analysis Requested	Lab Id:	587348-032	587348-033	587348-034	587348-035	587348-036	587348-037
	Field Id:	SB-4(0-1)	SB-4(1-2)	Overspray Stockpile 1	Overspray Stockpile 2	1(0-6)	2(0-6)
	Depth:	0-1 ft	1-2 ft			0-6 In	0-6 In
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	May-25-18 14:40	May-25-18 14:40	May-25-18 00:00	May-25-18 00:00	May-25-18 00:00	May-25-18 00:00
BTX by SW 8260B SUB: TX104704215-18-26	Extracted:	Jun-01-18 18:00	Jun-01-18 18:00	Jun-01-18 18:00	Jun-01-18 18:00	Jun-01-18 18:00	Jun-01-18 18:00
	Analyzed:	Jun-02-18 04:25	Jun-02-18 04:41	Jun-02-18 04:57	Jun-02-18 05:13	Jun-02-18 05:30	Jun-02-18 05:46
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.000497 0.000994	<0.000498 0.000996	<0.000499 0.000998	<0.000502 0.00100	<0.000500 0.00100	<0.000498 0.000996
Toluene		<0.000497 0.000994	<0.000498 0.000996	<0.000499 0.000998	<0.000502 0.00100	0.000980 J 0.00100	0.000896 J 0.000996
Ethylbenzene		<0.000497 0.000994	<0.000498 0.000996	<0.000499 0.000998	<0.000502 0.00100	<0.000500 0.00100	<0.000498 0.000996
m,p-Xylenes		<0.000994 0.00199	<0.000996 0.00199	<0.000998 0.00200	<0.00100 0.00201	0.00136 J 0.00200	<0.000996 0.00199
o-Xylene		<0.000497 0.000994	<0.000498 0.000996	<0.000499 0.000998	<0.000502 0.00100	<0.000500 0.00100	<0.000498 0.000996
Total Xylenes		<0.000497 0.000994	<0.000498 0.000996	<0.000499 0.000998	<0.000502 0.00100	0.00136 0.00100	<0.000498 0.000996
Total BTX		<0.000497 0.000994	<0.000498 0.000996	<0.000499 0.000998	<0.000502 0.00100	0.00234 0.00100	0.000896 J 0.000996
Inorganic Anions by EPA 300/300.1 SUB: TX104704215-18-26	Extracted:	May-31-18 09:12	May-31-18 09:12	May-31-18 09:12	May-31-18 09:12	May-31-18 09:12	May-31-18 09:12
	Analyzed:	Jun-01-18 22:43	Jun-01-18 23:28	Jun-01-18 23:39	Jun-01-18 23:51	Jun-02-18 00:02	Jun-02-18 00:13
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		1.86 J 9.92	30.1 9.96	578 9.98	206 9.82	574 9.88	676 9.92
TPH by SW 8015B SUB: TX104704215-18-26	Extracted:	Jun-01-18 13:15	Jun-01-18 13:18	Jun-01-18 13:21	Jun-01-18 13:24	Jun-01-18 13:27	Jun-01-18 13:30
	Analyzed:	Jun-09-18 19:53	Jun-09-18 20:14	Jun-09-18 20:36	Jun-09-18 20:56	Jun-09-18 21:17	Jun-09-18 21:38
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
C6-C10 Gasoline Range Hydrocarbons		<9.82 14.9	26.9 14.9	30.2 15.0	29.2 14.9	<9.78 14.9	28.8 15.0
C10-C28 Diesel Range Organics		18.5 14.9	14.2 J 14.9	1640 15.0	1140 14.9	155 14.9	363 15.0
C28-C35 Oil Range Hydrocarbons		12.4 J 14.9	11.1 J 14.9	240 15.0	216 14.9	65.9 14.9	65.5 15.0
Total TPH		30.9 14.9	52.2 14.9	1910 15.0	1390 14.9	221 14.9	457 15.0

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

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

Holly Taylor
Project Manager



Certificate of Analysis Summary 587348

R2M Engineering, Lubbock, TX

Project Name: Venables Construction

Project Id:

Contact: Mason Sanders

Project Location: Hobbs, NM

Date Received in Lab: Fri May-25-18 04:10 pm

Report Date: 11-JUN-18

Project Manager: Holly Taylor

Analysis Requested	Lab Id:	587348-038					
	Field Id:	3 (0-6)					
	Depth:	0-6 In					
	Matrix:	SOIL					
	Sampled:	May-25-18 00:00					
BTEX by SW 8260B SUB: TX104704215-18-26	Extracted:	Jun-01-18 06:02					
	Analyzed:	Jun-02-18 06:02					
	Units/RL:	mg/kg RL					
	Benzene	<0.000500 0.00100					
	Toluene	0.00179 0.00100					
	Ethylbenzene	<0.000500 0.00100					
	m,p-Xylenes	0.00154 J 0.00200					
	o-Xylene	<0.000500 0.00100					
	Total Xylenes	0.00154 0.00100					
	Total BTEX	0.00333 0.00100					
Inorganic Anions by EPA 300/300.1 SUB: TX104704215-18-26	Extracted:	May-31-18 09:12					
	Analyzed:	Jun-02-18 00:25					
	Units/RL:	mg/kg RL					
	Chloride	1110 X 9.94					
TPH by SW 8015B SUB: TX104704215-18-26	Extracted:	Jun-01-18 13:33					
	Analyzed:	Jun-09-18 21:59					
	Units/RL:	mg/kg RL					
	C6-C10 Gasoline Range Hydrocarbons	32.2 14.9					
	C10-C28 Diesel Range Organics	444 14.9					
	C28-C35 Oil Range Hydrocarbons	90.0 14.9					
	Total TPH	566 14.9					

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

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

Holly Taylor
Project Manager

Analytical Report 587348

for R2M Engineering

Project Manager: Mason Sanders

Venables Construction

11-JUN-18

Collected By: Client



6701 Aberdeen, Suite 9 Lubbock, TX 79424

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-18-26), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (T104704295-17-16), 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 (T104704400-18-14)

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)

Xenco-Atlanta (LELAP Lab ID #04176)

Xenco-Tampa: Florida (E87429)

Xenco-Lakeland: Florida (E84098)



11-JUN-18

Project Manager: **Mason Sanders**
R2M Engineering
5012 50th
Suite 204
Lubbock, TX 79414

Reference: XENCO Report No(s): **587348**
Venables Construction
Project Address: Hobbs, NM

Mason Sanders:

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) 587348. 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. 587348 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

A handwritten signature in black ink that reads 'Holly Taylor'. The signature is written in a cursive, flowing style.

Holly Taylor
Project Manager

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

Certified and approved by numerous States and Agencies.

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

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



Sample Cross Reference 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SB-17(0"-6")	S	05-25-18 11:25	0 - 6 In	587348-001
SB-17(6"-12")	S	05-25-18 11:25	6 - 12 In	587348-002
SB-8(0"-6")	S	05-25-18 11:25	0 - 6 In	587348-005
SB-8(6"-18")	S	05-25-18 11:25	6 - 12 In	587348-006
SB-9(0-12)	S	05-25-18 11:25	0 - 1 ft	587348-009
SB-9(1-2)	S	05-25-18 11:25	1 - 2 ft	587348-010
SB-6(0-1)	S	05-25-18 12:30	0 - 1 ft	587348-011
SB-6(1-2)	S	05-25-18 12:30	1 - 2 ft	587348-012
SB-7(0-1)	S	05-25-18 12:45	0 - 1 ft	587348-014
SB-7(1-2)	S	05-25-18 12:45	1 - 2 ft	587348-015
SB-5(0-1)	S	05-25-18 13:11	0 - 1 ft	587348-017
SB-5(1-2)	S	05-25-18 13:11	1 - 2 ft	587348-018
SB-10(0-1)	S	05-25-18 13:31	0 - 1 ft	587348-020
SB-10(1-2)	S	05-25-18 13:31	1 - 2 ft	587348-021
SB-11(0-1)	S	05-25-18 13:55	0 - 1 ft	587348-022
SB-11(1-2)	S	05-25-18 13:55	1 - 2 ft	587348-023
SB-12(0-1)	S	05-25-18 14:30	0 - 1 ft	587348-024
SB-12(1-2)	S	05-25-18 14:30	1 - 2 In	587348-025
SB-1(0-1)	S	05-25-18 15:10	0 - 1 ft	587348-026
SB-1(1-2)	S	05-25-18 15:10	1 - 2 ft	587348-027
SB-2(0-1)	S	05-25-18 15:00	0 - 1 ft	587348-028
SB-2(1-2)	S	05-25-18 15:00	1 - 2 ft	587348-029
SB-3(0-1)	S	05-25-18 14:50	0 - 1 ft	587348-030
SB-3(1-2)	S	05-25-18 14:50	1 - 2 ft	587348-031
SB-4(0-1)	S	05-25-18 14:40	0 - 1 ft	587348-032
SB-4(1-2)	S	05-25-18 14:40	1 - 2 ft	587348-033
Overspray Stockpile 1	S	05-25-18 00:00	In	587348-034
Overspray Stockpile 2	S	05-25-18 00:00	In	587348-035
1(0-6)	S	05-25-18 00:00	0 - 6 In	587348-036
2(0-6)	S	05-25-18 00:00	0 - 6 In	587348-037
3 (0-6)	S	05-25-18 00:00	0 - 6 In	587348-038
SB-17(12"-18")	S	05-25-18 11:25	12 - 18 In	Not Analyzed
SB-17(18"-24")	S	05-25-18 11:25	18 - 24 In	Not Analyzed
SB-8(12"-18")	S	05-25-18 11:25	12 - 18 In	Not Analyzed
SB-8(18"-24")	S	05-25-18 11:25	18 - 24 In	Not Analyzed
SB-6(2-3)	S	05-25-18 12:30	2 - 3 ft	Not Analyzed
SB-7(2-3)	S	05-25-18 12:45	2 - 3 ft	Not Analyzed
SB-5(2-3)	S	05-25-18 13:11	2 - 3 ft	Not Analyzed



CASE NARRATIVE

Client Name: R2M Engineering

Project Name: Venables Construction

Project ID:

Work Order Number(s): 587348

Report Date: 11-JUN-18

Date Received: 05/25/2018

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:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3052061 BTEX by SW 8260B

Lab Sample ID 587348-015 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Ethylbenzene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 587348-001, -002, -005, -006, -009, -010, -012, -015.

The Laboratory Control Sample for m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3052114 Inorganic Anions by SW 9056

Lab Sample ID 587348-038 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 587348-027, -028, -029, -030, -031, -032, -033, -034, -035, -036, -037, -038.

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

Batch: LBA-3052225 BTEX by SW 8260B

Surrogate 1,2-Dichloroethane-D4 recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 587348-037, 587348-026.

Lab Sample ID 587348-022 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene recovered below QC limits in the Matrix Spike. Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 587348-022, -023, -024, -025, -026, -027, -028, -029, -030, -031, -032, -033, -034, -035, -036, -037, -038.

The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.



CASE NARRATIVE

Client Name: R2M Engineering

Project Name: Venables Construction

Project ID:

Work Order Number(s): 587348

Report Date: 11-JUN-18

Date Received: 05/25/2018

Batch: LBA-3052372 BTEX by SW 8260B

Surrogate 1,2-Dichloroethane-D4 recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 587559-001 S.



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-17(0''-6'')**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-001

Date Collected: 05.25.18 11.25

Sample Depth: 0 - 6 In

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.31.18 08.31

Basis: Wet Weight

Seq Number: 3052112

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	268	9.96	0.353	mg/kg	06.01.18 06.54		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 05.31.18 16.42

Basis: Wet Weight

Seq Number: 3052304

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.81	14.9	9.81	mg/kg	06.05.18 01.09	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.81	14.9	9.81	mg/kg	06.05.18 01.09	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.81	14.9	9.81	mg/kg	06.05.18 01.09	U	1
Total TPH	PHC635	47.7	14.9	9.81	mg/kg	06.05.18 01.09		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	06.05.18 01.09	
o-Terphenyl	84-15-1	111	%	70-135	06.05.18 01.09	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-17(0''-6'')**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-001

Date Collected: 05.25.18 11.25

Sample Depth: 0 - 6 In

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 05.31.18 17.05

Basis: Wet Weight

Seq Number: 3052061

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000502	0.00100	0.000502	mg/kg	06.01.18 02.22	U	1
Toluene	108-88-3	<0.000502	0.00100	0.000502	mg/kg	06.01.18 02.22	U	1
Ethylbenzene	100-41-4	<0.000502	0.00100	0.000502	mg/kg	06.01.18 02.22	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00201	0.00100	mg/kg	06.01.18 02.22	U	1
o-Xylene	95-47-6	<0.000502	0.00100	0.000502	mg/kg	06.01.18 02.22	U	1
Total Xylenes	1330-20-7	<0.000502	0.00100	0.000502	mg/kg	06.01.18 02.22	U	1
Total BTEX		<0.000502	0.00100	0.000502	mg/kg	06.01.18 02.22	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	119	%	74-126	06.01.18 02.22			
1,2-Dichloroethane-D4	17060-07-0	108	%	80-120	06.01.18 02.22			
Toluene-D8	2037-26-5	95	%	73-132	06.01.18 02.22			



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-17(6''-12'')**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-002

Date Collected: 05.25.18 11.25

Sample Depth: 6 - 12 In

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.31.18 08.31

Basis: Wet Weight

Seq Number: 3052112

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	215	9.90	0.350	mg/kg	06.01.18 07.28		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 05.31.18 16.45

Basis: Wet Weight

Seq Number: 3052304

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.88	15.0	9.88	mg/kg	06.05.18 01.30	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.88	15.0	9.88	mg/kg	06.05.18 01.30	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.88	15.0	9.88	mg/kg	06.05.18 01.30	U	1
Total TPH	PHC635	<9.88	15.0	9.88	mg/kg	06.05.18 01.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	06.05.18 01.30	
o-Terphenyl	84-15-1	115	%	70-135	06.05.18 01.30	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-17(6''-12'')**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-002

Date Collected: 05.25.18 11.25

Sample Depth: 6 - 12 In

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 05.31.18 17.05

Basis: Wet Weight

Seq Number: 3052061

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/kg	06.01.18 02.38	U	1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/kg	06.01.18 02.38	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/kg	06.01.18 02.38	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/kg	06.01.18 02.38	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/kg	06.01.18 02.38	U	1
Total Xylenes	1330-20-7	<0.000500	0.00100	0.000500	mg/kg	06.01.18 02.38	U	1
Total BTEX		<0.000500	0.00100	0.000500	mg/kg	06.01.18 02.38	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	113	%	74-126	06.01.18 02.38			
1,2-Dichloroethane-D4	17060-07-0	111	%	80-120	06.01.18 02.38			
Toluene-D8	2037-26-5	92	%	73-132	06.01.18 02.38			



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-8(0''-6'')**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-005

Date Collected: 05.25.18 11.25

Sample Depth: 0 - 6 In

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.31.18 08.31

Basis: Wet Weight

Seq Number: 3052112

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	314	9.88	0.350	mg/kg	06.01.18 07.39		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 05.31.18 16.48

Basis: Wet Weight

Seq Number: 3052304

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.87	15.0	9.87	mg/kg	06.05.18 01.51	U	1
C10-C28 Diesel Range Organics	C10C28DRO	272	15.0	9.87	mg/kg	06.05.18 01.51		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	57.6	15.0	9.87	mg/kg	06.05.18 01.51		1
Total TPH	PHC635	330	15.0	9.87	mg/kg	06.05.18 01.51		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	06.05.18 01.51	
o-Terphenyl	84-15-1	100	%	70-135	06.05.18 01.51	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-8(0''-6'')**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-005

Date Collected: 05.25.18 11.25

Sample Depth: 0 - 6 In

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 05.31.18 17.05

Basis: Wet Weight

Seq Number: 3052061

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000499	0.000998	0.000499	mg/kg	06.01.18 02.54	U	1
Toluene	108-88-3	<0.000499	0.000998	0.000499	mg/kg	06.01.18 02.54	U	1
Ethylbenzene	100-41-4	<0.000499	0.000998	0.000499	mg/kg	06.01.18 02.54	U	1
m,p-Xylenes	179601-23-1	<0.000998	0.00200	0.000998	mg/kg	06.01.18 02.54	U	1
o-Xylene	95-47-6	<0.000499	0.000998	0.000499	mg/kg	06.01.18 02.54	U	1
Total Xylenes	1330-20-7	<0.000499	0.000998	0.000499	mg/kg	06.01.18 02.54	U	1
Total BTEX		<0.000499	0.000998	0.000499	mg/kg	06.01.18 02.54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	117	%	74-126	06.01.18 02.54			
1,2-Dichloroethane-D4	17060-07-0	112	%	80-120	06.01.18 02.54			
Toluene-D8	2037-26-5	91	%	73-132	06.01.18 02.54			



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-8(6''-18'')**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-006

Date Collected: 05.25.18 11.25

Sample Depth: 6 - 12 In

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.31.18 08.31

Basis: Wet Weight

Seq Number: 3052112

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	296	9.82	0.348	mg/kg	06.01.18 07.51		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 05.31.18 16.51

Basis: Wet Weight

Seq Number: 3052304

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.86	15.0	9.86	mg/kg	06.05.18 02.12	U	1
C10-C28 Diesel Range Organics	C10C28DRO	194	15.0	9.86	mg/kg	06.05.18 02.12		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	52.1	15.0	9.86	mg/kg	06.05.18 02.12		1
Total TPH	PHC635	246	15.0	9.86	mg/kg	06.05.18 02.12		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	06.05.18 02.12	
o-Terphenyl	84-15-1	121	%	70-135	06.05.18 02.12	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-8(6''-18'')**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-006

Date Collected: 05.25.18 11.25

Sample Depth: 6 - 12 In

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 05.31.18 17.05

Basis: Wet Weight

Seq Number: 3052061

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/kg	06.01.18 03.26	U	1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/kg	06.01.18 03.26	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/kg	06.01.18 03.26	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/kg	06.01.18 03.26	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/kg	06.01.18 03.26	U	1
Total Xylenes	1330-20-7	<0.000500	0.00100	0.000500	mg/kg	06.01.18 03.26	U	1
Total BTEX		<0.000500	0.00100	0.000500	mg/kg	06.01.18 03.26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	116	%	74-126	06.01.18 03.26			
1,2-Dichloroethane-D4	17060-07-0	113	%	80-120	06.01.18 03.26			
Toluene-D8	2037-26-5	87	%	73-132	06.01.18 03.26			



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-9(0-12)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-009

Date Collected: 05.25.18 11.25

Sample Depth: 0 - 1 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.31.18 08.31

Basis: Wet Weight

Seq Number: 3052112

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	18.7	9.84	0.348	mg/kg	06.01.18 08.24		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 05.31.18 16.54

Basis: Wet Weight

Seq Number: 3052304

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.87	15.0	9.87	mg/kg	06.05.18 02.33	U	1
C10-C28 Diesel Range Organics	C10C28DRO	28.9	15.0	9.87	mg/kg	06.05.18 02.33		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	26.6	15.0	9.87	mg/kg	06.05.18 02.33		1
Total TPH	PHC635	55.5	15.0	9.87	mg/kg	06.05.18 02.33		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	06.05.18 02.33	
o-Terphenyl	84-15-1	96	%	70-135	06.05.18 02.33	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-9(0-12)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-009

Date Collected: 05.25.18 11.25

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 05.31.18 17.05

Basis: Wet Weight

Seq Number: 3052061

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/kg	06.01.18 03.42	U	1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/kg	06.01.18 03.42	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/kg	06.01.18 03.42	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/kg	06.01.18 03.42	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/kg	06.01.18 03.42	U	1
Total Xylenes	1330-20-7	<0.000500	0.00100	0.000500	mg/kg	06.01.18 03.42	U	1
Total BTEX		<0.000500	0.00100	0.000500	mg/kg	06.01.18 03.42	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	117	%	74-126	06.01.18 03.42			
1,2-Dichloroethane-D4	17060-07-0	105	%	80-120	06.01.18 03.42			
Toluene-D8	2037-26-5	90	%	73-132	06.01.18 03.42			



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-9(1-2)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-010

Date Collected: 05.25.18 11.25

Sample Depth: 1 - 2 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.31.18 08.31

Basis: Wet Weight

Seq Number: 3052112

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3.44	9.92	0.351	mg/kg	06.01.18 08.36	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 05.31.18 16.57

Basis: Wet Weight

Seq Number: 3052304

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.83	14.9	9.83	mg/kg	06.05.18 02.54	U	1
C10-C28 Diesel Range Organics	C10C28DRO	22.8	14.9	9.83	mg/kg	06.05.18 02.54		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	26.9	14.9	9.83	mg/kg	06.05.18 02.54		1
Total TPH	PHC635	49.7	14.9	9.83	mg/kg	06.05.18 02.54		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	06.05.18 02.54	
o-Terphenyl	84-15-1	112	%	70-135	06.05.18 02.54	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-9(1-2)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-010

Date Collected: 05.25.18 11.25

Sample Depth: 1 - 2 ft

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 05.31.18 17.05

Basis: Wet Weight

Seq Number: 3052061

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000498	0.000996	0.000498	mg/kg	06.01.18 03.59	U	1
Toluene	108-88-3	<0.000498	0.000996	0.000498	mg/kg	06.01.18 03.59	U	1
Ethylbenzene	100-41-4	<0.000498	0.000996	0.000498	mg/kg	06.01.18 03.59	U	1
m,p-Xylenes	179601-23-1	<0.000996	0.00199	0.000996	mg/kg	06.01.18 03.59	U	1
o-Xylene	95-47-6	<0.000498	0.000996	0.000498	mg/kg	06.01.18 03.59	U	1
Total Xylenes	1330-20-7	<0.000498	0.000996	0.000498	mg/kg	06.01.18 03.59	U	1
Total BTEX		<0.000498	0.000996	0.000498	mg/kg	06.01.18 03.59	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	121	%	74-126	06.01.18 03.59			
1,2-Dichloroethane-D4	17060-07-0	106	%	80-120	06.01.18 03.59			
Toluene-D8	2037-26-5	94	%	73-132	06.01.18 03.59			



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-6(0-1)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-011

Date Collected: 05.25.18 12.30

Sample Depth: 0 - 1 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.31.18 08.31

Basis: Wet Weight

Seq Number: 3052112

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	244	9.96	0.353	mg/kg	06.01.18 08.47		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 05.31.18 17.00

Basis: Wet Weight

Seq Number: 3052304

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	28.5	14.9	9.80	mg/kg	06.05.18 03.57		1
C10-C28 Diesel Range Organics	C10C28DRO	176	14.9	9.80	mg/kg	06.05.18 03.57		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	48.3	14.9	9.80	mg/kg	06.05.18 03.57		1
Total TPH	PHC635	253	14.9	9.80	mg/kg	06.05.18 03.57		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	06.05.18 03.57	
o-Terphenyl	84-15-1	94	%	70-135	06.05.18 03.57	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-6(0-1)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-011

Date Collected: 05.25.18 12.30

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.04.18 15.35

Basis: Wet Weight

Seq Number: 3052372

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000495	0.000990	0.000495	mg/kg	06.04.18 17.11	U	1
Toluene	108-88-3	0.00313	0.000990	0.000495	mg/kg	06.04.18 17.11		1
Ethylbenzene	100-41-4	<0.000495	0.000990	0.000495	mg/kg	06.04.18 17.11	U	1
m,p-Xylenes	179601-23-1	0.00160	0.00198	0.000990	mg/kg	06.04.18 17.11	J	1
o-Xylene	95-47-6	<0.000495	0.000990	0.000495	mg/kg	06.04.18 17.11	U	1
Total Xylenes	1330-20-7	0.00160	0.000990	0.000495	mg/kg	06.04.18 17.11		1
Total BTEX		0.00473	0.000990	0.000495	mg/kg	06.04.18 17.11		1
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag	
Dibromofluoromethane	1868-53-7	112		%	74-126	06.04.18 17.11		
1,2-Dichloroethane-D4	17060-07-0	113		%	80-120	06.04.18 17.11		
Toluene-D8	2037-26-5	94		%	73-132	06.04.18 17.11		



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-6(1-2)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-012

Date Collected: 05.25.18 12.30

Sample Depth: 1 - 2 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.31.18 08.31

Basis: Wet Weight

Seq Number: 3052112

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	235	9.98	0.353	mg/kg	06.01.18 08.58		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 05.31.18 17.03

Basis: Wet Weight

Seq Number: 3052304

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	28.4	15.0	9.85	mg/kg	06.05.18 00.06		1
C10-C28 Diesel Range Organics	C10C28DRO	237	15.0	9.85	mg/kg	06.05.18 00.06		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	71.3	15.0	9.85	mg/kg	06.05.18 00.06		1
Total TPH	PHC635	337	15.0	9.85	mg/kg	06.05.18 00.06		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	06.05.18 00.06	
o-Terphenyl	84-15-1	96	%	70-135	06.05.18 00.06	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-6(1-2)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-012

Date Collected: 05.25.18 12.30

Sample Depth: 1 - 2 ft

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 05.31.18 17.05

Basis: Wet Weight

Seq Number: 3052061

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000496	0.000992	0.000496	mg/kg	06.01.18 04.31	U	1
Toluene	108-88-3	<0.000496	0.000992	0.000496	mg/kg	06.01.18 04.31	U	1
Ethylbenzene	100-41-4	<0.000496	0.000992	0.000496	mg/kg	06.01.18 04.31	U	1
m,p-Xylenes	179601-23-1	<0.000992	0.00198	0.000992	mg/kg	06.01.18 04.31	U	1
o-Xylene	95-47-6	<0.000496	0.000992	0.000496	mg/kg	06.01.18 04.31	U	1
Total Xylenes	1330-20-7	<0.000496	0.000992	0.000496	mg/kg	06.01.18 04.31	U	1
Total BTEX		<0.000496	0.000992	0.000496	mg/kg	06.01.18 04.31	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	115	%	74-126	06.01.18 04.31			
1,2-Dichloroethane-D4	17060-07-0	98	%	80-120	06.01.18 04.31			
Toluene-D8	2037-26-5	85	%	73-132	06.01.18 04.31			



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-7(0-1)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-014

Date Collected: 05.25.18 12.45

Sample Depth: 0 - 1 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.31.18 08.31

Basis: Wet Weight

Seq Number: 3052112

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	124	9.92	0.351	mg/kg	06.01.18 09.10		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 05.31.18 17.06

Basis: Wet Weight

Seq Number: 3052304

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.86	15.0	9.86	mg/kg	06.05.18 03.15	U	1
C10-C28 Diesel Range Organics	C10C28DRO	89.4	15.0	9.86	mg/kg	06.05.18 03.15		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	26.9	15.0	9.86	mg/kg	06.05.18 03.15		1
Total TPH	PHC635	116	15.0	9.86	mg/kg	06.05.18 03.15		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	06.05.18 03.15	
o-Terphenyl	84-15-1	113	%	70-135	06.05.18 03.15	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-7(0-1)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-014

Date Collected: 05.25.18 12.45

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.01.18 18.00

Basis: Wet Weight

Seq Number: 3052076

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000499	0.000998	0.000499	mg/kg	06.01.18 19.17	U	1
Toluene	108-88-3	<0.000499	0.000998	0.000499	mg/kg	06.01.18 19.17	U	1
Ethylbenzene	100-41-4	<0.000499	0.000998	0.000499	mg/kg	06.01.18 19.17	U	1
m,p-Xylenes	179601-23-1	<0.000998	0.00200	0.000998	mg/kg	06.01.18 19.17	U	1
o-Xylene	95-47-6	<0.000499	0.000998	0.000499	mg/kg	06.01.18 19.17	U	1
Total Xylenes	1330-20-7	<0.000499	0.000998	0.000499	mg/kg	06.01.18 19.17	U	1
Total BTEX		<0.000499	0.000998	0.000499	mg/kg	06.01.18 19.17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	116	%	74-126	06.01.18 19.17			
1,2-Dichloroethane-D4	17060-07-0	118	%	80-120	06.01.18 19.17			
Toluene-D8	2037-26-5	95	%	73-132	06.01.18 19.17			



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-7(1-2)**
Lab Sample Id: 587348-015

Matrix: Soil
Date Collected: 05.25.18 12.45

Date Received: 05.25.18 16.10
Sample Depth: 1 - 2 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Tech: MAB

Analyst: MAB

Seq Number: 3052112

Prep Method: E300P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	34.0	9.80	0.347	mg/kg	06.01.18 18.00		1

Analytical Method: TPH by SW 8015B

Tech: ARL

Analyst: ISU

Seq Number: 3052304

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.78	14.9	9.78	mg/kg	06.05.18 03.35	U	1
C10-C28 Diesel Range Organics	C10C28DRO	50.3	14.9	9.78	mg/kg	06.05.18 03.35		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	23.5	14.9	9.78	mg/kg	06.05.18 03.35		1
Total TPH	PHC635	73.8	14.9	9.78	mg/kg	06.05.18 03.35		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	06.05.18 03.35	
o-Terphenyl	84-15-1	111	%	70-135	06.05.18 03.35	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-7(1-2)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-015

Date Collected: 05.25.18 12.45

Sample Depth: 1 - 2 ft

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 05.31.18 17.05

Basis: Wet Weight

Seq Number: 3052061

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000501	0.00100	0.000501	mg/kg	05.31.18 23.24	U	1
Toluene	108-88-3	<0.000501	0.00100	0.000501	mg/kg	05.31.18 23.24	U	1
Ethylbenzene	100-41-4	<0.000501	0.00100	0.000501	mg/kg	05.31.18 23.24	UX	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/kg	05.31.18 23.24	UX	1
o-Xylene	95-47-6	<0.000501	0.00100	0.000501	mg/kg	05.31.18 23.24	UX	1
Total Xylenes	1330-20-7	<0.000501	0.00100	0.000501	mg/kg	05.31.18 23.24	U	1
Total BTEX		<0.000501	0.00100	0.000501	mg/kg	05.31.18 23.24	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	118	%	74-126	05.31.18 23.24			
1,2-Dichloroethane-D4	17060-07-0	106	%	80-120	05.31.18 23.24			
Toluene-D8	2037-26-5	87	%	73-132	05.31.18 23.24			



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-5(0-1)**
Lab Sample Id: 587348-017

Matrix: Soil
Date Collected: 05.25.18 13.11

Date Received: 05.25.18 16.10
Sample Depth: 0 - 1 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Tech: MAB

Analyst: MAB

Seq Number: 3052112

Prep Method: E300P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	172	9.92	0.351	mg/kg	06.01.18 18.12		1

Analytical Method: TPH by SW 8015B

Tech: ARL

Analyst: ISU

Seq Number: 3052304

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.78	14.9	9.78	mg/kg	06.05.18 04.17	U	1
C10-C28 Diesel Range Organics	C10C28DRO	330	14.9	9.78	mg/kg	06.05.18 04.17		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	67.1	14.9	9.78	mg/kg	06.05.18 04.17		1
Total TPH	PHC635	397	14.9	9.78	mg/kg	06.05.18 04.17		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	06.05.18 04.17	
o-Terphenyl	84-15-1	96	%	70-135	06.05.18 04.17	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-5(0-1)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-017

Date Collected: 05.25.18 13.11

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.01.18 18.00

Basis: Wet Weight

Seq Number: 3052076

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000499	0.000998	0.000499	mg/kg	06.01.18 19.49	U	1
Toluene	108-88-3	<0.000499	0.000998	0.000499	mg/kg	06.01.18 19.49	U	1
Ethylbenzene	100-41-4	<0.000499	0.000998	0.000499	mg/kg	06.01.18 19.49	U	1
m,p-Xylenes	179601-23-1	<0.000998	0.00200	0.000998	mg/kg	06.01.18 19.49	U	1
o-Xylene	95-47-6	<0.000499	0.000998	0.000499	mg/kg	06.01.18 19.49	U	1
Total Xylenes	1330-20-7	<0.000499	0.000998	0.000499	mg/kg	06.01.18 19.49	U	1
Total BTEX		<0.000499	0.000998	0.000499	mg/kg	06.01.18 19.49	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	111	%	74-126	06.01.18 19.49			
1,2-Dichloroethane-D4	17060-07-0	119	%	80-120	06.01.18 19.49			
Toluene-D8	2037-26-5	97	%	73-132	06.01.18 19.49			



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-5(1-2)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-018

Date Collected: 05.25.18 13.11

Sample Depth: 1 - 2 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.31.18 08.31

Basis: Wet Weight

Seq Number: 3052112

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	334	9.86	0.349	mg/kg	06.01.18 19.08		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 05.31.18 17.15

Basis: Wet Weight

Seq Number: 3052304

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.80	14.9	9.80	mg/kg	06.05.18 05.20	U	1
C10-C28 Diesel Range Organics	C10C28DRO	814	14.9	9.80	mg/kg	06.05.18 05.20		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	161	14.9	9.80	mg/kg	06.05.18 05.20		1
Total TPH	PHC635	975	14.9	9.80	mg/kg	06.05.18 05.20		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	06.05.18 05.20	
o-Terphenyl	84-15-1	81	%	70-135	06.05.18 05.20	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-5(1-2)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-018

Date Collected: 05.25.18 13.11

Sample Depth: 1 - 2 ft

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.01.18 18.00

Basis: Wet Weight

Seq Number: 3052076

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000498	0.000996	0.000498	mg/kg	06.01.18 20.05	U	1
Toluene	108-88-3	0.000717	0.000996	0.000498	mg/kg	06.01.18 20.05	J	1
Ethylbenzene	100-41-4	<0.000498	0.000996	0.000498	mg/kg	06.01.18 20.05	U	1
m,p-Xylenes	179601-23-1	<0.000996	0.00199	0.000996	mg/kg	06.01.18 20.05	U	1
o-Xylene	95-47-6	<0.000498	0.000996	0.000498	mg/kg	06.01.18 20.05	U	1
Total Xylenes	1330-20-7	<0.000498	0.000996	0.000498	mg/kg	06.01.18 20.05	U	1
Total BTEX		0.000717	0.000996	0.000498	mg/kg	06.01.18 20.05	J	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	109	%	74-126	06.01.18 20.05			
1,2-Dichloroethane-D4	17060-07-0	116	%	80-120	06.01.18 20.05			
Toluene-D8	2037-26-5	95	%	73-132	06.01.18 20.05			



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-10(0-1)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-020

Date Collected: 05.25.18 13.31

Sample Depth: 0 - 1 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.31.18 08.31

Basis: Wet Weight

Seq Number: 3052112

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	223	9.84	0.348	mg/kg	06.01.18 19.19		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.01.18 12.33

Basis: Wet Weight

Seq Number: 3052888

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	27.9	15.0	9.85	mg/kg	06.09.18 14.38		1
C10-C28 Diesel Range Organics	C10C28DRO	914	15.0	9.85	mg/kg	06.09.18 14.38		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	152	15.0	9.85	mg/kg	06.09.18 14.38		1
Total TPH	PHC635	1090	15.0	9.85	mg/kg	06.09.18 14.38		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	06.09.18 14.38	
o-Terphenyl	84-15-1	92	%	70-135	06.09.18 14.38	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-10(0-1)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-020

Date Collected: 05.25.18 13.31

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.01.18 18.00

Basis: Wet Weight

Seq Number: 3052076

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000498	0.000996	0.000498	mg/kg	06.01.18 20.21	U	1
Toluene	108-88-3	<0.000498	0.000996	0.000498	mg/kg	06.01.18 20.21	U	1
Ethylbenzene	100-41-4	<0.000498	0.000996	0.000498	mg/kg	06.01.18 20.21	U	1
m,p-Xylenes	179601-23-1	<0.000996	0.00199	0.000996	mg/kg	06.01.18 20.21	U	1
o-Xylene	95-47-6	<0.000498	0.000996	0.000498	mg/kg	06.01.18 20.21	U	1
Total Xylenes	1330-20-7	<0.000498	0.000996	0.000498	mg/kg	06.01.18 20.21	U	1
Total BTEX		<0.000498	0.000996	0.000498	mg/kg	06.01.18 20.21	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	109	%	74-126	06.01.18 20.21			
1,2-Dichloroethane-D4	17060-07-0	108	%	80-120	06.01.18 20.21			
Toluene-D8	2037-26-5	91	%	73-132	06.01.18 20.21			



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-10(1-2)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-021

Date Collected: 05.25.18 13.31

Sample Depth: 1 - 2 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.31.18 08.31

Basis: Wet Weight

Seq Number: 3052112

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	15.2	9.88	0.350	mg/kg	06.01.18 19.31		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.01.18 12.42

Basis: Wet Weight

Seq Number: 3052888

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.82	14.9	9.82	mg/kg	06.09.18 15.41	U	1
C10-C28 Diesel Range Organics	C10C28DRO	43.0	14.9	9.82	mg/kg	06.09.18 15.41		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	51.0	14.9	9.82	mg/kg	06.09.18 15.41		1
Total TPH	PHC635	94.0	14.9	9.82	mg/kg	06.09.18 15.41		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	06.09.18 15.41	
o-Terphenyl	84-15-1	103	%	70-135	06.09.18 15.41	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-10(1-2)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-021

Date Collected: 05.25.18 13.31

Sample Depth: 1 - 2 ft

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.01.18 18.00

Basis: Wet Weight

Seq Number: 3052076

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000498	0.000996	0.000498	mg/kg	06.01.18 20.37	U	1
Toluene	108-88-3	<0.000498	0.000996	0.000498	mg/kg	06.01.18 20.37	U	1
Ethylbenzene	100-41-4	<0.000498	0.000996	0.000498	mg/kg	06.01.18 20.37	U	1
m,p-Xylenes	179601-23-1	<0.000996	0.00199	0.000996	mg/kg	06.01.18 20.37	U	1
o-Xylene	95-47-6	<0.000498	0.000996	0.000498	mg/kg	06.01.18 20.37	U	1
Total Xylenes	1330-20-7	<0.000498	0.000996	0.000498	mg/kg	06.01.18 20.37	U	1
Total BTEX		<0.000498	0.000996	0.000498	mg/kg	06.01.18 20.37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	109	%	74-126	06.01.18 20.37			
1,2-Dichloroethane-D4	17060-07-0	110	%	80-120	06.01.18 20.37			
Toluene-D8	2037-26-5	89	%	73-132	06.01.18 20.37			



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-11(0-1)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-022

Date Collected: 05.25.18 13.55

Sample Depth: 0 - 1 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.31.18 08.31

Basis: Wet Weight

Seq Number: 3052112

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	17.2	9.94	0.352	mg/kg	06.01.18 19.42		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.01.18 12.45

Basis: Wet Weight

Seq Number: 3052888

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.87	15.0	9.87	mg/kg	06.09.18 16.02	U	1
C10-C28 Diesel Range Organics	C10C28DRO	30.3	15.0	9.87	mg/kg	06.09.18 16.02		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	20.7	15.0	9.87	mg/kg	06.09.18 16.02		1
Total TPH	PHC635	51.0	15.0	9.87	mg/kg	06.09.18 16.02		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	06.09.18 16.02	
o-Terphenyl	84-15-1	118	%	70-135	06.09.18 16.02	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-11(0-1)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-022

Date Collected: 05.25.18 13.55

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.01.18 18.00

Basis: Wet Weight

Seq Number: 3052225

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/kg	06.02.18 01.44	UX	1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/kg	06.02.18 01.44	UX	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/kg	06.02.18 01.44	UX	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/kg	06.02.18 01.44	UX	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/kg	06.02.18 01.44	UX	1
Total Xylenes	1330-20-7	<0.000500	0.00100	0.000500	mg/kg	06.02.18 01.44	U	1
Total BTEX		<0.000500	0.00100	0.000500	mg/kg	06.02.18 01.44	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	111	%	74-126	06.02.18 01.44			
1,2-Dichloroethane-D4	17060-07-0	117	%	80-120	06.02.18 01.44			
Toluene-D8	2037-26-5	102	%	73-132	06.02.18 01.44			



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-11(1-2)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-023

Date Collected: 05.25.18 13.55

Sample Depth: 1 - 2 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.31.18 08.31

Basis: Wet Weight

Seq Number: 3052112

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9.40	9.82	0.348	mg/kg	06.01.18 19.53	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.01.18 12.48

Basis: Wet Weight

Seq Number: 3052888

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.83	14.9	9.83	mg/kg	06.09.18 16.23	U	1
C10-C28 Diesel Range Organics	C10C28DRO	27.8	14.9	9.83	mg/kg	06.09.18 16.23		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	22.6	14.9	9.83	mg/kg	06.09.18 16.23		1
Total TPH	PHC635	50.4	14.9	9.83	mg/kg	06.09.18 16.23		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	06.09.18 16.23	
o-Terphenyl	84-15-1	123	%	70-135	06.09.18 16.23	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-11(1-2)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-023

Date Collected: 05.25.18 13.55

Sample Depth: 1 - 2 ft

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.01.18 18.00

Basis: Wet Weight

Seq Number: 3052225

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000496	0.000992	0.000496	mg/kg	06.02.18 02.00	U	1
Toluene	108-88-3	<0.000496	0.000992	0.000496	mg/kg	06.02.18 02.00	U	1
Ethylbenzene	100-41-4	<0.000496	0.000992	0.000496	mg/kg	06.02.18 02.00	U	1
m,p-Xylenes	179601-23-1	<0.000992	0.00198	0.000992	mg/kg	06.02.18 02.00	U	1
o-Xylene	95-47-6	<0.000496	0.000992	0.000496	mg/kg	06.02.18 02.00	U	1
Total Xylenes	1330-20-7	<0.000496	0.000992	0.000496	mg/kg	06.02.18 02.00	U	1
Total BTEX		<0.000496	0.000992	0.000496	mg/kg	06.02.18 02.00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	113	%	74-126	06.02.18 02.00			
1,2-Dichloroethane-D4	17060-07-0	107	%	80-120	06.02.18 02.00			
Toluene-D8	2037-26-5	100	%	73-132	06.02.18 02.00			



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-12(0-1)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-024

Date Collected: 05.25.18 14.30

Sample Depth: 0 - 1 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.31.18 08.31

Basis: Wet Weight

Seq Number: 3052112

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4.44	9.92	0.351	mg/kg	06.01.18 20.05	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.01.18 12.51

Basis: Wet Weight

Seq Number: 3052888

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.81	14.9	9.81	mg/kg	06.09.18 16.44	U	1
C10-C28 Diesel Range Organics	C10C28DRO	18.8	14.9	9.81	mg/kg	06.09.18 16.44		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	18.8	14.9	9.81	mg/kg	06.09.18 16.44		1
Total TPH	PHC635	37.6	14.9	9.81	mg/kg	06.09.18 16.44		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	06.09.18 16.44	
o-Terphenyl	84-15-1	114	%	70-135	06.09.18 16.44	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-12(0-1)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-024

Date Collected: 05.25.18 14.30

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.01.18 18.00

Basis: Wet Weight

Seq Number: 3052225

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000498	0.000996	0.000498	mg/kg	06.02.18 02.16	U	1
Toluene	108-88-3	<0.000498	0.000996	0.000498	mg/kg	06.02.18 02.16	U	1
Ethylbenzene	100-41-4	<0.000498	0.000996	0.000498	mg/kg	06.02.18 02.16	U	1
m,p-Xylenes	179601-23-1	<0.000996	0.00199	0.000996	mg/kg	06.02.18 02.16	U	1
o-Xylene	95-47-6	<0.000498	0.000996	0.000498	mg/kg	06.02.18 02.16	U	1
Total Xylenes	1330-20-7	<0.000498	0.000996	0.000498	mg/kg	06.02.18 02.16	U	1
Total BTEX		<0.000498	0.000996	0.000498	mg/kg	06.02.18 02.16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	111	%	74-126	06.02.18 02.16			
1,2-Dichloroethane-D4	17060-07-0	114	%	80-120	06.02.18 02.16			
Toluene-D8	2037-26-5	93	%	73-132	06.02.18 02.16			



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-12(1-2)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-025

Date Collected: 05.25.18 14.30

Sample Depth: 1 - 2 In

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.31.18 08.31

Basis: Wet Weight

Seq Number: 3052112

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2.55	9.90	0.350	mg/kg	06.01.18 20.16	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.01.18 12.54

Basis: Wet Weight

Seq Number: 3052888

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.78	14.9	9.78	mg/kg	06.09.18 17.05	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.78	14.9	9.78	mg/kg	06.09.18 17.05	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.78	14.9	9.78	mg/kg	06.09.18 17.05	U	1
Total TPH	PHC635	<9.78	14.9	9.78	mg/kg	06.09.18 17.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	06.09.18 17.05	
o-Terphenyl	84-15-1	119	%	70-135	06.09.18 17.05	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-12(1-2)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-025

Date Collected: 05.25.18 14.30

Sample Depth: 1 - 2 In

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.01.18 18.00

Basis: Wet Weight

Seq Number: 3052225

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000501	0.00100	0.000501	mg/kg	06.02.18 02.33	U	1
Toluene	108-88-3	<0.000501	0.00100	0.000501	mg/kg	06.02.18 02.33	U	1
Ethylbenzene	100-41-4	<0.000501	0.00100	0.000501	mg/kg	06.02.18 02.33	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/kg	06.02.18 02.33	U	1
o-Xylene	95-47-6	<0.000501	0.00100	0.000501	mg/kg	06.02.18 02.33	U	1
Total Xylenes	1330-20-7	<0.000501	0.00100	0.000501	mg/kg	06.02.18 02.33	U	1
Total BTEX		<0.000501	0.00100	0.000501	mg/kg	06.02.18 02.33	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	119	%	74-126	06.02.18 02.33			
1,2-Dichloroethane-D4	17060-07-0	108	%	80-120	06.02.18 02.33			
Toluene-D8	2037-26-5	98	%	73-132	06.02.18 02.33			



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-1(0-1)**
Lab Sample Id: 587348-026

Matrix: Soil
Date Collected: 05.25.18 15.10

Date Received: 05.25.18 16.10
Sample Depth: 0 - 1 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Tech: MAB

Analyst: MAB

Seq Number: 3052112

Date Prep: 05.31.18 08.31

Prep Method: E300P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	168	9.94	0.352	mg/kg	06.01.18 20.27		1

Analytical Method: TPH by SW 8015B

Tech: ARL

Analyst: ISU

Seq Number: 3052888

Date Prep: 06.01.18 12.57

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	26.3	15.0	9.87	mg/kg	06.09.18 17.26		1
C10-C28 Diesel Range Organics	C10C28DRO	22.9	15.0	9.87	mg/kg	06.09.18 17.26		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	13.7	15.0	9.87	mg/kg	06.09.18 17.26	J	1
Total TPH	PHC635	62.9	15.0	9.87	mg/kg	06.09.18 17.26		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	06.09.18 17.26	
o-Terphenyl	84-15-1	112	%	70-135	06.09.18 17.26	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-1(0-1)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-026

Date Collected: 05.25.18 15.10

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.01.18 18.00

Basis: Wet Weight

Seq Number: 3052225

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000497	0.000994	0.000497	mg/kg	06.02.18 02.49	U	1
Toluene	108-88-3	<0.000497	0.000994	0.000497	mg/kg	06.02.18 02.49	U	1
Ethylbenzene	100-41-4	<0.000497	0.000994	0.000497	mg/kg	06.02.18 02.49	U	1
m,p-Xylenes	179601-23-1	<0.000994	0.00199	0.000994	mg/kg	06.02.18 02.49	U	1
o-Xylene	95-47-6	<0.000497	0.000994	0.000497	mg/kg	06.02.18 02.49	U	1
Total Xylenes	1330-20-7	<0.000497	0.000994	0.000497	mg/kg	06.02.18 02.49	U	1
Total BTEX		<0.000497	0.000994	0.000497	mg/kg	06.02.18 02.49	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	112	%	74-126	06.02.18 02.49			
1,2-Dichloroethane-D4	17060-07-0	122	%	80-120	06.02.18 02.49	**		
Toluene-D8	2037-26-5	93	%	73-132	06.02.18 02.49			



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-1(1-2)**
Lab Sample Id: 587348-027

Matrix: Soil
Date Collected: 05.25.18 15.10

Date Received: 05.25.18 16.10
Sample Depth: 1 - 2 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Tech: MAB

Analyst: MAB

Seq Number: 3052114

Prep Method: E300P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	473	9.86	0.349	mg/kg	06.01.18 23.17		1

Analytical Method: TPH by SW 8015B

Tech: ARL

Analyst: ISU

Seq Number: 3052888

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	28.7	14.9	9.84	mg/kg	06.09.18 17.47		1
C10-C28 Diesel Range Organics	C10C28DRO	44.2	14.9	9.84	mg/kg	06.09.18 17.47		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	21.0	14.9	9.84	mg/kg	06.09.18 17.47		1
Total TPH	PHC635	93.9	14.9	9.84	mg/kg	06.09.18 17.47		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	06.09.18 17.47	
o-Terphenyl	84-15-1	118	%	70-135	06.09.18 17.47	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-1(1-2)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-027

Date Collected: 05.25.18 15.10

Sample Depth: 1 - 2 ft

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.01.18 18.00

Basis: Wet Weight

Seq Number: 3052225

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000502	0.00100	0.000502	mg/kg	06.02.18 03.05	U	1
Toluene	108-88-3	<0.000502	0.00100	0.000502	mg/kg	06.02.18 03.05	U	1
Ethylbenzene	100-41-4	<0.000502	0.00100	0.000502	mg/kg	06.02.18 03.05	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00201	0.00100	mg/kg	06.02.18 03.05	U	1
o-Xylene	95-47-6	<0.000502	0.00100	0.000502	mg/kg	06.02.18 03.05	U	1
Total Xylenes	1330-20-7	<0.000502	0.00100	0.000502	mg/kg	06.02.18 03.05	U	1
Total BTEX		<0.000502	0.00100	0.000502	mg/kg	06.02.18 03.05	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	110	%	74-126	06.02.18 03.05			
1,2-Dichloroethane-D4	17060-07-0	109	%	80-120	06.02.18 03.05			
Toluene-D8	2037-26-5	87	%	73-132	06.02.18 03.05			



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-2(0-1)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-028

Date Collected: 05.25.18 15.00

Sample Depth: 0 - 1 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.31.18 09.12

Basis: Wet Weight

Seq Number: 3052114

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	495	9.90	0.350	mg/kg	06.01.18 21.35		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.01.18 13.03

Basis: Wet Weight

Seq Number: 3052888

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	27.6	15.0	9.87	mg/kg	06.09.18 18.08		1
C10-C28 Diesel Range Organics	C10C28DRO	90.7	15.0	9.87	mg/kg	06.09.18 18.08		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	29.0	15.0	9.87	mg/kg	06.09.18 18.08		1
Total TPH	PHC635	147	15.0	9.87	mg/kg	06.09.18 18.08		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	121	%	70-135	06.09.18 18.08	
o-Terphenyl	84-15-1	124	%	70-135	06.09.18 18.08	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-2(0-1)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-028

Date Collected: 05.25.18 15.00

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.01.18 18.00

Basis: Wet Weight

Seq Number: 3052225

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000499	0.000998	0.000499	mg/kg	06.02.18 03.21	U	1
Toluene	108-88-3	<0.000499	0.000998	0.000499	mg/kg	06.02.18 03.21	U	1
Ethylbenzene	100-41-4	<0.000499	0.000998	0.000499	mg/kg	06.02.18 03.21	U	1
m,p-Xylenes	179601-23-1	<0.000998	0.00200	0.000998	mg/kg	06.02.18 03.21	U	1
o-Xylene	95-47-6	<0.000499	0.000998	0.000499	mg/kg	06.02.18 03.21	U	1
Total Xylenes	1330-20-7	<0.000499	0.000998	0.000499	mg/kg	06.02.18 03.21	U	1
Total BTEX		<0.000499	0.000998	0.000499	mg/kg	06.02.18 03.21	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	121	%	74-126	06.02.18 03.21			
1,2-Dichloroethane-D4	17060-07-0	105	%	80-120	06.02.18 03.21			
Toluene-D8	2037-26-5	90	%	73-132	06.02.18 03.21			



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-2(1-2)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-029

Date Collected: 05.25.18 15.00

Sample Depth: 1 - 2 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.31.18 09.12

Basis: Wet Weight

Seq Number: 3052114

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	728	9.82	0.348	mg/kg	06.01.18 22.09		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.01.18 13.06

Basis: Wet Weight

Seq Number: 3052888

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	27.5	14.9	9.78	mg/kg	06.09.18 18.50		1
C10-C28 Diesel Range Organics	C10C28DRO	50.9	14.9	9.78	mg/kg	06.09.18 18.50		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	22.0	14.9	9.78	mg/kg	06.09.18 18.50		1
Total TPH	PHC635	100	14.9	9.78	mg/kg	06.09.18 18.50		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	06.09.18 18.50	
o-Terphenyl	84-15-1	120	%	70-135	06.09.18 18.50	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-2(1-2)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-029

Date Collected: 05.25.18 15.00

Sample Depth: 1 - 2 ft

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.01.18 18.00

Basis: Wet Weight

Seq Number: 3052225

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000501	0.00100	0.000501	mg/kg	06.02.18 03.37	U	1
Toluene	108-88-3	<0.000501	0.00100	0.000501	mg/kg	06.02.18 03.37	U	1
Ethylbenzene	100-41-4	<0.000501	0.00100	0.000501	mg/kg	06.02.18 03.37	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/kg	06.02.18 03.37	U	1
o-Xylene	95-47-6	<0.000501	0.00100	0.000501	mg/kg	06.02.18 03.37	U	1
Total Xylenes	1330-20-7	<0.000501	0.00100	0.000501	mg/kg	06.02.18 03.37	U	1
Total BTEX		<0.000501	0.00100	0.000501	mg/kg	06.02.18 03.37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	118	%	74-126	06.02.18 03.37			
1,2-Dichloroethane-D4	17060-07-0	115	%	80-120	06.02.18 03.37			
Toluene-D8	2037-26-5	88	%	73-132	06.02.18 03.37			



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-3(0-1)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-030

Date Collected: 05.25.18 14.50

Sample Depth: 0 - 1 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.31.18 09.12

Basis: Wet Weight

Seq Number: 3052114

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	225	9.78	0.346	mg/kg	06.01.18 22.20		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.01.18 13.09

Basis: Wet Weight

Seq Number: 3052888

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.78	14.9	9.78	mg/kg	06.09.18 19.11	U	1
C10-C28 Diesel Range Organics	C10C28DRO	14.8	14.9	9.78	mg/kg	06.09.18 19.11	J	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	11.9	14.9	9.78	mg/kg	06.09.18 19.11	J	1
Total TPH	PHC635	26.7	14.9	9.78	mg/kg	06.09.18 19.11		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	06.09.18 19.11	
o-Terphenyl	84-15-1	118	%	70-135	06.09.18 19.11	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-3(0-1)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-030

Date Collected: 05.25.18 14.50

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.01.18 18.00

Basis: Wet Weight

Seq Number: 3052225

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000502	0.00100	0.000502	mg/kg	06.02.18 03.53	U	1
Toluene	108-88-3	<0.000502	0.00100	0.000502	mg/kg	06.02.18 03.53	U	1
Ethylbenzene	100-41-4	<0.000502	0.00100	0.000502	mg/kg	06.02.18 03.53	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00201	0.00100	mg/kg	06.02.18 03.53	U	1
o-Xylene	95-47-6	<0.000502	0.00100	0.000502	mg/kg	06.02.18 03.53	U	1
Total Xylenes	1330-20-7	<0.000502	0.00100	0.000502	mg/kg	06.02.18 03.53	U	1
Total BTEX		<0.000502	0.00100	0.000502	mg/kg	06.02.18 03.53	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	115	%	74-126	06.02.18 03.53			
1,2-Dichloroethane-D4	17060-07-0	111	%	80-120	06.02.18 03.53			
Toluene-D8	2037-26-5	94	%	73-132	06.02.18 03.53			



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-3(1-2)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-031

Date Collected: 05.25.18 14.50

Sample Depth: 1 - 2 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.31.18 09.12

Basis: Wet Weight

Seq Number: 3052114

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	93.6	9.75	0.345	mg/kg	06.01.18 22.32		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.01.18 13.12

Basis: Wet Weight

Seq Number: 3052888

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	28.8	14.9	9.78	mg/kg	06.09.18 19.32		1
C10-C28 Diesel Range Organics	C10C28DRO	148	14.9	9.78	mg/kg	06.09.18 19.32		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	78.0	14.9	9.78	mg/kg	06.09.18 19.32		1
Total TPH	PHC635	255	14.9	9.78	mg/kg	06.09.18 19.32		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	06.09.18 19.32	
o-Terphenyl	84-15-1	102	%	70-135	06.09.18 19.32	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-3(1-2)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-031

Date Collected: 05.25.18 14.50

Sample Depth: 1 - 2 ft

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.01.18 18.00

Basis: Wet Weight

Seq Number: 3052225

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000498	0.000996	0.000498	mg/kg	06.02.18 04.09	U	1
Toluene	108-88-3	<0.000498	0.000996	0.000498	mg/kg	06.02.18 04.09	U	1
Ethylbenzene	100-41-4	<0.000498	0.000996	0.000498	mg/kg	06.02.18 04.09	U	1
m,p-Xylenes	179601-23-1	<0.000996	0.00199	0.000996	mg/kg	06.02.18 04.09	U	1
o-Xylene	95-47-6	<0.000498	0.000996	0.000498	mg/kg	06.02.18 04.09	U	1
Total Xylenes	1330-20-7	<0.000498	0.000996	0.000498	mg/kg	06.02.18 04.09	U	1
Total BTEX		<0.000498	0.000996	0.000498	mg/kg	06.02.18 04.09	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	118	%	74-126	06.02.18 04.09			
1,2-Dichloroethane-D4	17060-07-0	108	%	80-120	06.02.18 04.09			
Toluene-D8	2037-26-5	97	%	73-132	06.02.18 04.09			



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-4(0-1)**
Lab Sample Id: 587348-032

Matrix: Soil
Date Collected: 05.25.18 14.40

Date Received: 05.25.18 16.10
Sample Depth: 0 - 1 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Tech: MAB

Analyst: MAB

Seq Number: 3052114

Prep Method: E300P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1.86	9.92	0.351	mg/kg	06.01.18 22.43	J	1

Analytical Method: TPH by SW 8015B

Tech: ARL

Analyst: ISU

Seq Number: 3052888

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.82	14.9	9.82	mg/kg	06.09.18 19.53	U	1
C10-C28 Diesel Range Organics	C10C28DRO	18.5	14.9	9.82	mg/kg	06.09.18 19.53		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	12.4	14.9	9.82	mg/kg	06.09.18 19.53	J	1
Total TPH	PHC635	30.9	14.9	9.82	mg/kg	06.09.18 19.53		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	06.09.18 19.53	
o-Terphenyl	84-15-1	122	%	70-135	06.09.18 19.53	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-4(0-1)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-032

Date Collected: 05.25.18 14.40

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.01.18 18.00

Basis: Wet Weight

Seq Number: 3052225

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000497	0.000994	0.000497	mg/kg	06.02.18 04.25	U	1
Toluene	108-88-3	<0.000497	0.000994	0.000497	mg/kg	06.02.18 04.25	U	1
Ethylbenzene	100-41-4	<0.000497	0.000994	0.000497	mg/kg	06.02.18 04.25	U	1
m,p-Xylenes	179601-23-1	<0.000994	0.00199	0.000994	mg/kg	06.02.18 04.25	U	1
o-Xylene	95-47-6	<0.000497	0.000994	0.000497	mg/kg	06.02.18 04.25	U	1
Total Xylenes	1330-20-7	<0.000497	0.000994	0.000497	mg/kg	06.02.18 04.25	U	1
Total BTEX		<0.000497	0.000994	0.000497	mg/kg	06.02.18 04.25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	113	%	74-126	06.02.18 04.25			
1,2-Dichloroethane-D4	17060-07-0	120	%	80-120	06.02.18 04.25			
Toluene-D8	2037-26-5	90	%	73-132	06.02.18 04.25			



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-4(1-2)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-033

Date Collected: 05.25.18 14.40

Sample Depth: 1 - 2 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.31.18 09.12

Basis: Wet Weight

Seq Number: 3052114

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	30.1	9.96	0.353	mg/kg	06.01.18 23.28		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.01.18 13.18

Basis: Wet Weight

Seq Number: 3052888

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	26.9	14.9	9.79	mg/kg	06.09.18 20.14		1
C10-C28 Diesel Range Organics	C10C28DRO	14.2	14.9	9.79	mg/kg	06.09.18 20.14	J	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	11.1	14.9	9.79	mg/kg	06.09.18 20.14	J	1
Total TPH	PHC635	52.2	14.9	9.79	mg/kg	06.09.18 20.14		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	06.09.18 20.14	
o-Terphenyl	84-15-1	120	%	70-135	06.09.18 20.14	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **SB-4(1-2)**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-033

Date Collected: 05.25.18 14.40

Sample Depth: 1 - 2 ft

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.01.18 18.00

Basis: Wet Weight

Seq Number: 3052225

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000498	0.000996	0.000498	mg/kg	06.02.18 04.41	U	1
Toluene	108-88-3	<0.000498	0.000996	0.000498	mg/kg	06.02.18 04.41	U	1
Ethylbenzene	100-41-4	<0.000498	0.000996	0.000498	mg/kg	06.02.18 04.41	U	1
m,p-Xylenes	179601-23-1	<0.000996	0.00199	0.000996	mg/kg	06.02.18 04.41	U	1
o-Xylene	95-47-6	<0.000498	0.000996	0.000498	mg/kg	06.02.18 04.41	U	1
Total Xylenes	1330-20-7	<0.000498	0.000996	0.000498	mg/kg	06.02.18 04.41	U	1
Total BTEX		<0.000498	0.000996	0.000498	mg/kg	06.02.18 04.41	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	114	%	74-126	06.02.18 04.41			
1,2-Dichloroethane-D4	17060-07-0	110	%	80-120	06.02.18 04.41			
Toluene-D8	2037-26-5	92	%	73-132	06.02.18 04.41			



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **Overspray Stockpile 1**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-034

Date Collected: 05.25.18 00.00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.31.18 09.12

Basis: Wet Weight

Seq Number: 3052114

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	578	9.98	0.353	mg/kg	06.01.18 23.39		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.01.18 13.21

Basis: Wet Weight

Seq Number: 3052888

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	30.2	15.0	9.85	mg/kg	06.09.18 20.36		1
C10-C28 Diesel Range Organics	C10C28DRO	1640	15.0	9.85	mg/kg	06.09.18 20.36		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	240	15.0	9.85	mg/kg	06.09.18 20.36		1
Total TPH	PHC635	1910	15.0	9.85	mg/kg	06.09.18 20.36		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	06.09.18 20.36	
o-Terphenyl	84-15-1	104	%	70-135	06.09.18 20.36	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **Overspray Stockpile 1**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-034

Date Collected: 05.25.18 00.00

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.01.18 18.00

Basis: Wet Weight

Seq Number: 3052225

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000499	0.000998	0.000499	mg/kg	06.02.18 04.57	U	1
Toluene	108-88-3	<0.000499	0.000998	0.000499	mg/kg	06.02.18 04.57	U	1
Ethylbenzene	100-41-4	<0.000499	0.000998	0.000499	mg/kg	06.02.18 04.57	U	1
m,p-Xylenes	179601-23-1	<0.000998	0.00200	0.000998	mg/kg	06.02.18 04.57	U	1
o-Xylene	95-47-6	<0.000499	0.000998	0.000499	mg/kg	06.02.18 04.57	U	1
Total Xylenes	1330-20-7	<0.000499	0.000998	0.000499	mg/kg	06.02.18 04.57	U	1
Total BTEX		<0.000499	0.000998	0.000499	mg/kg	06.02.18 04.57	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	121	%	74-126	06.02.18 04.57			
1,2-Dichloroethane-D4	17060-07-0	118	%	80-120	06.02.18 04.57			
Toluene-D8	2037-26-5	95	%	73-132	06.02.18 04.57			



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **Overspray Stockpile 2**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-035

Date Collected: 05.25.18 00.00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 05.31.18 09.12

Basis: Wet Weight

Seq Number: 3052114

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	206	9.82	0.348	mg/kg	06.01.18 23.51		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.01.18 13.24

Basis: Wet Weight

Seq Number: 3052888

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	29.2	14.9	9.78	mg/kg	06.09.18 20.56		1
C10-C28 Diesel Range Organics	C10C28DRO	1140	14.9	9.78	mg/kg	06.09.18 20.56		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	216	14.9	9.78	mg/kg	06.09.18 20.56		1
Total TPH	PHC635	1390	14.9	9.78	mg/kg	06.09.18 20.56		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	06.09.18 20.56	
o-Terphenyl	84-15-1	95	%	70-135	06.09.18 20.56	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **Overspray Stockpile 2**

Matrix: Soil

Date Received: 05.25.18 16.10

Lab Sample Id: 587348-035

Date Collected: 05.25.18 00.00

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.01.18 18.00

Basis: Wet Weight

Seq Number: 3052225

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000502	0.00100	0.000502	mg/kg	06.02.18 05.13	U	1
Toluene	108-88-3	<0.000502	0.00100	0.000502	mg/kg	06.02.18 05.13	U	1
Ethylbenzene	100-41-4	<0.000502	0.00100	0.000502	mg/kg	06.02.18 05.13	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00201	0.00100	mg/kg	06.02.18 05.13	U	1
o-Xylene	95-47-6	<0.000502	0.00100	0.000502	mg/kg	06.02.18 05.13	U	1
Total Xylenes	1330-20-7	<0.000502	0.00100	0.000502	mg/kg	06.02.18 05.13	U	1
Total BTEX		<0.000502	0.00100	0.000502	mg/kg	06.02.18 05.13	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	115	%	74-126	06.02.18 05.13			
1,2-Dichloroethane-D4	17060-07-0	112	%	80-120	06.02.18 05.13			
Toluene-D8	2037-26-5	94	%	73-132	06.02.18 05.13			



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **1(0-6)**
Lab Sample Id: 587348-036

Matrix: Soil
Date Collected: 05.25.18 00.00

Date Received: 05.25.18 16.10
Sample Depth: 0 - 6 In

Analytical Method: Inorganic Anions by EPA 300/300.1

Tech: MAB

Analyst: MAB

Seq Number: 3052114

Prep Method: E300P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	574	9.88	0.350	mg/kg	06.02.18 00.02		1

Analytical Method: TPH by SW 8015B

Tech: ARL

Analyst: ISU

Seq Number: 3052888

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.78	14.9	9.78	mg/kg	06.09.18 21.17	U	1
C10-C28 Diesel Range Organics	C10C28DRO	155	14.9	9.78	mg/kg	06.09.18 21.17		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	65.9	14.9	9.78	mg/kg	06.09.18 21.17		1
Total TPH	PHC635	221	14.9	9.78	mg/kg	06.09.18 21.17		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	06.09.18 21.17	
o-Terphenyl	84-15-1	124	%	70-135	06.09.18 21.17	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: **1(0-6)**
Lab Sample Id: 587348-036

Matrix: Soil
Date Collected: 05.25.18 00.00

Date Received: 05.25.18 16.10
Sample Depth: 0 - 6 In

Analytical Method: BTEX by SW 8260B

Tech: CHH

Analyst: CHH

Seq Number: 3052225

Prep Method: SW5035A

% Moisture:

Date Prep: 06.01.18 18.00

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/kg	06.02.18 05.30	U	1
Toluene	108-88-3	0.000980	0.00100	0.000500	mg/kg	06.02.18 05.30	J	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/kg	06.02.18 05.30	U	1
m,p-Xylenes	179601-23-1	0.00136	0.00200	0.00100	mg/kg	06.02.18 05.30	J	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/kg	06.02.18 05.30	U	1
Total Xylenes	1330-20-7	0.00136	0.00100	0.000500	mg/kg	06.02.18 05.30		1
Total BTEX		0.00234	0.00100	0.000500	mg/kg	06.02.18 05.30		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	121	%	74-126	06.02.18 05.30			
1,2-Dichloroethane-D4	17060-07-0	118	%	80-120	06.02.18 05.30			
Toluene-D8	2037-26-5	96	%	73-132	06.02.18 05.30			



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: 2(0-6)
Lab Sample Id: 587348-037

Matrix: Soil
Date Collected: 05.25.18 00.00

Date Received: 05.25.18 16.10
Sample Depth: 0 - 6 In

Analytical Method: Inorganic Anions by EPA 300/300.1

Tech: MAB

Analyst: MAB

Seq Number: 3052114

Prep Method: E300P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	676	9.92	0.351	mg/kg	06.02.18 00.13		1

Analytical Method: TPH by SW 8015B

Tech: ARL

Analyst: ISU

Seq Number: 3052888

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	28.8	15.0	9.86	mg/kg	06.09.18 21.38		1
C10-C28 Diesel Range Organics	C10C28DRO	363	15.0	9.86	mg/kg	06.09.18 21.38		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	65.5	15.0	9.86	mg/kg	06.09.18 21.38		1
Total TPH	PHC635	457	15.0	9.86	mg/kg	06.09.18 21.38		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	121	%	70-135	06.09.18 21.38	
o-Terphenyl	84-15-1	110	%	70-135	06.09.18 21.38	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: 2(0-6)
Lab Sample Id: 587348-037

Matrix: Soil
Date Collected: 05.25.18 00.00

Date Received: 05.25.18 16.10
Sample Depth: 0 - 6 In

Analytical Method: BTEX by SW 8260B

Tech: CHH

Analyst: CHH

Seq Number: 3052225

Prep Method: SW5035A

% Moisture:

Date Prep: 06.01.18 18.00

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000498	0.000996	0.000498	mg/kg	06.02.18 05.46	U	1
Toluene	108-88-3	0.000896	0.000996	0.000498	mg/kg	06.02.18 05.46	J	1
Ethylbenzene	100-41-4	<0.000498	0.000996	0.000498	mg/kg	06.02.18 05.46	U	1
m,p-Xylenes	179601-23-1	<0.000996	0.00199	0.000996	mg/kg	06.02.18 05.46	U	1
o-Xylene	95-47-6	<0.000498	0.000996	0.000498	mg/kg	06.02.18 05.46	U	1
Total Xylenes	1330-20-7	<0.000498	0.000996	0.000498	mg/kg	06.02.18 05.46	U	1
Total BTEX		0.000896	0.000996	0.000498	mg/kg	06.02.18 05.46	J	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	114	%	74-126	06.02.18 05.46			
1,2-Dichloroethane-D4	17060-07-0	126	%	80-120	06.02.18 05.46		**	
Toluene-D8	2037-26-5	96	%	73-132	06.02.18 05.46			



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: 3 (0-6)
Lab Sample Id: 587348-038

Matrix: Soil
Date Collected: 05.25.18 00.00

Date Received: 05.25.18 16.10
Sample Depth: 0 - 6 In

Analytical Method: Inorganic Anions by EPA 300/300.1

Tech: MAB

Analyst: MAB

Seq Number: 3052114

Prep Method: E300P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1110	9.94	0.352	mg/kg	06.04.18 11.31	X	1

Analytical Method: TPH by SW 8015B

Tech: ARL

Analyst: ISU

Seq Number: 3052888

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	32.2	14.9	9.82	mg/kg	06.09.18 21.59		1
C10-C28 Diesel Range Organics	C10C28DRO	444	14.9	9.82	mg/kg	06.09.18 21.59		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	90.0	14.9	9.82	mg/kg	06.09.18 21.59		1
Total TPH	PHC635	566	14.9	9.82	mg/kg	06.09.18 21.59		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	123	%	70-135	06.09.18 21.59	
o-Terphenyl	84-15-1	100	%	70-135	06.09.18 21.59	



Certificate of Analytical Results 587348

R2M Engineering, Lubbock, TX

Venables Construction

Sample Id: 3 (0-6)
Lab Sample Id: 587348-038

Matrix: Soil
Date Collected: 05.25.18 00.00

Date Received: 05.25.18 16.10
Sample Depth: 0 - 6 In

Analytical Method: BTEX by SW 8260B

Tech: CHH

Analyst: CHH

Seq Number: 3052225

Prep Method: SW5035A

% Moisture:

Date Prep: 06.01.18 06.02

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/kg	06.02.18 06.02	U	1
Toluene	108-88-3	0.00179	0.00100	0.000500	mg/kg	06.02.18 06.02		1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/kg	06.02.18 06.02	U	1
m,p-Xylenes	179601-23-1	0.00154	0.00200	0.00100	mg/kg	06.02.18 06.02	J	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/kg	06.02.18 06.02	U	1
Total Xylenes	1330-20-7	0.00154	0.00100	0.000500	mg/kg	06.02.18 06.02		1
Total BTEX		0.00333	0.00100	0.000500	mg/kg	06.02.18 06.02		1
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag	
Dibromofluoromethane	1868-53-7	116		%	74-126	06.02.18 06.02		
1,2-Dichloroethane-D4	17060-07-0	107		%	80-120	06.02.18 06.02		
Toluene-D8	2037-26-5	93		%	73-132	06.02.18 06.02		

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

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

R2M Engineering
Venables Construction

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3052112

Matrix: Solid

Prep Method: E300P

MB Sample Id: 7655709-1-BLK

LCS Sample Id: 7655709-1-BKS

Date Prep: 05.31.18

LCSD Sample Id: 7655709-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.354	100	98.1	98	97.9	98	80-120	0	20	mg/kg	06.01.18 06:31	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3052112

Matrix: Solid

Prep Method: E300P

MB Sample Id: 7655710-1-BLK

LCS Sample Id: 7655710-1-BKS

Date Prep: 05.31.18

LCSD Sample Id: 7655710-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.354	100	98.0	98	96.4	96	80-120	2	20	mg/kg	06.01.18 21:12	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3052112

Matrix: Soil

Prep Method: E300P

Parent Sample Id: 587348-001

MS Sample Id: 587348-001 S

Date Prep: 05.31.18

MSD Sample Id: 587348-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	268	99.4	363	96	362	95	80-120	0	20	mg/kg	06.01.18 07:05	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3052112

Matrix: Soil

Prep Method: E300P

Parent Sample Id: 587348-017

MS Sample Id: 587348-017 S

Date Prep: 05.31.18

MSD Sample Id: 587348-017 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	172	99.2	268	97	268	97	80-120	0	20	mg/kg	06.01.18 18:45	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3052114

Matrix: Soil

Prep Method: E300P

Parent Sample Id: 587348-028

MS Sample Id: 587348-028 S

Date Prep: 05.31.18

MSD Sample Id: 587348-028 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	495	99.2	590	96	585	91	80-120	1	20	mg/kg	06.01.18 21:46	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference $[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD ResultMS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

R2M Engineering
Venables Construction

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3052114

Matrix: Soil

Prep Method: E300P

Parent Sample Id: 587348-038

MS Sample Id: 587348-038 S

Date Prep: 05.31.18

MSD Sample Id: 587348-038 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1670	98.6	1180	0	1180	0	80-120	0	20	mg/kg	06.02.18 00:36	X

Analytical Method: TPH by SW 8015B

Seq Number: 3052304

Matrix: Solid

Prep Method: TX1005P

MB Sample Id: 7655779-1-BLK

LCS Sample Id: 7655779-1-BKS

Date Prep: 05.31.18

LCSD Sample Id: 7655779-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C10 Gasoline Range Hydrocarbons	<9.88	1000	799	80	773	77	70-135	3	35	mg/kg	06.04.18 19:29	
C10-C28 Diesel Range Organics	<9.88	1000	894	89	871	87	70-135	3	35	mg/kg	06.04.18 19:29	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	98		119		115		70-135	%	06.04.18 19:29
o-Terphenyl	111		119		114		70-135	%	06.04.18 19:29

Analytical Method: TPH by SW 8015B

Seq Number: 3052888

Matrix: Solid

Prep Method: SW8015P

MB Sample Id: 7655840-1-BLK

LCS Sample Id: 7655840-1-BKS

Date Prep: 06.01.18

LCSD Sample Id: 7655840-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C10 Gasoline Range Hydrocarbons	<9.88	1000	879	88	888	89	70-135	1	35	mg/kg	06.09.18 13:56	
C10-C28 Diesel Range Organics	<9.88	1000	1020	102	1010	101	70-135	1	35	mg/kg	06.09.18 13:56	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	101		113		111		70-135	%	06.09.18 13:56
o-Terphenyl	109		107		103		70-135	%	06.09.18 13:56

Analytical Method: TPH by SW 8015B

Seq Number: 3052304

Matrix: Soil

Prep Method: TX1005P

Parent Sample Id: 587089-001

MS Sample Id: 587089-001 S

Date Prep: 05.31.18

MSD Sample Id: 587089-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C10 Gasoline Range Hydrocarbons	<9.78	990	802	81	825	83	70-135	3	35	mg/kg	06.04.18 20:55	
C10-C28 Diesel Range Organics	<9.78	990	895	90	930	94	70-135	4	35	mg/kg	06.04.18 20:55	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	106		107		70-135	%	06.04.18 20:55
o-Terphenyl	98		99		70-135	%	06.04.18 20:55

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference $[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 $\text{Log Diff.} = \text{Log}(\text{Sample Duplicate}) - \text{Log}(\text{Original Sample})$ LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD ResultMS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

R2M Engineering
Venables Construction

Analytical Method: TPH by SW 8015B

Seq Number: 3052888

Parent Sample Id: 587348-020

Matrix: Soil

MS Sample Id: 587348-020 S

Prep Method: SW8015P

Date Prep: 06.01.18

MSD Sample Id: 587348-020 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C10 Gasoline Range Hydrocarbons	27.9	991	847	83	815	79	70-135	4	35	mg/kg	06.09.18 14:59	
C10-C28 Diesel Range Organics	914	991	1930	103	1830	92	70-135	5	35	mg/kg	06.09.18 14:59	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	110		104		70-135	%	06.09.18 14:59
o-Terphenyl	105		95		70-135	%	06.09.18 14:59

Analytical Method: BTEX by SW 8260B

Seq Number: 3052061

MB Sample Id: 7655858-1-BLK

Matrix: Solid

LCS Sample Id: 7655858-1-BKS

Prep Method: SW5035A

Date Prep: 05.31.18

LCSD Sample Id: 7655858-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000500	0.100	0.100	100	0.0984	98	62-132	2	25	mg/kg	05.31.18 21:15	
Toluene	<0.000500	0.100	0.101	101	0.0997	100	66-124	1	25	mg/kg	05.31.18 21:15	
Ethylbenzene	<0.000500	0.100	0.0992	99	0.111	111	71-134	11	25	mg/kg	05.31.18 21:15	
m,p-Xylenes	<0.00100	0.200	0.201	101	0.223	112	69-128	10	25	mg/kg	05.31.18 21:15	
o-Xylene	<0.000500	0.100	0.0966	97	0.107	107	72-131	10	25	mg/kg	05.31.18 21:15	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	115		107		110		74-126	%	05.31.18 21:15
1,2-Dichloroethane-D4	104		118		109		80-120	%	05.31.18 21:15
Toluene-D8	93		104		106		73-132	%	05.31.18 21:15

Analytical Method: BTEX by SW 8260B

Seq Number: 3052076

MB Sample Id: 7655881-1-BLK

Matrix: Solid

LCS Sample Id: 7655881-1-BKS

Prep Method: SW5030B

Date Prep: 06.01.18

LCSD Sample Id: 7655881-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000500	0.100	0.0941	94	0.0980	98	62-132	4	25	mg/kg	06.01.18 11:04	
Toluene	<0.000500	0.100	0.0979	98	0.109	109	66-124	11	25	mg/kg	06.01.18 11:04	
Ethylbenzene	<0.000500	0.100	0.107	107	0.104	104	71-134	3	25	mg/kg	06.01.18 11:04	
m,p-Xylenes	<0.00100	0.200	0.224	112	0.217	109	69-128	3	25	mg/kg	06.01.18 11:04	
o-Xylene	<0.000500	0.100	0.104	104	0.104	104	72-131	0	25	mg/kg	06.01.18 11:04	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	105		99		103		74-126	%	06.01.18 11:04
1,2-Dichloroethane-D4	97		114		106		80-120	%	06.01.18 11:04
Toluene-D8	93		109		106		73-132	%	06.01.18 11:04

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference $[D] = 100 * (C-A) / B$
 $RPD = 200 * |(C-E) / (C+E)|$
 $[D] = 100 * (C) / [B]$
 $\text{Log Diff.} = \text{Log}(\text{Sample Duplicate}) - \text{Log}(\text{Original Sample})$ LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD ResultMS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

R2M Engineering
Venables Construction

Analytical Method: BTEX by SW 8260B

Seq Number: 3052225

MB Sample Id: 7655972-1-BLK

Matrix: Solid

LCS Sample Id: 7655972-1-BKS

Prep Method: SW5035A

Date Prep: 06.01.18

LCSD Sample Id: 7655972-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000500	0.100	0.0957	96	0.0841	84	62-132	13	25	mg/kg	06.01.18 23:35	
Toluene	<0.000500	0.100	0.100	100	0.0881	88	66-124	13	25	mg/kg	06.01.18 23:35	
Ethylbenzene	<0.000500	0.100	0.0963	96	0.0864	86	71-134	11	25	mg/kg	06.01.18 23:35	
m,p-Xylenes	<0.00100	0.200	0.203	102	0.185	93	69-128	9	25	mg/kg	06.01.18 23:35	
o-Xylene	<0.000500	0.100	0.0954	95	0.0857	86	72-131	11	25	mg/kg	06.01.18 23:35	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	105		102		104		74-126	%	06.01.18 23:35
1,2-Dichloroethane-D4	92		106		96		80-120	%	06.01.18 23:35
Toluene-D8	98		105		100		73-132	%	06.01.18 23:35

Analytical Method: BTEX by SW 8260B

Seq Number: 3052372

MB Sample Id: 7656051-1-BLK

Matrix: Solid

LCS Sample Id: 7656051-1-BKS

Prep Method: SW5035A

Date Prep: 06.04.18

LCSD Sample Id: 7656051-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000500	0.100	0.0967	97	0.0958	96	62-132	1	25	mg/kg	06.04.18 09:49	
Toluene	<0.000500	0.100	0.105	105	0.0977	98	66-124	7	25	mg/kg	06.04.18 09:49	
Ethylbenzene	<0.000500	0.100	0.107	107	0.0982	98	71-134	9	25	mg/kg	06.04.18 09:49	
m,p-Xylenes	<0.00100	0.200	0.220	110	0.206	103	69-128	7	25	mg/kg	06.04.18 09:49	
o-Xylene	<0.000500	0.100	0.108	108	0.0960	96	72-131	12	25	mg/kg	06.04.18 09:49	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	106		108		105		74-126	%	06.04.18 09:49
1,2-Dichloroethane-D4	104		103		110		80-120	%	06.04.18 09:49
Toluene-D8	95		110		109		73-132	%	06.04.18 09:49

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference $[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD ResultMS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

R2M Engineering
Venables Construction

Analytical Method: BTEX by SW 8260B

Seq Number: 3052061

Parent Sample Id: 587348-015

Matrix: Soil

MS Sample Id: 587348-015 S

Prep Method: SW5035A

Date Prep: 05.31.18

MSD Sample Id: 587348-015 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000502	0.100	0.0753	75	0.0720	72	62-132	4	25	mg/kg	05.31.18 21:48	
Toluene	<0.000502	0.100	0.0734	73	0.0683	69	66-124	7	25	mg/kg	05.31.18 21:48	
Ethylbenzene	<0.000502	0.100	0.0676	68	0.0619	62	71-134	9	25	mg/kg	05.31.18 21:48	X
m,p-Xylenes	<0.00100	0.201	0.135	67	0.127	64	69-128	6	25	mg/kg	05.31.18 21:48	X
o-Xylene	<0.000502	0.100	0.0594	59	0.0555	56	72-131	7	25	mg/kg	05.31.18 21:48	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	106		111		74-126	%	05.31.18 21:48
1,2-Dichloroethane-D4	109		105		80-120	%	05.31.18 21:48
Toluene-D8	99		94		73-132	%	05.31.18 21:48

Analytical Method: BTEX by SW 8260B

Seq Number: 3052076

Parent Sample Id: 587712-003

Matrix: Solid

MS Sample Id: 587712-003 S

Prep Method: SW5030B

Date Prep: 06.01.18

MSD Sample Id: 587712-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.00406	0.106	0.0880	79	0.0864	78	62-132	2	25	mg/kg	06.01.18 12:46	
Toluene	0.0292	0.106	0.0877	55	0.0828	51	66-124	6	25	mg/kg	06.01.18 12:46	X
Ethylbenzene	0.00891	0.106	0.0770	64	0.0754	63	71-134	2	25	mg/kg	06.01.18 12:46	X
m,p-Xylenes	0.0194	0.211	0.155	64	0.152	63	69-128	2	25	mg/kg	06.01.18 12:46	X
o-Xylene	0.00661	0.106	0.0652	55	0.0682	59	72-131	4	25	mg/kg	06.01.18 12:46	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	106		105		74-126	%	06.01.18 12:46
1,2-Dichloroethane-D4	118		117		80-120	%	06.01.18 12:46
Toluene-D8	100		107		73-132	%	06.01.18 12:46

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference $[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD ResultMS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

R2M Engineering
Venables Construction

Analytical Method: BTEX by SW 8260B

Seq Number: 3052225

Parent Sample Id: 587348-022

Matrix: Soil

MS Sample Id: 587348-022 S

Prep Method: SW5035A

Date Prep: 06.01.18

MSD Sample Id: 587348-022 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000503	0.101	0.0607	60	0.0671	68	62-132	10	25	mg/kg	06.02.18 00:08	X
Toluene	<0.000503	0.101	0.0529	52	0.0587	59	66-124	10	25	mg/kg	06.02.18 00:08	X
Ethylbenzene	<0.000503	0.101	0.0461	46	0.0509	51	71-134	10	25	mg/kg	06.02.18 00:08	X
m,p-Xylenes	<0.00101	0.201	0.0884	44	0.101	51	69-128	13	25	mg/kg	06.02.18 00:08	X
o-Xylene	<0.000503	0.101	0.0368	36	0.0411	41	72-131	11	25	mg/kg	06.02.18 00:08	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	110		108		74-126	%	06.02.18 00:08
1,2-Dichloroethane-D4	114		120		80-120	%	06.02.18 00:08
Toluene-D8	96		98		73-132	%	06.02.18 00:08

Analytical Method: BTEX by SW 8260B

Seq Number: 3052372

Parent Sample Id: 587559-001

Matrix: Solid

MS Sample Id: 587559-001 S

Prep Method: SW5035A

Date Prep: 06.04.18

MSD Sample Id: 587559-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000499	0.0998	0.0706	71	0.0753	75	62-132	6	25	mg/kg	06.04.18 11:56	
Toluene	0.00717	0.0998	0.0623	55	0.0783	71	66-124	23	25	mg/kg	06.04.18 11:56	X
Ethylbenzene	<0.000499	0.0998	0.0728	73	0.0798	80	71-134	9	25	mg/kg	06.04.18 11:56	
m,p-Xylenes	0.00108	0.200	0.146	72	0.167	83	69-128	13	25	mg/kg	06.04.18 11:56	
o-Xylene	<0.000499	0.0998	0.0616	62	0.0703	70	72-131	13	25	mg/kg	06.04.18 11:56	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	106		111		74-126	%	06.04.18 11:56
1,2-Dichloroethane-D4	128	**	109		80-120	%	06.04.18 11:56
Toluene-D8	77		92		73-132	%	06.04.18 11:56

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference $[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD ResultMS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

Stafford, TX (281) 240-4200
Dallas, TX (214) 902-0300
Lubbock, TX (806) 794-1296

587348

CHAIN OF CUSTODY

Page 1 of 1

Revision 2016.1

Midland, TX (432) 704-5440
San Antonio, TX (210) 509-3334

Phoenix, AZ (480) 355-0900
Service Center - Baton Rouge, LA (832) 712-8143
Service Center - Amarillo, TX (806) 678-4514
Service Center - Hobbs, NM (575) 392-7550

www.xenco.com

Xenco Quote # Xenco Job #

587348

Client / Reporting Information		Project Information	
Company Name / Branch:	R2M ENG	Project Name/Number:	Yerabales Construction
Company Address:		Project Location:	Hobbs NM
Email:		Invoice To:	
Project Contact:		PO Number:	
Sampler's Name:			

No.	Field ID / Point of Collection	Collection			Matrix	# of bottles	Number of preserved bottles										Field Comments																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
		Sample Depth	Date	Time			HCl	NaOH/Zn	Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
1	SB-17	0'-6"	5-25	11:25	S	1										X																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												</

BTEx
TPH Ext
Chloride

H2O

H2O

H2O

H2O

Data Deliverable Information		Notes:	
☐ Same Day TAT	☒ 5 Day TAT	☐ Level II Std QC	☐ Level IV (Full Data Pkg / raw data)
☐ Next Day EMERGENCY	☐ 7 Day TAT	☐ Level III Std QC+ Forms	☐ TRRP Level IV
☐ 2 Day EMERGENCY	☐ Contract TAT	☐ Level 3 (CLP Forms)	☐ UST / RG -411
☐ 3 Day EMERGENCY		☐ Level II Report with TRRP checklist	

TAT Starts Day received by Lab, if received by 5:00 pm			
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY			
Relinquished by Sampler:	Received By:	Date Time:	Relinquished By:
1 MJD	1 JAL	5-25 16:10	2
Relinquished by:	Received By:	Date Time:	Relinquished By:
3	3		4
Relinquished by:	Received By:	Date Time:	Relinquished By:
5	5		4

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 fees 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.

On Ice Cooler Temp. Thermo, Corr. Factor

10.2/10.2



Setting the Standard since 1990

Stafford, TX (281) 240-4200
Dallas, TX (214) 902-0300

El Paso, TX (915) 585-3443
Lubbock, TX (806) 794-1296

CHAIN OF CUSTODY

Page 2 of 4

Phoenix, AZ (480) 355-0900
Service Center - Baton Rouge, LA (832) 712-8143

Service Center - Amarillo, TX (806) 678-4514
Service Center - Hobbs, NM (575) 392-7550

Revision 2016.1

www.xenco.com

Xenco Quote # 587348 Xenco Job #

Client / Reporting Information			Project Information			Analytical Information			Matrix Codes								
Company Name / Branch:			Project Name/Number:														
Company Address:			Project Location:														
Email:			Invoice To:														
Project Contact:			PO Number:														
Sampler's Name:																	
No.	Field ID / Point of Collection	Sample Depth	Collection Date	Time	Matrix	# of bottles	Number of preserved bottles					Field Comments					
							H ₂ O	NaOH/Zn	Acetate	HNO ₃	H ₂ SO ₄	NaOH	NaHSO ₄	MeOH	NONE		
1	SB-6	0-1'	5-25	1230	5	1											BTEX
2	"	1-2'															TPH EXT
3	"	2-3'															Chloride
4	SB-7	0-1'		1245													
5	"	1-2'															
6	"	2-3'															
7	SB-5	0-1'		1311													Au10
8	"	1-2'															
9	"	2-3'															Hu10
10	SB-16	0-1'		1331													Hu10

☐ Same Day TAT
☐ Next Day EMERGENCY
☐ 2 Day EMERGENCY
☐ 3 Day EMERGENCY

☐ 5 Day TAT
☐ 7 Day TAT
☐ Contract TAT

☐ Level II Std QC
☐ Level III Std QC+ Forms
☐ Level 3 (CLP Forms)
☐ Level II Report with TRRP checklist

☐ Level IV (Full Data Pkg raw data)
☐ TRRP Level IV
☐ UST / RG -411

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

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

Relinquished by Sampler:
1 MP5
Relinquished by:
3
Relinquished by:
5

Date Time:
5-25 1600
Date Time:
Date Time:
Date Time:

Received By:
2
Received By:
4
Received By:
5

Relinquished By:
2
Relinquished By:
4
Relinquished By:
5

FED-EX / UPS: Tracking #

On Ice ☐ Cooler Temp ☐ 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.

CHAIN OF CUSTODY

Page 3 of 4

Revision 2016.1



Setting the Standard since 1990

Stafford, TX (281) 240-4200
Dallas, TX (214) 902-0300

El Paso, TX (915) 585-3443
Lubbock, TX (806) 794-1296

Phoenix, AZ (480) 355-0900
Service Center - Baton Rouge, LA (832) 712-8143

Service Center- Amarillo, TX (806) 678-4514
Service Center- Hobbs, NM (575) 392-7550

www.xenco.com

Xenco Quote #

Xenco Job #

Matrix Codes

Client / Reporting Information		Project Information	
Company Name / Branch:		Project Name/Number:	
Company Address:		Project Location:	
Email:	Phone No:	Invoice To:	
Project Contact:	PO Number:		
Samplers's Name:			

No.	Field ID / Point of Collection	Collection		Matrix	# of bottles	Number of preserved bottles								Field Comments
		Sample Depth	Date	Time		HCl	NaOH/Zn	Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	
1	SB-10	1-2'	5-25	1351	5									X Chloride
2	SB-11	0-1'		1355	1									X TPH
3	"	1-2'		1355	1									X BTEX
4	SB-12	0-1'		1430	1									
5	"	1-2'		1430	1									
6	SB-1	0-1'		1510	1									
7	"	1-2'		1510	1									
8	SB-2	0-1'		1500	1									
9	"	1-2'		1500	1									

Turnaround Time (Business days)	Level II Std QC	Level IV (Full Data Pkg /raw data)
☐ Same Day TAT	☐ Level III Std QC+ Forms	TRRP Level IV
☐ Next Day EMERGENCY	☐ Level 3 (CLP Forms)	UST / RG -411
☐ 2 Day EMERGENCY	☐ Level II Report with TRRP checklist	
☐ 3 Day EMERGENCY		

TAT Starts Day received by Lab, if received by 5:00 pm		FED-EX / UPS: Tracking #
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY		
Relinquished by Sampler:	Relinquished By:	Received By:
1. WBS	5-25-16	2
Relinquished by:	Relinquished By:	Received By:
3	3	4
Relinquished by:	Relinquished By:	Received By:
5	5	4

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.

Client / Reporting Information				Project Information				Analytical Information				Matrix Codes				
Company Name / Branch: RW				Project Name/Number: Venables												
Company Address:				Project Location: Hobbs												
Email:				Invoice To:												
Project Contact:				Phone No:												
Sampler's Name:				PO Number:												
No.	Field ID / Point of Collection	Sample Depth	Collection Date	Time	Matrix	# of bottles	HCl	NaOH/Zn	Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Field Comments
1	SB-3	0-1'	5-25	1450	S	1									X	BTEX
2	"	1-2'		1450												Chloride
3	SB-4	0-1'		1440												TPH & BTEX
4	"	1-2'		1440												
5	overspray stockpile 1															
6	overspray stockpile 2															
7		0-6"														
8		0-6"														
9		0-6"														
10																

Data Deliverable Information			
☐ Same Day TAT	☒ 5 Day TAT	☐ Level II Std QC	☐ Level IV (Full Data Pkg /raw data)
☐ Next Day EMERGENCY	☐ 7 Day TAT	☐ Level III Std QC+ Forms	☐ TRRP Level IV
☐ 2 Day EMERGENCY	☐ Contract TAT	☐ Level 3 (CLP Forms)	☐ UST / RG -411
☐ 3 Day EMERGENCY		☐ Level II Report with TRRP checklist	

TAT Starts Day received by Lab, if received by 5:00 pm			
Relinquished by Sampler:	SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY		
Relinquished by:	Date Time:	Relinquished By:	Date Time:
1 MRD	5-25-10	2	
3		4	
5		5	

FED-EX / UPS: Tracking #			
On Ice	Cooler Temp.	Thermo. Qty. 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.



Inter-Office Shipment

Page 1 of 6

IOS Number **107870**

Date/Time: 05/25/18 17:45

Created by: Brenda Ward

Please send report to: Holly Taylor

Lab# From: **Lubbock**

Delivery Priority:

Address: 6701 Aberdeen, Suite 9 Lubbock, TX 79424

Lab# To: **Houston**

Air Bill No.: 772330632620

Phone:

E-Mail: holly.taylor@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
587348-001	S	SB-17(0"-6")	05/25/18 11:25	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-001	S	SB-17(0"-6")	05/25/18 11:25	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	
587348-001	S	SB-17(0"-6")	05/25/18 11:25	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	
587348-002	S	SB-17(6"-12")	05/25/18 11:25	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	
587348-002	S	SB-17(6"-12")	05/25/18 11:25	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	
587348-002	S	SB-17(6"-12")	05/25/18 11:25	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-003	S	SB-17(12"-18")	05/25/18 11:25	SW8260BTX	BTEX by SW 8260B	HOLD	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-003	S	SB-17(12"-18")	05/25/18 11:25	E300	Inorganic Anions by EPA 300/300.1	HOLD	06/22/18	HTA	CL	
587348-003	S	SB-17(12"-18")	05/25/18 11:25	SW8015B_NM	TPH by SW 8015B	HOLD	06/08/18	HTA	PHCC10C28	
587348-003	S	SB-17(12"-18")	05/25/18 11:25	E300	Inorganic Anions by EPA 300/300.1	HOLD	06/22/18	HTA	CL	
587348-003	S	SB-17(12"-18")	05/25/18 11:25	SW8015B_NM	TPH by SW 8015B	HOLD	06/08/18	HTA	PHCC10C28	
587348-004	S	SB-17(18"-24")	05/25/18 11:25	E300	Inorganic Anions by EPA 300/300.1	HOLD	06/22/18	HTA	CL	
587348-004	S	SB-17(18"-24")	05/25/18 11:25	SW8015B_NM	TPH by SW 8015B	HOLD	06/08/18	HTA	PHCC10C28	
587348-004	S	SB-17(18"-24")	05/25/18 11:25	SW8015B_NM	TPH by SW 8015B	HOLD	06/08/18	HTA	PHCC10C28	
587348-004	S	SB-17(18"-24")	05/25/18 11:25	SW8260BTX	BTEX by SW 8260B	HOLD	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-004	S	SB-17(18"-24")	05/25/18 11:25	E300	Inorganic Anions by EPA 300/300.1	HOLD	06/22/18	HTA	CL	
587348-005	S	SB-8(0"-6")	05/25/18 11:25	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-005	S	SB-8(0"-6")	05/25/18 11:25	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	
587348-005	S	SB-8(0"-6")	05/25/18 11:25	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	
587348-006	S	SB-8(6"-18")	05/25/18 11:25	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	
587348-006	S	SB-8(6"-18")	05/25/18 11:25	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	
587348-006	S	SB-8(6"-18")	05/25/18 11:25	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-007	S	SB-8(12"-18")	05/25/18 11:25	SW8015B_NM	TPH by SW 8015B	HOLD	06/08/18	HTA	PHCC10C28	
587348-007	S	SB-8(12"-18")	05/25/18 11:25	E300	Inorganic Anions by EPA 300/300.1	HOLD	06/22/18	HTA	CL	
587348-007	S	SB-8(12"-18")	05/25/18 11:25	SW8260BTX	BTEX by SW 8260B	HOLD	06/08/18	HTA	BZ BZME EBZ XYLMP X	



Inter-Office Shipment

Page 2 of 6

IOS Number **107870**

Date/Time: 05/25/18 17:45

Created by: Brenda Ward

Please send report to: Holly Taylor

Lab# From: **Lubbock**

Delivery Priority:

Address: 6701 Aberdeen, Suite 9 Lubbock, TX 79424

Lab# To: **Houston**

Air Bill No.: 772330632620

Phone:

E-Mail: holly.taylor@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
587348-007	S	SB-8(12"-18")	05/25/18 11:25	E300	Inorganic Anions by EPA 300/300.1	HOLD	06/22/18	HTA	CL	
587348-007	S	SB-8(12"-18")	05/25/18 11:25	SW8015B_NM	TPH by SW 8015B	HOLD	06/08/18	HTA	PHCC10C28	
587348-008	S	SB-8(18"-24")	05/25/18 11:25	E300	Inorganic Anions by EPA 300/300.1	HOLD	06/22/18	HTA	CL	
587348-008	S	SB-8(18"-24")	05/25/18 11:25	SW8015B_NM	TPH by SW 8015B	HOLD	06/08/18	HTA	PHCC10C28	
587348-008	S	SB-8(18"-24")	05/25/18 11:25	E300	Inorganic Anions by EPA 300/300.1	HOLD	06/22/18	HTA	CL	
587348-008	S	SB-8(18"-24")	05/25/18 11:25	SW8015B_NM	TPH by SW 8015B	HOLD	06/08/18	HTA	PHCC10C28	
587348-008	S	SB-8(18"-24")	05/25/18 11:25	SW8260BTX	BTEX by SW 8260B	HOLD	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-009	S	SB-9(0-12)	05/25/18 11:25	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-009	S	SB-9(0-12)	05/25/18 11:25	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	
587348-009	S	SB-9(0-12)	05/25/18 11:25	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	
587348-010	S	SB-9(1-2)	05/25/18 11:25	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	
587348-010	S	SB-9(1-2)	05/25/18 11:25	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	
587348-010	S	SB-9(1-2)	05/25/18 11:25	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-011	S	SB-6(0-1)	05/25/18 12:30	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-011	S	SB-6(0-1)	05/25/18 12:30	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	
587348-011	S	SB-6(0-1)	05/25/18 12:30	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	
587348-012	S	SB-6(1-2)	05/25/18 12:30	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	
587348-012	S	SB-6(1-2)	05/25/18 12:30	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	
587348-012	S	SB-6(1-2)	05/25/18 12:30	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-013	S	SB-6(2-3)	05/25/18 12:30	SW8260BTX	BTEX by SW 8260B	HOLD	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-013	S	SB-6(2-3)	05/25/18 12:30	SW8015B_NM	TPH by SW 8015B	HOLD	06/08/18	HTA	PHCC10C28	
587348-013	S	SB-6(2-3)	05/25/18 12:30	E300	Inorganic Anions by EPA 300/300.1	HOLD	06/22/18	HTA	CL	
587348-013	S	SB-6(2-3)	05/25/18 12:30	SW8015B_NM	TPH by SW 8015B	HOLD	06/08/18	HTA	PHCC10C28	
587348-013	S	SB-6(2-3)	05/25/18 12:30	E300	Inorganic Anions by EPA 300/300.1	HOLD	06/22/18	HTA	CL	
587348-014	S	SB-7(0-1)	05/25/18 12:45	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	



Inter-Office Shipment

Page 3 of 6

IOS Number **107870**

Date/Time: 05/25/18 17:45

Created by: Brenda Ward

Please send report to: Holly Taylor

Lab# From: **Lubbock**

Delivery Priority:

Address: 6701 Aberdeen, Suite 9 Lubbock, TX 79424

Lab# To: **Houston**

Air Bill No.: 772330632620

Phone:

E-Mail: holly.taylor@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
587348-014	S	SB-7(0-1)	05/25/18 12:45	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	
587348-014	S	SB-7(0-1)	05/25/18 12:45	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-015	S	SB-7(1-2)	05/25/18 12:45	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-015	S	SB-7(1-2)	05/25/18 12:45	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	
587348-015	S	SB-7(1-2)	05/25/18 12:45	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	
587348-016	S	SB-7(2-3)	05/25/18 12:45	SW8015B_NM	TPH by SW 8015B	HOLD	06/08/18	HTA	PHCC10C28	
587348-016	S	SB-7(2-3)	05/25/18 12:45	E300	Inorganic Anions by EPA 300/300.1	HOLD	06/22/18	HTA	CL	
587348-016	S	SB-7(2-3)	05/25/18 12:45	SW8260BTX	BTEX by SW 8260B	HOLD	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-016	S	SB-7(2-3)	05/25/18 12:45	E300	Inorganic Anions by EPA 300/300.1	HOLD	06/22/18	HTA	CL	
587348-016	S	SB-7(2-3)	05/25/18 12:45	SW8015B_NM	TPH by SW 8015B	HOLD	06/08/18	HTA	PHCC10C28	
587348-017	S	SB-5(0-1)	05/25/18 13:11	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-017	S	SB-5(0-1)	05/25/18 13:11	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	
587348-017	S	SB-5(0-1)	05/25/18 13:11	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	
587348-018	S	SB-5(1-2)	05/25/18 13:11	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	
587348-018	S	SB-5(1-2)	05/25/18 13:11	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	
587348-018	S	SB-5(1-2)	05/25/18 13:11	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-019	S	SB-5(2-3)	05/25/18 13:11	SW8260BTX	BTEX by SW 8260B	HOLD	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-019	S	SB-5(2-3)	05/25/18 13:11	E300	Inorganic Anions by EPA 300/300.1	HOLD	06/22/18	HTA	CL	
587348-019	S	SB-5(2-3)	05/25/18 13:11	SW8015B_NM	TPH by SW 8015B	HOLD	06/08/18	HTA	PHCC10C28	
587348-019	S	SB-5(2-3)	05/25/18 13:11	E300	Inorganic Anions by EPA 300/300.1	HOLD	06/22/18	HTA	CL	
587348-019	S	SB-5(2-3)	05/25/18 13:11	SW8015B_NM	TPH by SW 8015B	HOLD	06/08/18	HTA	PHCC10C28	
587348-020	S	SB-10(0-1)	05/25/18 13:31	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	
587348-020	S	SB-10(0-1)	05/25/18 13:31	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	
587348-020	S	SB-10(0-1)	05/25/18 13:31	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-021	S	SB-10(1-2)	05/25/18 13:31	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	



Inter-Office Shipment

Page 4 of 6

IOS Number **107870**

Date/Time: 05/25/18 17:45

Created by: Brenda Ward

Please send report to: Holly Taylor

Lab# From: **Lubbock**

Delivery Priority:

Address: 6701 Aberdeen, Suite 9 Lubbock, TX 79424

Lab# To: **Houston**

Air Bill No.: 772330632620

Phone:

E-Mail: holly.taylor@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
587348-021	S	SB-10(1-2)	05/25/18 13:31	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	
587348-021	S	SB-10(1-2)	05/25/18 13:31	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	
587348-022	S	SB-11(0-1)	05/25/18 13:55	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	
587348-022	S	SB-11(0-1)	05/25/18 13:55	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	
587348-022	S	SB-11(0-1)	05/25/18 13:55	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-023	S	SB-11(1-2)	05/25/18 13:55	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-023	S	SB-11(1-2)	05/25/18 13:55	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	
587348-023	S	SB-11(1-2)	05/25/18 13:55	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	
587348-024	S	SB-12(0-1)	05/25/18 14:30	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	
587348-024	S	SB-12(0-1)	05/25/18 14:30	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	
587348-024	S	SB-12(0-1)	05/25/18 14:30	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-025	S	SB-12(1-2)	05/25/18 14:30	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-025	S	SB-12(1-2)	05/25/18 14:30	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	
587348-025	S	SB-12(1-2)	05/25/18 14:30	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	
587348-026	S	SB-1(0-1)	05/25/18 15:10	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	
587348-026	S	SB-1(0-1)	05/25/18 15:10	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	
587348-026	S	SB-1(0-1)	05/25/18 15:10	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-027	S	SB-1(1-2)	05/25/18 15:10	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-027	S	SB-1(1-2)	05/25/18 15:10	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	
587348-027	S	SB-1(1-2)	05/25/18 15:10	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	
587348-028	S	SB-2(0-1)	05/25/18 15:00	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	
587348-028	S	SB-2(0-1)	05/25/18 15:00	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	
587348-028	S	SB-2(0-1)	05/25/18 15:00	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-029	S	SB-2(1-2)	05/25/18 15:00	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-029	S	SB-2(1-2)	05/25/18 15:00	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	



Inter-Office Shipment

Page 5 of 6

IOS Number **107870**

Date/Time: 05/25/18 17:45

Created by: Brenda Ward

Please send report to: Holly Taylor

Lab# From: **Lubbock**

Delivery Priority:

Address: 6701 Aberdeen, Suite 9 Lubbock, TX 79424

Lab# To: **Houston**

Air Bill No.: 772330632620

Phone:

E-Mail: holly.taylor@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
587348-029	S	SB-2(1-2)	05/25/18 15:00	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	
587348-030	S	SB-3(0-1)	05/25/18 14:50	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	
587348-030	S	SB-3(0-1)	05/25/18 14:50	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	
587348-030	S	SB-3(0-1)	05/25/18 14:50	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-031	S	SB-3(1-2)	05/25/18 14:50	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-031	S	SB-3(1-2)	05/25/18 14:50	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	
587348-031	S	SB-3(1-2)	05/25/18 14:50	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	
587348-032	S	SB-4(0-1)	05/25/18 14:40	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	
587348-032	S	SB-4(0-1)	05/25/18 14:40	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	
587348-032	S	SB-4(0-1)	05/25/18 14:40	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-033	S	SB-4(1-2)	05/25/18 14:40	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-033	S	SB-4(1-2)	05/25/18 14:40	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	
587348-033	S	SB-4(1-2)	05/25/18 14:40	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	
587348-034	S	Overspray Stockpile 1	05/25/18 00:00	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	
587348-034	S	Overspray Stockpile 1	05/25/18 00:00	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	
587348-034	S	Overspray Stockpile 1	05/25/18 00:00	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-035	S	Overspray Stockpile 2	05/25/18 00:00	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-035	S	Overspray Stockpile 2	05/25/18 00:00	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	
587348-035	S	Overspray Stockpile 2	05/25/18 00:00	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	
587348-036	S	1(0-6)	05/25/18 00:00	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	
587348-036	S	1(0-6)	05/25/18 00:00	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	
587348-036	S	1(0-6)	05/25/18 00:00	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-037	S	2(0-6)	05/25/18 00:00	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	
587348-037	S	2(0-6)	05/25/18 00:00	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	
587348-037	S	2(0-6)	05/25/18 00:00	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	



Inter-Office Shipment

Page 6 of 6

IOS Number **107870**

Date/Time: 05/25/18 17:45

Created by: Brenda Ward

Please send report to: Holly Taylor

Lab# From: **Lubbock**

Delivery Priority:

Address: 6701 Aberdeen, Suite 9 Lubbock, TX 79424

Lab# To: **Houston**

Air Bill No.: 772330632620

Phone:

E-Mail: holly.taylor@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
587348-038	S	3 (0-6)	05/25/18 00:00	SW8015B_NM	TPH by SW 8015B	06/01/18	06/08/18	HTA	PHCC10C28	
587348-038	S	3 (0-6)	05/25/18 00:00	E300	Inorganic Anions by EPA 300/300.1	06/01/18	06/22/18	HTA	CL	
587348-038	S	3 (0-6)	05/25/18 00:00	SW8260BTX	BTEX by SW 8260B	06/01/18	06/08/18	HTA	BZ BZME EBZ XYLMP X	

Inter Office Shipment or Sample Comments:

Relinquished By

Brenda Ward

Received By:

Maria Paula Guerra

Date Relinquished: 05/29/2018

Date Received: 05/26/2018 09:20

Cooler Temperature: 1.1



XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 107870

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR:HOU068

Sent By: Brenda Ward

Date Sent: 05/25/2018 05:45 PM

Received By: Maria Paula Guerra

Date Received: 05/26/2018 09:20 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	1.1
#2 *Shipping container in good condition?	Yes
#3 *Samples received with appropriate temperature?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 *Custody Seals Signed and dated for Containers/coolers	Yes
#6 *IOS present?	Yes
#7 Any missing/extra samples?	No
#8 IOS agrees with sample label(s)/matrix?	Yes
#9 Sample matrix/ properties agree with IOS?	Yes
#10 Samples in proper container/ bottle?	Yes
#11 Samples properly preserved?	Yes
#12 Sample container(s) intact?	Yes
#13 Sufficient sample amount for indicated test(s)?	Yes
#14 All samples received within hold time?	Yes

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ Contacted by : _____ Date: _____

Checklist reviewed by:

Maria Paula Guerra

Date: 05/26/2018



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In



Client: R2M Engineering

Date/ Time Received: 05/25/2018 04:10:00 PM

Work Order #: 587348

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)?	10.2
#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?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	Yes Houston Xenco
#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: 05/29/2018

Checklist reviewed by:


Holly Taylor

Date: 05/29/2018



Certificate of Analysis Summary 587854

R2M Engineering, Lubbock, TX

Project Name: Venables

Project Id:

Contact: Mason Sanders

Project Location: Hobbs, NM

Date Received in Lab: Thu May-31-18 04:00 pm

Report Date: 15-JUN-18

Project Manager: Holly Taylor

Analysis Requested	Lab Id:	587854-001	587854-003	587854-005	587854-007	587854-012	587854-013
	Field Id:	Con 2001	Con 2002	Con 2003	Con 2004	SB-2.2	SB-2.3
	Depth:					0-1	0-1
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	May-31-18 07:30	May-31-18 07:33	May-31-18 07:39	May-31-18 07:44	May-31-18 08:30	May-31-18 08:40
BTEX by SW 8260B SUB: TX104704215-18-26	Extracted:	Jun-07-18 16:45	Jun-08-18 18:30	Jun-08-18 18:30	Jun-09-18 12:05	Jun-04-18 18:10	Jun-04-18 18:25
	Analyzed:	Jun-07-18 21:52	Jun-09-18 01:21	Jun-09-18 01:05	Jun-09-18 13:41	Jun-04-18 22:36	Jun-05-18 00:29
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
		<0.000499 0.000998	<0.000502 0.00100	<0.000499 0.000998	<0.000494 0.000988	<0.000497 0.000994	<0.000496 0.000992
Benzene		<0.000499 0.000998	<0.000502 0.00100	0.00257 0.000998	0.00335 0.000988	<0.000497 0.000994	<0.000496 0.000992
Toluene		<0.000499 0.000998	<0.000502 0.00100	<0.000499 0.000998	<0.000494 0.000988	<0.000497 0.000994	<0.000496 0.000992
Ethylbenzene		<0.000499 0.000998	<0.000502 0.00100	<0.000499 0.000998	<0.000494 0.000988	<0.000497 0.000994	<0.000496 0.000992
m,p-Xylenes		<0.000998 0.00200	<0.00100 0.00201	<0.000998 0.00200	0.00203 0.00198	<0.000994 0.00199	<0.000992 0.00198
o-Xylene		<0.000499 0.000998	<0.000502 0.00100	0.00104 0.000998	0.000879 J 0.000988	<0.000497 0.000994	<0.000496 0.000992
Total Xylenes		<0.000499 0.000998	<0.000502 0.00100	0.00104 0.000998	0.00291 0.000988	<0.000497 0.000994	<0.000496 0.000992
Total BTEX		<0.000499 0.000998	<0.000502 0.00100	0.00361 0.000998	0.00626 0.000988	<0.000497 0.000994	<0.000496 0.000992
Inorganic Anions by EPA 300/300.1 SUB: TX104704215-18-26	Extracted:	Jun-05-18 17:04	Jun-05-18 17:04	Jun-05-18 17:04	Jun-06-18 09:08	Jun-05-18 17:04	Jun-05-18 17:04
	Analyzed:	Jun-06-18 08:04	Jun-06-18 08:18	Jun-06-18 08:31	Jun-07-18 06:03	Jun-06-18 08:45	Jun-06-18 09:27
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
		592 9.88	11.7 9.94	7.65 J 9.75	884 X 9.94	13.2 9.82	17.6 9.92
Chloride		592 9.88	11.7 9.94	7.65 J 9.75	884 X 9.94	13.2 9.82	17.6 9.92
TPH by SW 8015B SUB: TX104704215-18-26	Extracted:	Jun-07-18 13:30	Jun-07-18 13:33	Jun-07-18 13:36	Jun-08-18 12:15	Jun-07-18 13:21	Jun-07-18 13:39
	Analyzed:	Jun-10-18 06:43	Jun-10-18 07:04	Jun-10-18 07:25	Jun-11-18 02:48	Jun-09-18 23:44	Jun-10-18 00:47
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
		59.3 14.9	78.2 14.9	102 14.9	161 15.0	<9.86 15.0	<9.81 14.9
C6-C10 Gasoline Range Hydrocarbons		59.3 14.9	78.2 14.9	102 14.9	161 15.0	<9.86 15.0	<9.81 14.9
C10-C28 Diesel Range Organics		2040 14.9	899 14.9	1870 14.9	4200 15.0	<9.86 15.0	<9.81 14.9
C28-C35 Oil Range Hydrocarbons		216 14.9	97.6 14.9	222 14.9	429 15.0	<9.86 15.0	<9.81 14.9
Total TPH		2320 14.9	1070 14.9	2190 14.9	4790 15.0	<9.86 15.0	<9.81 14.9

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

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

Holly Taylor
Project Manager



Certificate of Analysis Summary 587854

R2M Engineering, Lubbock, TX

Project Name: Venables

Project Id:

Contact: Mason Sanders

Project Location: Hobbs, NM

Date Received in Lab: Thu May-31-18 04:00 pm

Report Date: 15-JUN-18

Project Manager: Holly Taylor

Analysis Requested	Lab Id:	587854-014	587854-023	587854-024	587854-025	587854-026	587854-027
	Field Id:	SB-2.4	Stockpile 3	Stockpile 4	Pit Bottom	SW Confirmation 0-1	SW Confirmation 1-2
	Depth:	0-1	0-1	0-1	0-1	0-1	1-2
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	May-31-18 08:51	May-31-18 11:00	May-31-18 13:30	May-31-18 13:25	May-31-18 11:25	May-31-18 11:25
BTEX by SW 8260B SUB: TX104704215-18-26	Extracted:	Jun-04-18 18:25	Jun-07-18 16:45	Jun-04-18 18:25	Jun-09-18 11:40	Jun-04-18 18:25	Jun-04-18 18:25
	Analyzed:	Jun-05-18 00:45	Jun-07-18 22:08	Jun-05-18 01:01	Jun-09-18 12:53	Jun-05-18 01:18	Jun-05-18 01:34
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.000500 0.00100	<0.000500 0.00100	<0.000496 0.000992	<0.000501 0.00100	<0.000499 0.000998	<0.000496 0.000992
Toluene		<0.000500 0.00100	<0.000500 0.00100	<0.000496 0.000992	<0.000501 0.00100	<0.000499 0.000998	<0.000496 0.000992
Ethylbenzene		<0.000500 0.00100	<0.000500 0.00100	<0.000496 0.000992	<0.000501 0.00100	<0.000499 0.000998	<0.000496 0.000992
m,p-Xylenes		<0.00100 0.00200	<0.00100 0.00200	<0.000992 0.00198	<0.00100 0.00200	<0.000998 0.00200	<0.000992 0.00198
o-Xylene		<0.000500 0.00100	<0.000500 0.00100	0.00548 0.000992	<0.000501 0.00100	<0.000499 0.000998	<0.000496 0.000992
Total Xylenes		<0.000500 0.00100	<0.000500 0.00100	0.00548 0.000992	<0.000501 0.00100	<0.000499 0.000998	<0.000496 0.000992
Total BTEX		<0.000500 0.00100	<0.000500 0.00100	0.00548 0.000992	<0.000501 0.00100	<0.000499 0.000998	<0.000496 0.000992
Inorganic Anions by EPA 300/300.1 SUB: TX104704215-18-26	Extracted:	Jun-05-18 17:04	Jun-06-18 09:08	Jun-06-18 09:08	Jun-06-18 09:08	Jun-05-18 17:04	Jun-05-18 17:04
	Analyzed:	Jun-06-18 09:41	Jun-07-18 06:36	Jun-07-18 06:46	Jun-07-18 06:57	Jun-06-18 09:54	Jun-06-18 16:37
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		35.8 9.94	477 9.86	65.4 9.88	10.6 9.90	1.64 J 9.96	2.97 J 9.94
TPH by SW 8015B SUB: TX104704215-18-26	Extracted:	Jun-07-18 13:42	Jun-08-18 12:18	Jun-08-18 12:21	Jun-08-18 12:24	Jun-07-18 13:45	Jun-07-18 13:48
	Analyzed:	Jun-10-18 01:08	Jun-10-18 21:54	Jun-10-18 22:15	Jun-10-18 22:36	Jun-10-18 01:29	Jun-10-18 01:50
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
C6-C10 Gasoline Range Hydrocarbons		<9.84 14.9	<9.84 14.9	28.1 14.9	24.6 15.0	<9.84 14.9	<9.85 15.0
C10-C28 Diesel Range Organics		<9.84 14.9	92.4 14.9	52.1 14.9	15.0 J 15.0	<9.84 14.9	<9.85 15.0
C28-C35 Oil Range Hydrocarbons		<9.84 14.9	25.4 14.9	14.7 J 14.9	10.4 J 15.0	<9.84 14.9	<9.85 15.0
Total TPH		<9.84 14.9	118 14.9	94.9 14.9	50.0 15.0	<9.84 14.9	<9.85 15.0

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

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

Holly Taylor
Project Manager



Certificate of Analysis Summary 587854

R2M Engineering, Lubbock, TX

Project Name: Venables

Project Id:

Contact: Mason Sanders

Project Location: Hobbs, NM

Date Received in Lab: Thu May-31-18 04:00 pm

Report Date: 15-JUN-18

Project Manager: Holly Taylor

Analysis Requested	Lab Id:	587854-028	587854-029	587854-030	587854-031	587854-032	587854-033
	Field Id:	SW Confirmation 2-3	SW Confirmation 3-4	SW Confirmation 4-5	SW Confirmation 5-6	SW Confirmation 6-7	SW Confirmation 7-8
	Depth:	2-3	3-4	4-5	5-6	6-7	7-8
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	May-31-18 11:25	May-31-18 11:25	May-31-18 11:25	May-31-18 11:25	May-31-18 11:25	May-31-18 11:25
BTEX by SW 8260B SUB: TX104704215-18-26	Extracted:	Jun-09-18 11:40	Jun-04-18 18:25	Jun-04-18 18:25	Jun-04-18 18:25	Jun-07-18 16:45	Jun-07-18 16:45
	Analyzed:	Jun-09-18 13:09	Jun-05-18 01:50	Jun-05-18 02:06	Jun-05-18 02:22	Jun-07-18 18:21	Jun-07-18 18:38
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.000502 0.00100	<0.000501 0.00100	<0.000497 0.000994	<0.000498 0.000996	<0.000502 0.00100	<0.000502 0.00100
Toluene		0.000602 JX 0.00100	<0.000501 0.00100	<0.000497 0.000994	<0.000498 0.000996	<0.000502 0.00100	<0.000502 0.00100
Ethylbenzene		<0.000502 0.00100	<0.000501 0.00100	<0.000497 0.000994	<0.000498 0.000996	<0.000502 0.00100	<0.000502 0.00100
m,p-Xylenes		<0.00100 0.00201	<0.00100 0.00200	<0.000994 0.00199	<0.000996 0.00199	<0.00100 0.00201	<0.00100 0.00201
o-Xylene		<0.000502 0.00100	<0.000501 0.00100	<0.000497 0.000994	<0.000498 0.000996	<0.000502 0.00100	<0.000502 0.00100
Total Xylenes		<0.000502 0.00100	<0.000501 0.00100	<0.000497 0.000994	<0.000498 0.000996	<0.000502 0.00100	<0.000502 0.00100
Total BTEX		0.000602 J 0.00100	<0.000501 0.00100	<0.000497 0.000994	<0.000498 0.000996	<0.000502 0.00100	<0.000502 0.00100
Inorganic Anions by EPA 300/300.1 SUB: TX104704215-18-26	Extracted:	Jun-05-18 17:04	Jun-05-18 17:04	Jun-05-18 17:04	Jun-05-18 17:04	Jun-05-18 17:04	Jun-05-18 17:04
	Analyzed:	Jun-06-18 16:51	Jun-06-18 17:04	Jun-06-18 17:18	Jun-06-18 17:32	Jun-06-18 18:41	Jun-06-18 18:55
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		1.50 J 9.92	1.04 J 9.82	3.10 J 9.78	4.84 J 9.75	16.3 9.77	21.5 9.78
TPH by SW 8015B SUB: TX104704215-18-26	Extracted:	Jun-07-18 13:51	Jun-07-18 13:54	Jun-07-18 13:57	Jun-07-18 14:00	Jun-07-18 14:03	Jun-07-18 14:06
	Analyzed:	Jun-10-18 02:11	Jun-10-18 02:32	Jun-10-18 02:52	Jun-10-18 03:14	Jun-10-18 03:35	Jun-10-18 04:16
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
C6-C10 Gasoline Range Hydrocarbons		<9.85 15.0	<9.82 14.9	<9.84 14.9	<9.78 14.9	<9.78 14.9	<9.82 14.9
C10-C28 Diesel Range Organics		<9.85 15.0	<9.82 14.9	<9.84 14.9	<9.78 14.9	<9.78 14.9	<9.82 14.9
C28-C35 Oil Range Hydrocarbons		<9.85 15.0	<9.82 14.9	<9.84 14.9	<9.78 14.9	<9.78 14.9	<9.82 14.9
Total TPH		<9.85 15.0	<9.82 14.9	<9.84 14.9	<9.78 14.9	<9.78 14.9	<9.82 14.9

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

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

Holly Taylor
Project Manager



Certificate of Analysis Summary 587854

R2M Engineering, Lubbock, TX

Project Name: Venables

Project Id:

Contact: Mason Sanders

Project Location: Hobbs, NM

Date Received in Lab: Thu May-31-18 04:00 pm

Report Date: 15-JUN-18

Project Manager: Holly Taylor

Analysis Requested	Lab Id:	587854-034	587854-035	587854-036	587854-037	587854-038	587854-039
	Field Id:	SW Confirmation 8-9	SW Confirmation 9-10	SE Confirmation 0-1	SE Confirmation 1-2	SE Confirmation 2-3	SE Confirmation 3-4
	Depth:	8-9	9-10	0-1	1-2	2-3	3-4
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	May-31-18 11:25	May-31-18 11:25	May-31-18 11:15	May-31-18 11:15	May-31-18 11:15	May-31-18 11:15
BTEX by SW 8260B SUB: TX104704215-18-26	Extracted:	Jun-04-18 18:25	Jun-04-18 18:25	Jun-04-18 18:25	Jun-04-18 18:25	Jun-14-18 08:57	Jun-04-18 18:25
	Analyzed:	Jun-05-18 02:38	Jun-05-18 02:54	Jun-05-18 03:11	Jun-05-18 03:27	Jun-14-18 13:48	Jun-05-18 03:43
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.000500 0.00100	<0.000502 0.00100	<0.000500 0.00100	<0.000501 0.00100	<0.000496 0.000992	<0.000498 0.000996
Toluene		<0.000500 0.00100	<0.000502 0.00100	0.000740 J 0.00100	<0.000501 0.00100	<0.000496 0.000992	<0.000498 0.000996
Ethylbenzene		<0.000500 0.00100	<0.000502 0.00100	<0.000500 0.00100	<0.000501 0.00100	<0.000496 0.000992	<0.000498 0.000996
m,p-Xylenes		<0.00100 0.00200	<0.00100 0.00201	<0.00100 0.00200	<0.00100 0.00200	<0.000992 0.00198	<0.000996 0.00199
o-Xylene		<0.000500 0.00100	<0.000502 0.00100	<0.000500 0.00100	<0.000501 0.00100	<0.000496 0.000992	<0.000498 0.000996
Total Xylenes		<0.000500 0.00100	<0.000502 0.00100	<0.000500 0.00100	<0.000501 0.00100	<0.000496 0.000992	<0.000498 0.000996
Total BTEX		<0.000500 0.00100	<0.000502 0.00100	0.000740 J 0.00100	<0.000501 0.00100	<0.000496 0.000992	<0.000498 0.000996
Inorganic Anions by EPA 300/300.1 SUB: TX104704215-18-26	Extracted:	Jun-05-18 17:04	Jun-05-18 17:04	Jun-05-18 17:04	Jun-05-18 17:04	Jun-05-18 17:04	Jun-06-18 09:08
	Analyzed:	Jun-06-18 19:09	Jun-06-18 19:23	Jun-06-18 19:37	Jun-06-18 19:51	Jun-06-18 20:04	Jun-07-18 07:30
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		18.3 9.73	8.76 J 9.75	2.97 J 9.77	3.05 J 9.78	2.27 J 9.88	2.43 J 9.92
TPH by SW 8015B SUB: TX104704215-18-26	Extracted:	Jun-07-18 14:09	Jun-07-18 14:12	Jun-07-18 14:15	Jun-07-18 14:18	Jun-07-18 14:21	Jun-07-18 14:24
	Analyzed:	Jun-10-18 04:37	Jun-10-18 04:58	Jun-10-18 05:19	Jun-10-18 05:40	Jun-10-18 06:01	Jun-10-18 06:22
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
C6-C10 Gasoline Range Hydrocarbons		<9.79 14.9	<9.80 14.9	<9.80 14.9	<9.82 14.9	<9.82 14.9	<9.85 15.0
C10-C28 Diesel Range Organics		<9.79 14.9	<9.80 14.9	<9.80 14.9	<9.82 14.9	<9.82 14.9	<9.85 15.0
C28-C35 Oil Range Hydrocarbons		<9.79 14.9	<9.80 14.9	<9.80 14.9	<9.82 14.9	<9.82 14.9	<9.85 15.0
Total TPH		<9.79 14.9	<9.80 14.9	<9.80 14.9	<9.82 14.9	<9.82 14.9	<9.85 15.0

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

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

Holly Taylor
Project Manager



Certificate of Analysis Summary 587854

R2M Engineering, Lubbock, TX

Project Name: Venables

Project Id:

Contact: Mason Sanders

Project Location: Hobbs, NM

Date Received in Lab: Thu May-31-18 04:00 pm

Report Date: 15-JUN-18

Project Manager: Holly Taylor

Analysis Requested	Lab Id:	587854-040	587854-041	587854-042	587854-043	587854-044	587854-045
	Field Id:	SE Confirmation 4-5	SE Confirmation 5-6	SE Confirmation 6-7	SE Confirmation 7-8	SE Confirmation 8-9	SE Confirmation 9-10
	Depth:	4-5	5-6	6-7	7-8	8-9	9-10
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	May-31-18 11:15	May-31-18 11:15	May-31-18 11:15	May-31-18 11:15	May-31-18 11:15	May-31-18 11:15
BTEX by SW 8260B SUB: TX104704215-18-26	Extracted:	Jun-07-18 16:45	Jun-07-18 16:45	Jun-07-18 16:45	Jun-07-18 15:00	Jun-07-18 16:45	Jun-07-18 16:45
	Analyzed:	Jun-07-18 19:11	Jun-07-18 19:27	Jun-07-18 19:43	Jun-07-18 16:58	Jun-07-18 19:59	Jun-07-18 20:15
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
		<0.000504 0.00101	<0.000497 0.000994	<0.000497 0.000994	<0.000501 0.00100	<0.000498 0.000996	<0.000495 0.000990
Benzene		<0.000504 0.00101	<0.000497 0.000994	<0.000497 0.000994	<0.000501 0.00100	<0.000498 0.000996	<0.000495 0.000990
Toluene		<0.000504 0.00101	<0.000497 0.000994	<0.000497 0.000994	<0.000501 0.00100	<0.000498 0.000996	<0.000495 0.000990
Ethylbenzene		<0.000504 0.00101	<0.000497 0.000994	<0.000497 0.000994	<0.000501 0.00100	<0.000498 0.000996	<0.000495 0.000990
m,p-Xylenes		<0.00101 0.00202	<0.000994 0.00199	<0.000994 0.00199	<0.00100 0.00200	<0.000996 0.00199	<0.000990 0.00198
o-Xylene		<0.000504 0.00101	<0.000497 0.000994	<0.000497 0.000994	<0.000501 0.00100	<0.000498 0.000996	<0.000495 0.000990
Total Xylenes		<0.000504 0.00101	<0.000497 0.000994	<0.000497 0.000994	<0.000501 0.00100	<0.000498 0.000996	<0.000495 0.000990
Total BTEX		<0.000504 0.00101	<0.000497 0.000994	<0.000497 0.000994	<0.000501 0.00100	<0.000498 0.000996	<0.000495 0.000990
Inorganic Anions by EPA 300/300.1 SUB: TX104704215-18-26	Extracted:	Jun-06-18 09:08	Jun-06-18 09:08	Jun-06-18 09:08	Jun-06-18 09:08	Jun-06-18 09:08	Jun-06-18 09:08
	Analyzed:	Jun-07-18 07:40	Jun-07-18 07:51	Jun-07-18 08:02	Jun-07-18 08:13	Jun-07-18 08:24	Jun-07-18 08:34
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
		4.55 J 9.82	3.20 J 9.94	3.22 J 9.96	3.67 J 9.98	2.23 J 9.82	2.40 J 9.94
Chloride		4.55 J 9.82	3.20 J 9.94	3.22 J 9.96	3.67 J 9.98	2.23 J 9.82	2.40 J 9.94
TPH by SW 8015B SUB: TX104704215-18-26	Extracted:	Jun-07-18 16:42	Jun-07-18 16:42	Jun-07-18 16:42	Jun-07-18 16:42	Jun-07-18 16:42	Jun-07-18 16:42
	Analyzed:	Jun-10-18 09:10	Jun-10-18 10:13	Jun-10-18 10:34	Jun-10-18 10:55	Jun-10-18 11:16	Jun-10-18 11:37
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
		<9.88 15.0	<9.88 15.0	<9.88 15.0	<9.88 15.0	<9.88 15.0	<9.88 15.0
C6-C10 Gasoline Range Hydrocarbons		<9.88 15.0	<9.88 15.0	<9.88 15.0	<9.88 15.0	<9.88 15.0	<9.88 15.0
C10-C28 Diesel Range Organics		<9.88 15.0	<9.88 15.0	<9.88 15.0	<9.88 15.0	<9.88 15.0	<9.88 15.0
C28-C35 Oil Range Hydrocarbons		<9.88 15.0	<9.88 15.0	<9.88 15.0	<9.88 15.0	<9.88 15.0	<9.88 15.0
Total TPH		<9.88 15.0	<9.88 15.0	<9.88 15.0	<9.88 15.0	<9.88 15.0	<9.88 15.0

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

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

Holly Taylor
Project Manager



Certificate of Analysis Summary 587854

R2M Engineering, Lubbock, TX

Project Name: Venables

Project Id:

Contact: Mason Sanders

Project Location: Hobbs, NM

Date Received in Lab: Thu May-31-18 04:00 pm

Report Date: 15-JUN-18

Project Manager: Holly Taylor

Analysis Requested	Lab Id:	587854-046	587854-047	587854-048	587854-049	587854-050	587854-051
	Field Id:	NW Confirmation 0-1	NW Confirmation 1-2	NW Confirmation 2-3	NW Confirmation 3-4	NW Confirmation 4-5	NW Confirmation 5-6
	Depth:	0-1	1-2	2-3	3-4	4-5	5-6
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	May-31-18 11:35	May-31-18 11:35	May-31-18 11:35	May-31-18 11:35	May-31-18 11:35	May-31-18 11:35
BTEX by SW 8260B SUB: TX104704215-18-26	Extracted:	Jun-07-18 16:45	Jun-07-18 16:45	Jun-14-18 08:57	Jun-07-18 16:45	Jun-14-18 08:57	Jun-07-18 16:45
	Analyzed:	Jun-07-18 21:04	Jun-07-18 20:31	Jun-14-18 14:04	Jun-07-18 20:47	Jun-14-18 14:21	Jun-07-18 21:36
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.000504 0.00101	<0.000499 0.000998	<0.000498 0.000996	<0.000504 0.00101	<0.000502 0.00100	<0.000497 0.000994
Toluene		<0.000504 0.00101	<0.000499 0.000998	<0.000498 0.000996	<0.000504 0.00101	<0.000502 0.00100	<0.000497 0.000994
Ethylbenzene		<0.000504 0.00101	<0.000499 0.000998	<0.000498 0.000996	<0.000504 0.00101	<0.000502 0.00100	<0.000497 0.000994
m,p-Xylenes		<0.00101 0.00202	<0.000998 0.00200	<0.000996 0.00199	<0.00101 0.00202	<0.00100 0.00201	<0.000994 0.00199
o-Xylene		<0.000504 0.00101	<0.000499 0.000998	<0.000498 0.000996	<0.000504 0.00101	<0.000502 0.00100	<0.000497 0.000994
Total Xylenes		<0.000504 0.00101	<0.000499 0.000998	<0.000498 0.000996	<0.000504 0.00101	<0.000502 0.00100	<0.000497 0.000994
Total BTEX		<0.000504 0.00101	<0.000499 0.000998	<0.000498 0.000996	<0.000504 0.00101	<0.000502 0.00100	<0.000497 0.000994
Inorganic Anions by EPA 300/300.1 SUB: TX104704215-18-26	Extracted:	Jun-06-18 09:08	Jun-06-18 09:08	Jun-06-18 09:08	Jun-06-18 09:08	Jun-06-18 09:08	Jun-06-18 09:08
	Analyzed:	Jun-07-18 08:45	Jun-07-18 08:56	Jun-07-18 09:07	Jun-07-18 09:39	Jun-07-18 09:50	Jun-07-18 10:01
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		31.5 9.96	26.9 9.82	22.3 9.92	28.2 9.90	4.48 J 9.82	5.21 J 9.82
TPH by SW 8015B SUB: TX104704215-18-26	Extracted:	Jun-07-18 16:42	Jun-07-18 16:42	Jun-07-18 16:42	Jun-07-18 16:42	Jun-07-18 16:42	Jun-07-18 16:42
	Analyzed:	Jun-10-18 11:58	Jun-10-18 12:19	Jun-10-18 12:41	Jun-10-18 13:02	Jun-10-18 22:57	Jun-10-18 23:39
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
C6-C10 Gasoline Range Hydrocarbons		29.4 15.0	26.0 15.0	<9.88 15.0	<9.88 15.0	<9.88 15.0	<9.88 15.0
C10-C28 Diesel Range Organics		13.2 J 15.0	22.6 15.0	<9.88 15.0	<9.88 15.0	<9.88 15.0	<9.88 15.0
C28-C35 Oil Range Hydrocarbons		<9.88 15.0	<9.88 15.0	<9.88 15.0	<9.88 15.0	<9.88 15.0	<9.88 15.0
Total TPH		42.6 15.0	48.6 15.0	<9.88 15.0	<9.88 15.0	<9.88 15.0	<9.88 15.0

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

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

Holly Taylor
Project Manager



Certificate of Analysis Summary 587854

R2M Engineering, Lubbock, TX

Project Name: Venables

Project Id:

Contact: Mason Sanders

Project Location: Hobbs, NM

Date Received in Lab: Thu May-31-18 04:00 pm

Report Date: 15-JUN-18

Project Manager: Holly Taylor

Analysis Requested	Lab Id:	587854-052	587854-053	587854-054	587854-055	587854-056	587854-057
	Field Id:	NW Confirmation 6-7	NW Confirmation 7-8	NW Confirmation 8-9	NW Confirmation 9-10	NE Confirmation 0-1	NE Confirmation 1-2
	Depth:	6-7	7-8	8-9	9-10	0-1	1-2
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	May-31-18 11:35	May-31-18 11:35	May-31-18 11:35	May-31-18 11:35	May-31-18 11:45	May-31-18 11:45
BTEX by SW 8260B SUB: TX104704215-18-26	Extracted:	Jun-07-18 16:45	Jun-09-18 12:05	Jun-09-18 12:05	Jun-08-18 18:30	Jun-08-18 18:30	Jun-08-18 18:30
	Analyzed:	Jun-07-18 21:20	Jun-09-18 13:58	Jun-09-18 14:30	Jun-08-18 22:23	Jun-08-18 20:14	Jun-08-18 22:39
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.000497 0.000994	<0.000499 0.000998	<0.000495 0.000990	<0.000501 0.00100	<0.000502 0.00100	<0.000500 0.00100
Toluene		<0.000497 0.000994	0.000918 J 0.000998	0.000634 J 0.000990	0.00163 0.00100	<0.000502 0.00100	<0.000500 0.00100
Ethylbenzene		<0.000497 0.000994	<0.000499 0.000998	<0.000495 0.000990	<0.000501 0.00100	<0.000502 0.00100	<0.000500 0.00100
m,p-Xylenes		<0.000994 0.00199	<0.000998 0.00200	<0.000990 0.00198	<0.00100 0.00200	<0.00100 0.00201	<0.00100 0.00200
o-Xylene		<0.000497 0.000994	<0.000499 0.000998	<0.000495 0.000990	<0.000501 0.00100	<0.000502 0.00100	<0.000500 0.00100
Total Xylenes		<0.000497 0.000994	<0.000499 0.000998	<0.000495 0.000990	<0.000501 0.00100	<0.000502 0.00100	<0.000500 0.00100
Total BTEX		<0.000497 0.000994	0.000918 J 0.000998	0.000634 J 0.000990	0.00163 0.00100	<0.000502 0.00100	<0.000500 0.00100
Inorganic Anions by EPA 300/300.1 SUB: TX104704215-18-26	Extracted:	Jun-06-18 09:08	Jun-06-18 09:08	Jun-06-18 09:08	Jun-06-18 17:08	Jun-06-18 17:08	Jun-06-18 17:08
	Analyzed:	Jun-07-18 14:49	Jun-07-18 15:00	Jun-07-18 15:11	Jun-07-18 02:27	Jun-07-18 03:00	Jun-07-18 03:10
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		5.95 J 9.82	5.74 J 9.88	2.77 J 9.90	6.33 J 9.82	9.39 J 9.88	18.0 9.90
TPH by SW 8015B SUB: TX104704215-18-26	Extracted:	Jun-07-18 16:42	Jun-07-18 16:42	Jun-07-18 16:42	Jun-07-18 16:42	Jun-07-18 16:42	Jun-07-18 16:42
	Analyzed:	Jun-11-18 00:00	Jun-11-18 00:21	Jun-11-18 00:42	Jun-11-18 01:03	Jun-11-18 01:24	Jun-11-18 01:45
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
C6-C10 Gasoline Range Hydrocarbons		<9.88 15.0	<9.88 15.0	<9.88 15.0	28.8 15.0	24.8 15.0	30.3 15.0
C10-C28 Diesel Range Organics		<9.88 15.0	<9.88 15.0	<9.88 15.0	14.1 J 15.0	12.6 J 15.0	11.9 J 15.0
C28-C35 Oil Range Hydrocarbons		<9.88 15.0	<9.88 15.0	<9.88 15.0	12.1 J 15.0	<9.88 15.0	<9.88 15.0
Total TPH		<9.88 15.0	<9.88 15.0	<9.88 15.0	55.0 15.0	37.4 15.0	42.2 15.0

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

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

Holly Taylor
Project Manager



Certificate of Analysis Summary 587854

R2M Engineering, Lubbock, TX

Project Name: Venables

Project Id:

Contact: Mason Sanders

Project Location: Hobbs, NM

Date Received in Lab: Thu May-31-18 04:00 pm

Report Date: 15-JUN-18

Project Manager: Holly Taylor

Analysis Requested	Lab Id:	587854-058	587854-059	587854-060	587854-061	587854-062	587854-063
	Field Id:	NE Confirmation 2-3	NE Confirmation 3-4	NE Confirmation 4-5	NE Confirmation 5-6	NE Confirmation 6-7	NE Confirmation 7-8
	Depth:	2-3	3-4	4-5	5-6	6-7	7-8
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	May-31-18 11:45	May-31-18 11:45	May-31-18 11:45	May-31-18 11:45	May-31-18 11:45	May-31-18 11:45
BTEX by SW 8260B SUB: TX104704215-18-26	Extracted:	Jun-08-18 18:30	Jun-08-18 18:30	Jun-08-18 18:30	Jun-08-18 18:30	Jun-08-18 18:30	Jun-08-18 18:30
	Analyzed:	Jun-08-18 22:55	Jun-08-18 23:11	Jun-08-18 23:28	Jun-08-18 23:44	Jun-09-18 00:00	Jun-09-18 00:16
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.000499 0.000998	<0.000495 0.000990	<0.000500 0.00100	<0.000502 0.00100	<0.000502 0.00100	<0.000501 0.00100
Toluene		<0.000499 0.000998	<0.000495 0.000990	<0.000500 0.00100	<0.000502 0.00100	<0.000502 0.00100	<0.000501 0.00100
Ethylbenzene		<0.000499 0.000998	<0.000495 0.000990	<0.000500 0.00100	<0.000502 0.00100	<0.000502 0.00100	<0.000501 0.00100
m,p-Xylenes		<0.000998 0.00200	<0.000990 0.00198	<0.00100 0.00200	<0.00100 0.00201	<0.00100 0.00201	<0.00100 0.00200
o-Xylene		<0.000499 0.000998	<0.000495 0.000990	<0.000500 0.00100	<0.000502 0.00100	<0.000502 0.00100	<0.000501 0.00100
Total Xylenes		<0.000499 0.000998	<0.000495 0.000990	<0.000500 0.00100	<0.000502 0.00100	<0.000502 0.00100	<0.000501 0.00100
Total BTEX		<0.000499 0.000998	<0.000495 0.000990	<0.000500 0.00100	<0.000502 0.00100	<0.000502 0.00100	<0.000501 0.00100
Inorganic Anions by EPA 300/300.1 SUB: TX104704215-18-26	Extracted:	Jun-06-18 17:08	Jun-06-18 17:08	Jun-06-18 17:08	Jun-06-18 17:08	Jun-06-18 17:08	Jun-06-18 17:08
	Analyzed:	Jun-07-18 03:21	Jun-07-18 03:54	Jun-07-18 04:04	Jun-07-18 04:15	Jun-07-18 04:26	Jun-07-18 04:37
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		29.7 9.96	18.2 9.94	2.25 J 9.86	3.55 J 9.90	9.39 J 9.88	1.51 J 9.92
TPH by SW 8015B SUB: TX104704215-18-26	Extracted:	Jun-07-18 16:42	Jun-07-18 16:42	Jun-08-18 11:51	Jun-08-18 12:00	Jun-08-18 12:03	Jun-08-18 12:06
	Analyzed:	Jun-11-18 02:06	Jun-11-18 02:27	Jun-10-18 19:47	Jun-10-18 20:08	Jun-10-18 20:29	Jun-10-18 20:50
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
C6-C10 Gasoline Range Hydrocarbons		29.5 15.0	<9.88 15.0	<9.83 14.9	<9.79 14.9	<9.83 14.9	<9.83 14.9
C10-C28 Diesel Range Organics		13.3 J 15.0	<9.88 15.0	<9.83 14.9	<9.79 14.9	<9.83 14.9	<9.83 14.9
C28-C35 Oil Range Hydrocarbons		9.90 J 15.0	<9.88 15.0	<9.83 14.9	<9.79 14.9	<9.83 14.9	<9.83 14.9
Total TPH		52.7 15.0	<9.88 15.0	<9.83 14.9	<9.79 14.9	<9.83 14.9	<9.83 14.9

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

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

Holly Taylor
Project Manager



Certificate of Analysis Summary 587854

R2M Engineering, Lubbock, TX

Project Name: Venables

Project Id:

Contact: Mason Sanders

Project Location: Hobbs, NM

Date Received in Lab: Thu May-31-18 04:00 pm

Report Date: 15-JUN-18

Project Manager: Holly Taylor

Analysis Requested	Lab Id:	587854-064	587854-065				
	Field Id:	NE Confirmation 8-9	NE Confirmation 9-10				
	Depth:	8-9	9-10				
	Matrix:	SOIL	SOIL				
	Sampled:	May-31-18 11:45	May-31-18 11:45				
BTEX by SW 8260B SUB: TX104704215-18-26	Extracted:	Jun-08-18 18:30	Jun-08-18 18:30				
	Analyzed:	Jun-09-18 00:32	Jun-09-18 00:49				
	Units/RL:	mg/kg RL	mg/kg RL				
	Benzene	<0.000499 0.000998	<0.000495 0.000990				
	Toluene	<0.000499 0.000998	<0.000495 0.000990				
Ethylbenzene		<0.000499 0.000998	<0.000495 0.000990				
m,p-Xylenes		<0.000998 0.00200	<0.000990 0.00198				
o-Xylene		<0.000499 0.000998	<0.000495 0.000990				
Total Xylenes		<0.000499 0.000998	<0.000495 0.000990				
Total BTEX		<0.000499 0.000998	<0.000495 0.000990				
Inorganic Anions by EPA 300/300.1 SUB: TX104704215-18-26	Extracted:	Jun-06-18 17:08	Jun-06-18 17:08				
	Analyzed:	Jun-07-18 04:48	Jun-07-18 04:58				
	Units/RL:	mg/kg RL	mg/kg RL				
	Chloride	3.50 J 9.77	10.3 9.88				
TPH by SW 8015B SUB: TX104704215-18-26	Extracted:	Jun-08-18 12:09	Jun-08-18 12:12				
	Analyzed:	Jun-10-18 21:12	Jun-10-18 21:33				
	Units/RL:	mg/kg RL	mg/kg RL				
	C6-C10 Gasoline Range Hydrocarbons	<9.84 14.9	<9.78 14.9				
	C10-C28 Diesel Range Organics	<9.84 14.9	<9.78 14.9				
C28-C35 Oil Range Hydrocarbons		<9.84 14.9	<9.78 14.9				
Total TPH		<9.84 14.9	<9.78 14.9				

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

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

Holly Taylor
Project Manager

Analytical Report 587854

for R2M Engineering

Project Manager: Mason Sanders

Venables

15-JUN-18

Collected By: Client



6701 Aberdeen, Suite 9 Lubbock, TX 79424

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-18-26), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (T104704295-17-16), 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 (T104704400-18-15)

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)

Xenco-Atlanta (LELAP Lab ID #04176)

Xenco-Tampa: Florida (E87429)

Xenco-Lakeland: Florida (E84098)



15-JUN-18

Project Manager: **Mason Sanders**

R2M Engineering

5012 50th

Suite 204

Lubbock, TX 79414

Reference: XENCO Report No(s): **587854**

Venables

Project Address: Hobbs, NM

Mason Sanders:

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) 587854. 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. 587854 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

A handwritten signature in black ink that reads 'Holly Taylor'. The signature is written in a cursive, flowing style.

Holly Taylor

Project Manager

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

Certified and approved by numerous States and Agencies.

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

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



Sample Cross Reference 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Con 2001	S	05-31-18 07:30		587854-001
Con 2002	S	05-31-18 07:33		587854-003
Con 2003	S	05-31-18 07:39		587854-005
Con 2004	S	05-31-18 07:44		587854-007
SB-2.2	S	05-31-18 08:30	0 - 1	587854-012
SB-2.3	S	05-31-18 08:40	0 - 1	587854-013
SB-2.4	S	05-31-18 08:51	0 - 1	587854-014
Stockpile 3	S	05-31-18 11:00	0 - 1	587854-023
Stockpile 4	S	05-31-18 13:30	0 - 1	587854-024
Pit Bottom	S	05-31-18 13:25	0 - 1	587854-025
SW Confirmation 0-1	S	05-31-18 11:25	0 - 1	587854-026
SW Confirmation 1-2	S	05-31-18 11:25	1 - 2	587854-027
SW Confirmation 2-3	S	05-31-18 11:25	2 - 3	587854-028
SW Confirmation 3-4	S	05-31-18 11:25	3 - 4	587854-029
SW Confirmation 4-5	S	05-31-18 11:25	4 - 5	587854-030
SW Confirmation 5-6	S	05-31-18 11:25	5 - 6	587854-031
SW Confirmation 6-7	S	05-31-18 11:25	6 - 7	587854-032
SW Confirmation 7-8	S	05-31-18 11:25	7 - 8	587854-033
SW Confirmation 8-9	S	05-31-18 11:25	8 - 9	587854-034
SW Confirmation 9-10	S	05-31-18 11:25	9 - 10	587854-035
SE Confirmation 0-1	S	05-31-18 11:15	0 - 1	587854-036
SE Confirmation 1-2	S	05-31-18 11:15	1 - 2	587854-037
SE Confirmation 2-3	S	05-31-18 11:15	2 - 3	587854-038
SE Confirmation 3-4	S	05-31-18 11:15	3 - 4	587854-039
SE Confirmation 4-5	S	05-31-18 11:15	4 - 5	587854-040
SE Confirmation 5-6	S	05-31-18 11:15	5 - 6	587854-041
SE Confirmation 6-7	S	05-31-18 11:15	6 - 7	587854-042
SE Confirmation 7-8	S	05-31-18 11:15	7 - 8	587854-043
SE Confirmation 8-9	S	05-31-18 11:15	8 - 9	587854-044
SE Confirmation 9-10	S	05-31-18 11:15	9 - 10	587854-045
NW Confirmation 0-1	S	05-31-18 11:35	0 - 1	587854-046
NW Confirmation 1-2	S	05-31-18 11:35	1 - 2	587854-047
NW Confirmation 2-3	S	05-31-18 11:35	2 - 3	587854-048
NW Confirmation 3-4	S	05-31-18 11:35	3 - 4	587854-049
NW Confirmation 4-5	S	05-31-18 11:35	4 - 5	587854-050
NW Confirmation 5-6	S	05-31-18 11:35	5 - 6	587854-051
NW Confirmation 6-7	S	05-31-18 11:35	6 - 7	587854-052
NW Confirmation 7-8	S	05-31-18 11:35	7 - 8	587854-053
NW Confirmation 8-9	S	05-31-18 11:35	8 - 9	587854-054
NW Confirmation 9-10	S	05-31-18 11:35	9 - 10	587854-055
NE Confirmation 0-1	S	05-31-18 11:45	0 - 1	587854-056
NE Confirmation 1-2	S	05-31-18 11:45	1 - 2	587854-057
NE Confirmation 2-3	S	05-31-18 11:45	2 - 3	587854-058



Sample Cross Reference 587854

R2M Engineering, Lubbock, TX

Venables

NE Confirmation 3-4	S	05-31-18 11:45	3 - 4	587854-059
NE Confirmation 4-5	S	05-31-18 11:45	4 - 5	587854-060
NE Confirmation 5-6	S	05-31-18 11:45	5 - 6	587854-061
NE Confirmation 6-7	S	05-31-18 11:45	6 - 7	587854-062
NE Confirmation 7-8	S	05-31-18 11:45	7 - 8	587854-063
NE Confirmation 8-9	S	05-31-18 11:45	8 - 9	587854-064
NE Confirmation 9-10	S	05-31-18 11:45	9 - 10	587854-065
Con 2001	S	05-31-18 07:30		Not Analyzed
Con 2002	S	05-31-18 07:33		Not Analyzed
Con 2003	S	05-31-18 07:39		Not Analyzed
Con 2004	S	05-31-18 07:44		Not Analyzed
SB-2	S	05-31-18 09:20	2 - 3	Not Analyzed
SB-2	S	05-31-18 09:20	3 - 4	Not Analyzed
SB-2	S	05-31-18 09:20	4 - 5	Not Analyzed
SB-5	S	05-31-18 09:40	3 - 4	Not Analyzed
SB-6	S	05-31-18 09:56	3 - 4	Not Analyzed
SB-7	S	05-31-18 10:12	3 - 4	Not Analyzed
SB-10	S	05-31-18 10:25	3 - 4	Not Analyzed
SB-3	S	05-31-18 10:50	2 - 3	Not Analyzed
SB-3	S	05-31-18 10:50	3 - 4	Not Analyzed
SB-3	S	05-31-18 10:50	4 - 5	Not Analyzed
SB-3	S	05-31-18 10:50	5 - 6	Not Analyzed
SB-01 2-3	S	05-31-18 13:45	2 - 3	Not Analyzed
SB-01 3-4	S	05-31-18 13:45	3 - 4	Not Analyzed
SB-01 4-5	S	05-31-18 13:45	4 - 5	Not Analyzed
SB-01 5-6	S	05-31-18 13:45	5 - 6	Not Analyzed



CASE NARRATIVE

Client Name: R2M Engineering

Project Name: Venables

Project ID:
Work Order Number(s): 587854

Report Date: 15-JUN-18
Date Received: 05/31/2018

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:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3052363 BTEX by SW 8260B

Lab Sample ID 587854-012 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 587854-012, -013, -014, -024, -026, -027, -029, -030, -031, -034, -035, -036, -037, -039.

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

Batch: LBA-3052603 Inorganic Anions by EPA 300/300.1

Lab Sample ID 587854-054 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 587854-007, -023, -024, -025, -039, -040, -041, -042, -043, -044, -045, -046, -047, -048, -049, -050, -051, -052, -053, -054.

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

Batch: LBA-3052687 BTEX by SW 8260B

Surrogate 1,2-Dichloroethane-D4 recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 587854-051, 587854-046.



CASE NARRATIVE

Client Name: R2M Engineering

Project Name: Venables

Project ID:
Work Order Number(s): 587854

Report Date: 15-JUN-18
Date Received: 05/31/2018

Batch: LBA-3053013 BTEX by SW 8260B

Lab Sample ID 587854-028 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Ethylbenzene, Toluene, m,p-Xylenes recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 587854-007, -025, -028, -053, -054. The Laboratory Control Sample for Toluene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

m,p-Xylenes Relative Percent Difference (RPD) between matrix spike and duplicate were above quality control limits.

Samples in the analytical batch are: 587854-007, -025, -028, -053, -054

Surrogate 1,2-Dichloroethane-D4 recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 587854-025, 587854-054, 587854-053.

Batch: LBA-3053017 BTEX by SW 8260B

Surrogate 1,2-Dichloroethane-D4 recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 587856-004 S, 587854-055, 587854-061, 587854-056, 587854-060.

Batch: LBA-3053406 BTEX-MTBE by SW 8260B

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

Samples affected are: 588431-010 S.



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **Con 2001**
Lab Sample Id: 587854-001

Matrix: Soil
Date Collected: 05.31.18 07.30

Date Received: 05.31.18 16.00

Analytical Method: Inorganic Anions by EPA 300/300.1

Tech: MAB

Analyst: MAB

Seq Number: 3052514

Prep Method: E300P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	592	9.88	0.350	mg/kg	06.06.18 08.04		1

Analytical Method: TPH by SW 8015B

Tech: ARL

Analyst: ISU

Seq Number: 3052891

Date Prep: 06.07.18 13.30

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	59.3	14.9	9.84	mg/kg	06.10.18 06.43		1
C10-C28 Diesel Range Organics	C10C28DRO	2040	14.9	9.84	mg/kg	06.10.18 06.43		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	216	14.9	9.84	mg/kg	06.10.18 06.43		1
Total TPH	PHC635	2320	14.9	9.84	mg/kg	06.10.18 06.43		1

Surrogate

1-Chlorooctane

o-Terphenyl

Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
111-85-3	120	%	70-135	06.10.18 06.43	
84-15-1	103	%	70-135	06.10.18 06.43	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **Con 2001**
Lab Sample Id: 587854-001

Matrix: Soil
Date Collected: 05.31.18 07.30

Date Received: 05.31.18 16.00

Analytical Method: BTEX by SW 8260B

Tech: CHH

Analyst: CHH

Seq Number: 3052687

Prep Method: SW5035A

% Moisture:

Date Prep: 06.07.18 16.45

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000499	0.000998	0.000499	mg/kg	06.07.18 21.52	U	1
Toluene	108-88-3	<0.000499	0.000998	0.000499	mg/kg	06.07.18 21.52	U	1
Ethylbenzene	100-41-4	<0.000499	0.000998	0.000499	mg/kg	06.07.18 21.52	U	1
m,p-Xylenes	179601-23-1	<0.000998	0.00200	0.000998	mg/kg	06.07.18 21.52	U	1
o-Xylene	95-47-6	<0.000499	0.000998	0.000499	mg/kg	06.07.18 21.52	U	1
Total Xylenes	1330-20-7	<0.000499	0.000998	0.000499	mg/kg	06.07.18 21.52	U	1
Total BTEX		<0.000499	0.000998	0.000499	mg/kg	06.07.18 21.52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	103	%	74-126	06.07.18 21.52			
1,2-Dichloroethane-D4	17060-07-0	110	%	80-120	06.07.18 21.52			
Toluene-D8	2037-26-5	97	%	73-132	06.07.18 21.52			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **Con 2002**
Lab Sample Id: 587854-003

Matrix: Soil
Date Collected: 05.31.18 07.33

Date Received: 05.31.18 16.00

Analytical Method: Inorganic Anions by EPA 300/300.1

Tech: MAB

Analyst: MAB

Seq Number: 3052514

Prep Method: E300P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.7	9.94	0.352	mg/kg	06.06.18 08.18		1

Analytical Method: TPH by SW 8015B

Tech: ARL

Analyst: ISU

Seq Number: 3052891

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	78.2	14.9	9.82	mg/kg	06.10.18 07.04		1
C10-C28 Diesel Range Organics	C10C28DRO	899	14.9	9.82	mg/kg	06.10.18 07.04		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	97.6	14.9	9.82	mg/kg	06.10.18 07.04		1
Total TPH	PHC635	1070	14.9	9.82	mg/kg	06.10.18 07.04		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1-Chlorooctane	111-85-3	122	%	70-135	06.10.18 07.04			
o-Terphenyl	84-15-1	106	%	70-135	06.10.18 07.04			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **Con 2002**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-003

Date Collected: 05.31.18 07.33

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.08.18 18.30

Basis: Wet Weight

Seq Number: 3053017

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000502	0.00100	0.000502	mg/kg	06.09.18 01.21	U	1
Toluene	108-88-3	<0.000502	0.00100	0.000502	mg/kg	06.09.18 01.21	U	1
Ethylbenzene	100-41-4	<0.000502	0.00100	0.000502	mg/kg	06.09.18 01.21	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00201	0.00100	mg/kg	06.09.18 01.21	U	1
o-Xylene	95-47-6	<0.000502	0.00100	0.000502	mg/kg	06.09.18 01.21	U	1
Total Xylenes	1330-20-7	<0.000502	0.00100	0.000502	mg/kg	06.09.18 01.21	U	1
Total BTEX		<0.000502	0.00100	0.000502	mg/kg	06.09.18 01.21	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	113	%	74-126	06.09.18 01.21			
1,2-Dichloroethane-D4	17060-07-0	113	%	80-120	06.09.18 01.21			
Toluene-D8	2037-26-5	93	%	73-132	06.09.18 01.21			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **Con 2003**
Lab Sample Id: 587854-005

Matrix: Soil
Date Collected: 05.31.18 07.39

Date Received: 05.31.18 16.00

Analytical Method: Inorganic Anions by EPA 300/300.1

Tech: MAB

Analyst: MAB

Seq Number: 3052514

Prep Method: E300P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7.65	9.75	0.345	mg/kg	06.06.18 08.31	J	1

Analytical Method: TPH by SW 8015B

Tech: ARL

Analyst: ISU

Seq Number: 3052891

Date Prep: 06.07.18 13.36

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	102	14.9	9.84	mg/kg	06.10.18 07.25		1
C10-C28 Diesel Range Organics	C10C28DRO	1870	14.9	9.84	mg/kg	06.10.18 07.25		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	222	14.9	9.84	mg/kg	06.10.18 07.25		1
Total TPH	PHC635	2190	14.9	9.84	mg/kg	06.10.18 07.25		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	06.10.18 07.25	
o-Terphenyl	84-15-1	107	%	70-135	06.10.18 07.25	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **Con 2003**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-005

Date Collected: 05.31.18 07.39

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.08.18 18.30

Basis: Wet Weight

Seq Number: 3053017

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000499	0.000998	0.000499	mg/kg	06.09.18 01.05	U	1
Toluene	108-88-3	0.00257	0.000998	0.000499	mg/kg	06.09.18 01.05		1
Ethylbenzene	100-41-4	<0.000499	0.000998	0.000499	mg/kg	06.09.18 01.05	U	1
m,p-Xylenes	179601-23-1	<0.000998	0.00200	0.000998	mg/kg	06.09.18 01.05	U	1
o-Xylene	95-47-6	0.00104	0.000998	0.000499	mg/kg	06.09.18 01.05		1
Total Xylenes	1330-20-7	0.00104	0.000998	0.000499	mg/kg	06.09.18 01.05		1
Total BTEX		0.00361	0.000998	0.000499	mg/kg	06.09.18 01.05		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	112	%	74-126	06.09.18 01.05			
1,2-Dichloroethane-D4	17060-07-0	113	%	80-120	06.09.18 01.05			
Toluene-D8	2037-26-5	86	%	73-132	06.09.18 01.05			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **Con 2004**
Lab Sample Id: 587854-007

Matrix: Soil
Date Collected: 05.31.18 07.44

Date Received: 05.31.18 16.00

Analytical Method: Inorganic Anions by EPA 300/300.1

Tech: MAB

Analyst: MAB

Seq Number: 3052603

Prep Method: E300P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	884	9.94	0.352	mg/kg	06.07.18 06.03	X	1

Analytical Method: TPH by SW 8015B

Tech: ARL

Analyst: ISU

Seq Number: 3052956

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	161	15.0	9.87	mg/kg	06.11.18 02.48		1
C10-C28 Diesel Range Organics	C10C28DRO	4200	15.0	9.87	mg/kg	06.11.18 02.48		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	429	15.0	9.87	mg/kg	06.11.18 02.48		1
Total TPH	PHC635	4790	15.0	9.87	mg/kg	06.11.18 02.48		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	06.11.18 02.48	
o-Terphenyl	84-15-1	126	%	70-135	06.11.18 02.48	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **Con 2004**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-007

Date Collected: 05.31.18 07.44

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.09.18 12.05

Basis: Wet Weight

Seq Number: 3053013

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000494	0.000988	0.000494	mg/kg	06.09.18 13.41	U	1
Toluene	108-88-3	0.00335	0.000988	0.000494	mg/kg	06.09.18 13.41		1
Ethylbenzene	100-41-4	<0.000494	0.000988	0.000494	mg/kg	06.09.18 13.41	U	1
m,p-Xylenes	179601-23-1	0.00203	0.00198	0.000988	mg/kg	06.09.18 13.41		1
o-Xylene	95-47-6	0.000879	0.000988	0.000494	mg/kg	06.09.18 13.41	J	1
Total Xylenes	1330-20-7	0.00291	0.000988	0.000494	mg/kg	06.09.18 13.41		1
Total BTEX		0.00626	0.000988	0.000494	mg/kg	06.09.18 13.41		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	108	%	74-126	06.09.18 13.41			
1,2-Dichloroethane-D4	17060-07-0	115	%	80-120	06.09.18 13.41			
Toluene-D8	2037-26-5	93	%	73-132	06.09.18 13.41			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SB-2.2**
Lab Sample Id: 587854-012

Matrix: Soil
Date Collected: 05.31.18 08.30

Date Received: 05.31.18 16.00
Sample Depth: 0 - 1

Analytical Method: Inorganic Anions by EPA 300/300.1

Tech: MAB

Analyst: MAB

Seq Number: 3052514

Prep Method: E300P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	13.2	9.82	0.348	mg/kg	06.06.18 08.45		1

Analytical Method: TPH by SW 8015B

Tech: ARL

Analyst: ISU

Seq Number: 3052891

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.86	15.0	9.86	mg/kg	06.09.18 23.44	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.86	15.0	9.86	mg/kg	06.09.18 23.44	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.86	15.0	9.86	mg/kg	06.09.18 23.44	U	1
Total TPH	PHC635	<9.86	15.0	9.86	mg/kg	06.09.18 23.44	U	1

Surrogate

1-Chlorooctane

o-Terphenyl

Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
111-85-3	111	%	70-135	06.09.18 23.44	
84-15-1	122	%	70-135	06.09.18 23.44	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SB-2.2**
Lab Sample Id: 587854-012

Matrix: Soil
Date Collected: 05.31.18 08.30

Date Received: 05.31.18 16.00
Sample Depth: 0 - 1

Analytical Method: BTEX by SW 8260B

Tech: CHH

Analyst: CHH

Seq Number: 3052363

Prep Method: SW5035A

% Moisture:

Date Prep: 06.04.18 18.10

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000497	0.000994	0.000497	mg/kg	06.04.18 22.36	U	1
Toluene	108-88-3	<0.000497	0.000994	0.000497	mg/kg	06.04.18 22.36	U	1
Ethylbenzene	100-41-4	<0.000497	0.000994	0.000497	mg/kg	06.04.18 22.36	U	1
m,p-Xylenes	179601-23-1	<0.000994	0.00199	0.000994	mg/kg	06.04.18 22.36	U	1
o-Xylene	95-47-6	<0.000497	0.000994	0.000497	mg/kg	06.04.18 22.36	UX	1
Total Xylenes	1330-20-7	<0.000497	0.000994	0.000497	mg/kg	06.04.18 22.36	U	1
Total BTEX		<0.000497	0.000994	0.000497	mg/kg	06.04.18 22.36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	119	%	74-126	06.04.18 22.36			
1,2-Dichloroethane-D4	17060-07-0	119	%	80-120	06.04.18 22.36			
Toluene-D8	2037-26-5	93	%	73-132	06.04.18 22.36			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SB-2.3**
Lab Sample Id: 587854-013

Matrix: Soil
Date Collected: 05.31.18 08.40

Date Received: 05.31.18 16.00
Sample Depth: 0 - 1

Analytical Method: Inorganic Anions by EPA 300/300.1

Tech: MAB

Analyst: MAB

Seq Number: 3052514

Prep Method: E300P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	17.6	9.92	0.351	mg/kg	06.06.18 09.27		1

Analytical Method: TPH by SW 8015B

Tech: ARL

Analyst: ISU

Seq Number: 3052891

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.81	14.9	9.81	mg/kg	06.10.18 00.47	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.81	14.9	9.81	mg/kg	06.10.18 00.47	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.81	14.9	9.81	mg/kg	06.10.18 00.47	U	1
Total TPH	PHC635	<9.81	14.9	9.81	mg/kg	06.10.18 00.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	06.10.18 00.47	
o-Terphenyl	84-15-1	118	%	70-135	06.10.18 00.47	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SB-2.3**
Lab Sample Id: 587854-013

Matrix: Soil
Date Collected: 05.31.18 08.40

Date Received: 05.31.18 16.00
Sample Depth: 0 - 1

Analytical Method: BTEX by SW 8260B

Tech: CHH

Analyst: CHH

Seq Number: 3052363

Prep Method: SW5035A

% Moisture:

Date Prep: 06.04.18 18.25

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000496	0.000992	0.000496	mg/kg	06.05.18 00.29	U	1
Toluene	108-88-3	<0.000496	0.000992	0.000496	mg/kg	06.05.18 00.29	U	1
Ethylbenzene	100-41-4	<0.000496	0.000992	0.000496	mg/kg	06.05.18 00.29	U	1
m,p-Xylenes	179601-23-1	<0.000992	0.00198	0.000992	mg/kg	06.05.18 00.29	U	1
o-Xylene	95-47-6	<0.000496	0.000992	0.000496	mg/kg	06.05.18 00.29	U	1
Total Xylenes	1330-20-7	<0.000496	0.000992	0.000496	mg/kg	06.05.18 00.29	U	1
Total BTEX		<0.000496	0.000992	0.000496	mg/kg	06.05.18 00.29	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	118	%	74-126	06.05.18 00.29			
1,2-Dichloroethane-D4	17060-07-0	114	%	80-120	06.05.18 00.29			
Toluene-D8	2037-26-5	90	%	73-132	06.05.18 00.29			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SB-2.4**
Lab Sample Id: 587854-014

Matrix: Soil
Date Collected: 05.31.18 08.51

Date Received: 05.31.18 16.00
Sample Depth: 0 - 1

Analytical Method: Inorganic Anions by EPA 300/300.1

Tech: MAB

Analyst: MAB

Seq Number: 3052514

Date Prep: 06.05.18 17.04

Prep Method: E300P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	35.8	9.94	0.352	mg/kg	06.06.18 09.41		1

Analytical Method: TPH by SW 8015B

Tech: ARL

Analyst: ISU

Seq Number: 3052891

Date Prep: 06.07.18 13.42

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.84	14.9	9.84	mg/kg	06.10.18 01.08	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.84	14.9	9.84	mg/kg	06.10.18 01.08	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.84	14.9	9.84	mg/kg	06.10.18 01.08	U	1
Total TPH	PHC635	<9.84	14.9	9.84	mg/kg	06.10.18 01.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	06.10.18 01.08	
o-Terphenyl	84-15-1	121	%	70-135	06.10.18 01.08	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SB-2.4**
Lab Sample Id: 587854-014

Matrix: Soil
Date Collected: 05.31.18 08.51

Date Received: 05.31.18 16.00
Sample Depth: 0 - 1

Analytical Method: BTEX by SW 8260B

Tech: CHH

Analyst: CHH

Seq Number: 3052363

Prep Method: SW5035A

% Moisture:

Date Prep: 06.04.18 18.25

Basis: Wet Weight

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/kg	06.05.18 00.45	U	1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/kg	06.05.18 00.45	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/kg	06.05.18 00.45	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/kg	06.05.18 00.45	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/kg	06.05.18 00.45	U	1
Total Xylenes	1330-20-7	<0.000500	0.00100	0.000500	mg/kg	06.05.18 00.45	U	1
Total BTEX		<0.000500	0.00100	0.000500	mg/kg	06.05.18 00.45	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	117	%	74-126	06.05.18 00.45			
1,2-Dichloroethane-D4	17060-07-0	115	%	80-120	06.05.18 00.45			
Toluene-D8	2037-26-5	93	%	73-132	06.05.18 00.45			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **Stockpile 3**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-023

Date Collected: 05.31.18 11.00

Sample Depth: 0 - 1

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.06.18 09.08

Basis: Wet Weight

Seq Number: 3052603

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	477	9.86	0.349	mg/kg	06.07.18 06.36		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.08.18 12.18

Basis: Wet Weight

Seq Number: 3052956

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.84	14.9	9.84	mg/kg	06.10.18 21.54	U	1
C10-C28 Diesel Range Organics	C10C28DRO	92.4	14.9	9.84	mg/kg	06.10.18 21.54		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	25.4	14.9	9.84	mg/kg	06.10.18 21.54		1
Total TPH	PHC635	118	14.9	9.84	mg/kg	06.10.18 21.54		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	121	%	70-135	06.10.18 21.54	
o-Terphenyl	84-15-1	126	%	70-135	06.10.18 21.54	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **Stockpile 3**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-023

Date Collected: 05.31.18 11.00

Sample Depth: 0 - 1

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.07.18 16.45

Basis: Wet Weight

Seq Number: 3052687

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/kg	06.07.18 22.08	U	1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/kg	06.07.18 22.08	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/kg	06.07.18 22.08	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/kg	06.07.18 22.08	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/kg	06.07.18 22.08	U	1
Total Xylenes	1330-20-7	<0.000500	0.00100	0.000500	mg/kg	06.07.18 22.08	U	1
Total BTEX		<0.000500	0.00100	0.000500	mg/kg	06.07.18 22.08	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	98	%	74-126	06.07.18 22.08			
1,2-Dichloroethane-D4	17060-07-0	108	%	80-120	06.07.18 22.08			
Toluene-D8	2037-26-5	104	%	73-132	06.07.18 22.08			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **Stockpile 4**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-024

Date Collected: 05.31.18 13.30

Sample Depth: 0 - 1

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.06.18 09.08

Basis: Wet Weight

Seq Number: 3052603

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	65.4	9.88	0.350	mg/kg	06.07.18 06.46		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.08.18 12.21

Basis: Wet Weight

Seq Number: 3052956

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	28.1	14.9	9.83	mg/kg	06.10.18 22.15		1
C10-C28 Diesel Range Organics	C10C28DRO	52.1	14.9	9.83	mg/kg	06.10.18 22.15		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	14.7	14.9	9.83	mg/kg	06.10.18 22.15	J	1
Total TPH	PHC635	94.9	14.9	9.83	mg/kg	06.10.18 22.15		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	121	%	70-135	06.10.18 22.15	
o-Terphenyl	84-15-1	130	%	70-135	06.10.18 22.15	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **Stockpile 4**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-024

Date Collected: 05.31.18 13.30

Sample Depth: 0 - 1

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.04.18 18.25

Basis: Wet Weight

Seq Number: 3052363

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000496	0.000992	0.000496	mg/kg	06.05.18 01.01	U	1
Toluene	108-88-3	<0.000496	0.000992	0.000496	mg/kg	06.05.18 01.01	U	1
Ethylbenzene	100-41-4	<0.000496	0.000992	0.000496	mg/kg	06.05.18 01.01	U	1
m,p-Xylenes	179601-23-1	<0.000992	0.00198	0.000992	mg/kg	06.05.18 01.01	U	1
o-Xylene	95-47-6	0.00548	0.000992	0.000496	mg/kg	06.05.18 01.01		1
Total Xylenes	1330-20-7	0.00548	0.000992	0.000496	mg/kg	06.05.18 01.01		1
Total BTEX		0.00548	0.000992	0.000496	mg/kg	06.05.18 01.01		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	114	%	74-126	06.05.18 01.01			
1,2-Dichloroethane-D4	17060-07-0	109	%	80-120	06.05.18 01.01			
Toluene-D8	2037-26-5	102	%	73-132	06.05.18 01.01			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **Pit Bottom**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-025

Date Collected: 05.31.18 13.25

Sample Depth: 0 - 1

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.06.18 09.08

Basis: Wet Weight

Seq Number: 3052603

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.6	9.90	0.350	mg/kg	06.07.18 06.57		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.08.18 12.24

Basis: Wet Weight

Seq Number: 3052956

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	24.6	15.0	9.86	mg/kg	06.10.18 22.36		1
C10-C28 Diesel Range Organics	C10C28DRO	15.0	15.0	9.86	mg/kg	06.10.18 22.36	J	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	10.4	15.0	9.86	mg/kg	06.10.18 22.36	J	1
Total TPH	PHC635	50.0	15.0	9.86	mg/kg	06.10.18 22.36		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-135	06.10.18 22.36	
o-Terphenyl	84-15-1	130	%	70-135	06.10.18 22.36	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **Pit Bottom**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-025

Date Collected: 05.31.18 13.25

Sample Depth: 0 - 1

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.09.18 11.40

Basis: Wet Weight

Seq Number: 3053013

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000501	0.00100	0.000501	mg/kg	06.09.18 12.53	U	1
Toluene	108-88-3	<0.000501	0.00100	0.000501	mg/kg	06.09.18 12.53	U	1
Ethylbenzene	100-41-4	<0.000501	0.00100	0.000501	mg/kg	06.09.18 12.53	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/kg	06.09.18 12.53	U	1
o-Xylene	95-47-6	<0.000501	0.00100	0.000501	mg/kg	06.09.18 12.53	U	1
Total Xylenes	1330-20-7	<0.000501	0.00100	0.000501	mg/kg	06.09.18 12.53	U	1
Total BTEX		<0.000501	0.00100	0.000501	mg/kg	06.09.18 12.53	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	119	%	74-126	06.09.18 12.53			
1,2-Dichloroethane-D4	17060-07-0	123	%	80-120	06.09.18 12.53		**	
Toluene-D8	2037-26-5	93	%	73-132	06.09.18 12.53			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SW Confirmation 0-1**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-026

Date Collected: 05.31.18 11.25

Sample Depth: 0 - 1

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.05.18 17.04

Basis: Wet Weight

Seq Number: 3052514

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1.64	9.96	0.353	mg/kg	06.06.18 09.54	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 13.45

Basis: Wet Weight

Seq Number: 3052891

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.84	14.9	9.84	mg/kg	06.10.18 01.29	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.84	14.9	9.84	mg/kg	06.10.18 01.29	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.84	14.9	9.84	mg/kg	06.10.18 01.29	U	1
Total TPH	PHC635	<9.84	14.9	9.84	mg/kg	06.10.18 01.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	06.10.18 01.29	
o-Terphenyl	84-15-1	123	%	70-135	06.10.18 01.29	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SW Confirmation 0-1**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-026

Date Collected: 05.31.18 11.25

Sample Depth: 0 - 1

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.04.18 18.25

Basis: Wet Weight

Seq Number: 3052363

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000499	0.000998	0.000499	mg/kg	06.05.18 01.18	U	1
Toluene	108-88-3	<0.000499	0.000998	0.000499	mg/kg	06.05.18 01.18	U	1
Ethylbenzene	100-41-4	<0.000499	0.000998	0.000499	mg/kg	06.05.18 01.18	U	1
m,p-Xylenes	179601-23-1	<0.000998	0.00200	0.000998	mg/kg	06.05.18 01.18	U	1
o-Xylene	95-47-6	<0.000499	0.000998	0.000499	mg/kg	06.05.18 01.18	U	1
Total Xylenes	1330-20-7	<0.000499	0.000998	0.000499	mg/kg	06.05.18 01.18	U	1
Total BTEX		<0.000499	0.000998	0.000499	mg/kg	06.05.18 01.18	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	111	%	74-126	06.05.18 01.18			
1,2-Dichloroethane-D4	17060-07-0	99	%	80-120	06.05.18 01.18			
Toluene-D8	2037-26-5	92	%	73-132	06.05.18 01.18			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SW Confirmation 1-2**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-027

Date Collected: 05.31.18 11.25

Sample Depth: 1 - 2

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.05.18 17.04

Basis: Wet Weight

Seq Number: 3052514

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2.97	9.94	0.352	mg/kg	06.06.18 16.37	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 13.48

Basis: Wet Weight

Seq Number: 3052891

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.85	15.0	9.85	mg/kg	06.10.18 01.50	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.85	15.0	9.85	mg/kg	06.10.18 01.50	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.85	15.0	9.85	mg/kg	06.10.18 01.50	U	1
Total TPH	PHC635	<9.85	15.0	9.85	mg/kg	06.10.18 01.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	06.10.18 01.50	
o-Terphenyl	84-15-1	128	%	70-135	06.10.18 01.50	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SW Confirmation 1-2**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-027

Date Collected: 05.31.18 11.25

Sample Depth: 1 - 2

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.04.18 18.25

Basis: Wet Weight

Seq Number: 3052363

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000496	0.000992	0.000496	mg/kg	06.05.18 01.34	U	1
Toluene	108-88-3	<0.000496	0.000992	0.000496	mg/kg	06.05.18 01.34	U	1
Ethylbenzene	100-41-4	<0.000496	0.000992	0.000496	mg/kg	06.05.18 01.34	U	1
m,p-Xylenes	179601-23-1	<0.000992	0.00198	0.000992	mg/kg	06.05.18 01.34	U	1
o-Xylene	95-47-6	<0.000496	0.000992	0.000496	mg/kg	06.05.18 01.34	U	1
Total Xylenes	1330-20-7	<0.000496	0.000992	0.000496	mg/kg	06.05.18 01.34	U	1
Total BTEX		<0.000496	0.000992	0.000496	mg/kg	06.05.18 01.34	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	109	%	74-126	06.05.18 01.34			
1,2-Dichloroethane-D4	17060-07-0	113	%	80-120	06.05.18 01.34			
Toluene-D8	2037-26-5	88	%	73-132	06.05.18 01.34			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SW Confirmation 2-3**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-028

Date Collected: 05.31.18 11.25

Sample Depth: 2 - 3

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.05.18 17.04

Basis: Wet Weight

Seq Number: 3052514

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1.50	9.92	0.351	mg/kg	06.06.18 16.51	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 13.51

Basis: Wet Weight

Seq Number: 3052891

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.85	15.0	9.85	mg/kg	06.10.18 02.11	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.85	15.0	9.85	mg/kg	06.10.18 02.11	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.85	15.0	9.85	mg/kg	06.10.18 02.11	U	1
Total TPH	PHC635	<9.85	15.0	9.85	mg/kg	06.10.18 02.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	06.10.18 02.11	
o-Terphenyl	84-15-1	121	%	70-135	06.10.18 02.11	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SW Confirmation 2-3**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-028

Date Collected: 05.31.18 11.25

Sample Depth: 2 - 3

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.09.18 11.40

Basis: Wet Weight

Seq Number: 3053013

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000502	0.00100	0.000502	mg/kg	06.09.18 13.09	U	1
Toluene	108-88-3	0.000602	0.00100	0.000502	mg/kg	06.09.18 13.09	JX	1
Ethylbenzene	100-41-4	<0.000502	0.00100	0.000502	mg/kg	06.09.18 13.09	UX	1
m,p-Xylenes	179601-23-1	<0.00100	0.00201	0.00100	mg/kg	06.09.18 13.09	UXF	1
o-Xylene	95-47-6	<0.000502	0.00100	0.000502	mg/kg	06.09.18 13.09	UX	1
Total Xylenes	1330-20-7	<0.000502	0.00100	0.000502	mg/kg	06.09.18 13.09	U	1
Total BTEX		0.000602	0.00100	0.000502	mg/kg	06.09.18 13.09	J	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	117	%	74-126	06.09.18 13.09			
1,2-Dichloroethane-D4	17060-07-0	119	%	80-120	06.09.18 13.09			
Toluene-D8	2037-26-5	102	%	73-132	06.09.18 13.09			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SW Confirmation 3-4**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-029

Date Collected: 05.31.18 11.25

Sample Depth: 3 - 4

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.05.18 17.04

Basis: Wet Weight

Seq Number: 3052514

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1.04	9.82	0.348	mg/kg	06.06.18 17.04	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 13.54

Basis: Wet Weight

Seq Number: 3052891

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.82	14.9	9.82	mg/kg	06.10.18 02.32	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.82	14.9	9.82	mg/kg	06.10.18 02.32	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.82	14.9	9.82	mg/kg	06.10.18 02.32	U	1
Total TPH	PHC635	<9.82	14.9	9.82	mg/kg	06.10.18 02.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	06.10.18 02.32	
o-Terphenyl	84-15-1	122	%	70-135	06.10.18 02.32	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SW Confirmation 3-4**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-029

Date Collected: 05.31.18 11.25

Sample Depth: 3 - 4

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.04.18 18.25

Basis: Wet Weight

Seq Number: 3052363

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000501	0.00100	0.000501	mg/kg	06.05.18 01.50	U	1
Toluene	108-88-3	<0.000501	0.00100	0.000501	mg/kg	06.05.18 01.50	U	1
Ethylbenzene	100-41-4	<0.000501	0.00100	0.000501	mg/kg	06.05.18 01.50	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/kg	06.05.18 01.50	U	1
o-Xylene	95-47-6	<0.000501	0.00100	0.000501	mg/kg	06.05.18 01.50	U	1
Total Xylenes	1330-20-7	<0.000501	0.00100	0.000501	mg/kg	06.05.18 01.50	U	1
Total BTEX		<0.000501	0.00100	0.000501	mg/kg	06.05.18 01.50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	108	%	74-126	06.05.18 01.50			
1,2-Dichloroethane-D4	17060-07-0	106	%	80-120	06.05.18 01.50			
Toluene-D8	2037-26-5	98	%	73-132	06.05.18 01.50			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SW Confirmation 4-5**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-030

Date Collected: 05.31.18 11.25

Sample Depth: 4 - 5

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.05.18 17.04

Basis: Wet Weight

Seq Number: 3052514

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3.10	9.78	0.346	mg/kg	06.06.18 17.18	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 13.57

Basis: Wet Weight

Seq Number: 3052891

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.84	14.9	9.84	mg/kg	06.10.18 02.52	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.84	14.9	9.84	mg/kg	06.10.18 02.52	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.84	14.9	9.84	mg/kg	06.10.18 02.52	U	1
Total TPH	PHC635	<9.84	14.9	9.84	mg/kg	06.10.18 02.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	06.10.18 02.52	
o-Terphenyl	84-15-1	119	%	70-135	06.10.18 02.52	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SW Confirmation 4-5**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-030

Date Collected: 05.31.18 11.25

Sample Depth: 4 - 5

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.04.18 18.25

Basis: Wet Weight

Seq Number: 3052363

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000497	0.000994	0.000497	mg/kg	06.05.18 02.06	U	1
Toluene	108-88-3	<0.000497	0.000994	0.000497	mg/kg	06.05.18 02.06	U	1
Ethylbenzene	100-41-4	<0.000497	0.000994	0.000497	mg/kg	06.05.18 02.06	U	1
m,p-Xylenes	179601-23-1	<0.000994	0.00199	0.000994	mg/kg	06.05.18 02.06	U	1
o-Xylene	95-47-6	<0.000497	0.000994	0.000497	mg/kg	06.05.18 02.06	U	1
Total Xylenes	1330-20-7	<0.000497	0.000994	0.000497	mg/kg	06.05.18 02.06	U	1
Total BTEX		<0.000497	0.000994	0.000497	mg/kg	06.05.18 02.06	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	116	%	74-126	06.05.18 02.06			
1,2-Dichloroethane-D4	17060-07-0	107	%	80-120	06.05.18 02.06			
Toluene-D8	2037-26-5	90	%	73-132	06.05.18 02.06			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SW Confirmation 5-6**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-031

Date Collected: 05.31.18 11.25

Sample Depth: 5 - 6

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.05.18 17.04

Basis: Wet Weight

Seq Number: 3052514

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4.84	9.75	0.345	mg/kg	06.06.18 17.32	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 14.00

Basis: Wet Weight

Seq Number: 3052891

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.78	14.9	9.78	mg/kg	06.10.18 03.14	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.78	14.9	9.78	mg/kg	06.10.18 03.14	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.78	14.9	9.78	mg/kg	06.10.18 03.14	U	1
Total TPH	PHC635	<9.78	14.9	9.78	mg/kg	06.10.18 03.14	U	1

Surrogate

1-Chlorooctane

o-Terphenyl

Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
111-85-3	116	%	70-135	06.10.18 03.14	
84-15-1	127	%	70-135	06.10.18 03.14	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SW Confirmation 5-6**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-031

Date Collected: 05.31.18 11.25

Sample Depth: 5 - 6

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.04.18 18.25

Basis: Wet Weight

Seq Number: 3052363

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000498	0.000996	0.000498	mg/kg	06.05.18 02.22	U	1
Toluene	108-88-3	<0.000498	0.000996	0.000498	mg/kg	06.05.18 02.22	U	1
Ethylbenzene	100-41-4	<0.000498	0.000996	0.000498	mg/kg	06.05.18 02.22	U	1
m,p-Xylenes	179601-23-1	<0.000996	0.00199	0.000996	mg/kg	06.05.18 02.22	U	1
o-Xylene	95-47-6	<0.000498	0.000996	0.000498	mg/kg	06.05.18 02.22	U	1
Total Xylenes	1330-20-7	<0.000498	0.000996	0.000498	mg/kg	06.05.18 02.22	U	1
Total BTEX		<0.000498	0.000996	0.000498	mg/kg	06.05.18 02.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	113	%	74-126	06.05.18 02.22	
1,2-Dichloroethane-D4	17060-07-0	108	%	80-120	06.05.18 02.22	
Toluene-D8	2037-26-5	96	%	73-132	06.05.18 02.22	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SW Confirmation 6-7**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-032

Date Collected: 05.31.18 11.25

Sample Depth: 6 - 7

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.05.18 17.04

Basis: Wet Weight

Seq Number: 3052514

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16.3	9.77	0.346	mg/kg	06.06.18 18.41		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 14.03

Basis: Wet Weight

Seq Number: 3052891

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.78	14.9	9.78	mg/kg	06.10.18 03.35	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.78	14.9	9.78	mg/kg	06.10.18 03.35	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.78	14.9	9.78	mg/kg	06.10.18 03.35	U	1
Total TPH	PHC635	<9.78	14.9	9.78	mg/kg	06.10.18 03.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	06.10.18 03.35	
o-Terphenyl	84-15-1	121	%	70-135	06.10.18 03.35	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SW Confirmation 6-7**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-032

Date Collected: 05.31.18 11.25

Sample Depth: 6 - 7

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.07.18 16.45

Basis: Wet Weight

Seq Number: 3052687

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000502	0.00100	0.000502	mg/kg	06.07.18 18.21	U	1
Toluene	108-88-3	<0.000502	0.00100	0.000502	mg/kg	06.07.18 18.21	U	1
Ethylbenzene	100-41-4	<0.000502	0.00100	0.000502	mg/kg	06.07.18 18.21	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00201	0.00100	mg/kg	06.07.18 18.21	U	1
o-Xylene	95-47-6	<0.000502	0.00100	0.000502	mg/kg	06.07.18 18.21	U	1
Total Xylenes	1330-20-7	<0.000502	0.00100	0.000502	mg/kg	06.07.18 18.21	U	1
Total BTEX		<0.000502	0.00100	0.000502	mg/kg	06.07.18 18.21	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	108	%	74-126	06.07.18 18.21			
1,2-Dichloroethane-D4	17060-07-0	114	%	80-120	06.07.18 18.21			
Toluene-D8	2037-26-5	102	%	73-132	06.07.18 18.21			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SW Confirmation 7-8**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-033

Date Collected: 05.31.18 11.25

Sample Depth: 7 - 8

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.05.18 17.04

Basis: Wet Weight

Seq Number: 3052514

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	21.5	9.78	0.346	mg/kg	06.06.18 18.55		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 14.06

Basis: Wet Weight

Seq Number: 3052891

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.82	14.9	9.82	mg/kg	06.10.18 04.16	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.82	14.9	9.82	mg/kg	06.10.18 04.16	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.82	14.9	9.82	mg/kg	06.10.18 04.16	U	1
Total TPH	PHC635	<9.82	14.9	9.82	mg/kg	06.10.18 04.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	06.10.18 04.16	
o-Terphenyl	84-15-1	127	%	70-135	06.10.18 04.16	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SW Confirmation 7-8**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-033

Date Collected: 05.31.18 11.25

Sample Depth: 7 - 8

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.07.18 16.45

Basis: Wet Weight

Seq Number: 3052687

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000502	0.00100	0.000502	mg/kg	06.07.18 18.38	U	1
Toluene	108-88-3	<0.000502	0.00100	0.000502	mg/kg	06.07.18 18.38	U	1
Ethylbenzene	100-41-4	<0.000502	0.00100	0.000502	mg/kg	06.07.18 18.38	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00201	0.00100	mg/kg	06.07.18 18.38	U	1
o-Xylene	95-47-6	<0.000502	0.00100	0.000502	mg/kg	06.07.18 18.38	U	1
Total Xylenes	1330-20-7	<0.000502	0.00100	0.000502	mg/kg	06.07.18 18.38	U	1
Total BTEX		<0.000502	0.00100	0.000502	mg/kg	06.07.18 18.38	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	108	%	74-126	06.07.18 18.38			
1,2-Dichloroethane-D4	17060-07-0	110	%	80-120	06.07.18 18.38			
Toluene-D8	2037-26-5	100	%	73-132	06.07.18 18.38			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SW Confirmation 8-9**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-034

Date Collected: 05.31.18 11.25

Sample Depth: 8 - 9

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.05.18 17.04

Basis: Wet Weight

Seq Number: 3052514

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	18.3	9.73	0.344	mg/kg	06.06.18 19.09		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 14.09

Basis: Wet Weight

Seq Number: 3052891

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.79	14.9	9.79	mg/kg	06.10.18 04.37	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.79	14.9	9.79	mg/kg	06.10.18 04.37	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.79	14.9	9.79	mg/kg	06.10.18 04.37	U	1
Total TPH	PHC635	<9.79	14.9	9.79	mg/kg	06.10.18 04.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	06.10.18 04.37	
o-Terphenyl	84-15-1	122	%	70-135	06.10.18 04.37	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SW Confirmation 8-9**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-034

Date Collected: 05.31.18 11.25

Sample Depth: 8 - 9

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.04.18 18.25

Basis: Wet Weight

Seq Number: 3052363

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/kg	06.05.18 02.38	U	1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/kg	06.05.18 02.38	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/kg	06.05.18 02.38	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/kg	06.05.18 02.38	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/kg	06.05.18 02.38	U	1
Total Xylenes	1330-20-7	<0.000500	0.00100	0.000500	mg/kg	06.05.18 02.38	U	1
Total BTEX		<0.000500	0.00100	0.000500	mg/kg	06.05.18 02.38	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	111	%	74-126	06.05.18 02.38			
1,2-Dichloroethane-D4	17060-07-0	101	%	80-120	06.05.18 02.38			
Toluene-D8	2037-26-5	94	%	73-132	06.05.18 02.38			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SW Confirmation 9-10**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-035

Date Collected: 05.31.18 11.25

Sample Depth: 9 - 10

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.05.18 17.04

Basis: Wet Weight

Seq Number: 3052514

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8.76	9.75	0.345	mg/kg	06.06.18 19.23	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 14.12

Basis: Wet Weight

Seq Number: 3052891

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.80	14.9	9.80	mg/kg	06.10.18 04.58	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.80	14.9	9.80	mg/kg	06.10.18 04.58	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.80	14.9	9.80	mg/kg	06.10.18 04.58	U	1
Total TPH	PHC635	<9.80	14.9	9.80	mg/kg	06.10.18 04.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	06.10.18 04.58	
o-Terphenyl	84-15-1	120	%	70-135	06.10.18 04.58	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SW Confirmation 9-10**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-035

Date Collected: 05.31.18 11.25

Sample Depth: 9 - 10

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.04.18 18.25

Basis: Wet Weight

Seq Number: 3052363

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000502	0.00100	0.000502	mg/kg	06.05.18 02.54	U	1
Toluene	108-88-3	<0.000502	0.00100	0.000502	mg/kg	06.05.18 02.54	U	1
Ethylbenzene	100-41-4	<0.000502	0.00100	0.000502	mg/kg	06.05.18 02.54	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00201	0.00100	mg/kg	06.05.18 02.54	U	1
o-Xylene	95-47-6	<0.000502	0.00100	0.000502	mg/kg	06.05.18 02.54	U	1
Total Xylenes	1330-20-7	<0.000502	0.00100	0.000502	mg/kg	06.05.18 02.54	U	1
Total BTEX		<0.000502	0.00100	0.000502	mg/kg	06.05.18 02.54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	119	%	74-126	06.05.18 02.54			
1,2-Dichloroethane-D4	17060-07-0	114	%	80-120	06.05.18 02.54			
Toluene-D8	2037-26-5	86	%	73-132	06.05.18 02.54			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SE Confirmation 0-1**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-036

Date Collected: 05.31.18 11.15

Sample Depth: 0 - 1

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.05.18 17.04

Basis: Wet Weight

Seq Number: 3052514

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2.97	9.77	0.346	mg/kg	06.06.18 19.37	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 14.15

Basis: Wet Weight

Seq Number: 3052891

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.80	14.9	9.80	mg/kg	06.10.18 05.19	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.80	14.9	9.80	mg/kg	06.10.18 05.19	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.80	14.9	9.80	mg/kg	06.10.18 05.19	U	1
Total TPH	PHC635	<9.80	14.9	9.80	mg/kg	06.10.18 05.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	06.10.18 05.19	
o-Terphenyl	84-15-1	124	%	70-135	06.10.18 05.19	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SE Confirmation 0-1**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-036

Date Collected: 05.31.18 11.15

Sample Depth: 0 - 1

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.04.18 18.25

Basis: Wet Weight

Seq Number: 3052363

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/kg	06.05.18 03.11	U	1
Toluene	108-88-3	0.000740	0.00100	0.000500	mg/kg	06.05.18 03.11	J	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/kg	06.05.18 03.11	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/kg	06.05.18 03.11	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/kg	06.05.18 03.11	U	1
Total Xylenes	1330-20-7	<0.000500	0.00100	0.000500	mg/kg	06.05.18 03.11	U	1
Total BTEX		0.000740	0.00100	0.000500	mg/kg	06.05.18 03.11	J	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	110	%	74-126	06.05.18 03.11			
1,2-Dichloroethane-D4	17060-07-0	105	%	80-120	06.05.18 03.11			
Toluene-D8	2037-26-5	97	%	73-132	06.05.18 03.11			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SE Confirmation 1-2**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-037

Date Collected: 05.31.18 11.15

Sample Depth: 1 - 2

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.05.18 17.04

Basis: Wet Weight

Seq Number: 3052514

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3.05	9.78	0.346	mg/kg	06.06.18 19.51	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 14.18

Basis: Wet Weight

Seq Number: 3052891

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.82	14.9	9.82	mg/kg	06.10.18 05.40	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.82	14.9	9.82	mg/kg	06.10.18 05.40	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.82	14.9	9.82	mg/kg	06.10.18 05.40	U	1
Total TPH	PHC635	<9.82	14.9	9.82	mg/kg	06.10.18 05.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	06.10.18 05.40	
o-Terphenyl	84-15-1	117	%	70-135	06.10.18 05.40	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SE Confirmation 1-2**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-037

Date Collected: 05.31.18 11.15

Sample Depth: 1 - 2

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.04.18 18.25

Basis: Wet Weight

Seq Number: 3052363

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000501	0.00100	0.000501	mg/kg	06.05.18 03.27	U	1
Toluene	108-88-3	<0.000501	0.00100	0.000501	mg/kg	06.05.18 03.27	U	1
Ethylbenzene	100-41-4	<0.000501	0.00100	0.000501	mg/kg	06.05.18 03.27	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/kg	06.05.18 03.27	U	1
o-Xylene	95-47-6	<0.000501	0.00100	0.000501	mg/kg	06.05.18 03.27	U	1
Total Xylenes	1330-20-7	<0.000501	0.00100	0.000501	mg/kg	06.05.18 03.27	U	1
Total BTEX		<0.000501	0.00100	0.000501	mg/kg	06.05.18 03.27	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	114	%	74-126	06.05.18 03.27			
1,2-Dichloroethane-D4	17060-07-0	105	%	80-120	06.05.18 03.27			
Toluene-D8	2037-26-5	100	%	73-132	06.05.18 03.27			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SE Confirmation 2-3**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-038

Date Collected: 05.31.18 11.15

Sample Depth: 2 - 3

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.05.18 17.04

Basis: Wet Weight

Seq Number: 3052514

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2.27	9.88	0.350	mg/kg	06.06.18 20.04	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 14.21

Basis: Wet Weight

Seq Number: 3052891

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.82	14.9	9.82	mg/kg	06.10.18 06.01	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.82	14.9	9.82	mg/kg	06.10.18 06.01	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.82	14.9	9.82	mg/kg	06.10.18 06.01	U	1
Total TPH	PHC635	<9.82	14.9	9.82	mg/kg	06.10.18 06.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	06.10.18 06.01	
o-Terphenyl	84-15-1	126	%	70-135	06.10.18 06.01	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SE Confirmation 2-3**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-038

Date Collected: 05.31.18 11.15

Sample Depth: 2 - 3

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.14.18 08.57

Basis: Wet Weight

Seq Number: 3053406

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000496	0.000992	0.000496	mg/kg	06.14.18 13.48	U	1
Toluene	108-88-3	<0.000496	0.000992	0.000496	mg/kg	06.14.18 13.48	U	1
Ethylbenzene	100-41-4	<0.000496	0.000992	0.000496	mg/kg	06.14.18 13.48	U	1
m,p-Xylenes	179601-23-1	<0.000992	0.00198	0.000992	mg/kg	06.14.18 13.48	U	1
o-Xylene	95-47-6	<0.000496	0.000992	0.000496	mg/kg	06.14.18 13.48	U	1
Total Xylenes	1330-20-7	<0.000496	0.000992	0.000496	mg/kg	06.14.18 13.48	U	1
Total BTEX		<0.000496	0.000992	0.000496	mg/kg	06.14.18 13.48	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	107	%	74-126	06.14.18 13.48			
1,2-Dichloroethane-D4	17060-07-0	105	%	80-120	06.14.18 13.48			
Toluene-D8	2037-26-5	90	%	73-132	06.14.18 13.48			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SE Confirmation 3-4**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-039

Date Collected: 05.31.18 11.15

Sample Depth: 3 - 4

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.06.18 09.08

Basis: Wet Weight

Seq Number: 3052603

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2.43	9.92	0.351	mg/kg	06.07.18 07.30	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 14.24

Basis: Wet Weight

Seq Number: 3052891

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.85	15.0	9.85	mg/kg	06.10.18 06.22	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.85	15.0	9.85	mg/kg	06.10.18 06.22	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.85	15.0	9.85	mg/kg	06.10.18 06.22	U	1
Total TPH	PHC635	<9.85	15.0	9.85	mg/kg	06.10.18 06.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-135	06.10.18 06.22	
o-Terphenyl	84-15-1	132	%	70-135	06.10.18 06.22	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SE Confirmation 3-4**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-039

Date Collected: 05.31.18 11.15

Sample Depth: 3 - 4

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.04.18 18.25

Basis: Wet Weight

Seq Number: 3052363

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000498	0.000996	0.000498	mg/kg	06.05.18 03.43	U	1
Toluene	108-88-3	<0.000498	0.000996	0.000498	mg/kg	06.05.18 03.43	U	1
Ethylbenzene	100-41-4	<0.000498	0.000996	0.000498	mg/kg	06.05.18 03.43	U	1
m,p-Xylenes	179601-23-1	<0.000996	0.00199	0.000996	mg/kg	06.05.18 03.43	U	1
o-Xylene	95-47-6	<0.000498	0.000996	0.000498	mg/kg	06.05.18 03.43	U	1
Total Xylenes	1330-20-7	<0.000498	0.000996	0.000498	mg/kg	06.05.18 03.43	U	1
Total BTEX		<0.000498	0.000996	0.000498	mg/kg	06.05.18 03.43	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	116	%	74-126	06.05.18 03.43			
1,2-Dichloroethane-D4	17060-07-0	115	%	80-120	06.05.18 03.43			
Toluene-D8	2037-26-5	90	%	73-132	06.05.18 03.43			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SE Confirmation 4-5**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-040

Date Collected: 05.31.18 11.15

Sample Depth: 4 - 5

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.06.18 09.08

Basis: Wet Weight

Seq Number: 3052603

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4.55	9.82	0.348	mg/kg	06.07.18 07.40	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 16.42

Basis: Wet Weight

Seq Number: 3052890

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.88	15.0	9.88	mg/kg	06.10.18 09.10	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.88	15.0	9.88	mg/kg	06.10.18 09.10	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.88	15.0	9.88	mg/kg	06.10.18 09.10	U	1
Total TPH	PHC635	<9.88	15.0	9.88	mg/kg	06.10.18 09.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-135	06.10.18 09.10	
o-Terphenyl	84-15-1	128	%	70-135	06.10.18 09.10	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SE Confirmation 4-5**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-040

Date Collected: 05.31.18 11.15

Sample Depth: 4 - 5

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.07.18 16.45

Basis: Wet Weight

Seq Number: 3052687

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000504	0.00101	0.000504	mg/kg	06.07.18 19.11	U	1
Toluene	108-88-3	<0.000504	0.00101	0.000504	mg/kg	06.07.18 19.11	U	1
Ethylbenzene	100-41-4	<0.000504	0.00101	0.000504	mg/kg	06.07.18 19.11	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00202	0.00101	mg/kg	06.07.18 19.11	U	1
o-Xylene	95-47-6	<0.000504	0.00101	0.000504	mg/kg	06.07.18 19.11	U	1
Total Xylenes	1330-20-7	<0.000504	0.00101	0.000504	mg/kg	06.07.18 19.11	U	1
Total BTEX		<0.000504	0.00101	0.000504	mg/kg	06.07.18 19.11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	103	%	74-126	06.07.18 19.11			
1,2-Dichloroethane-D4	17060-07-0	99	%	80-120	06.07.18 19.11			
Toluene-D8	2037-26-5	101	%	73-132	06.07.18 19.11			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SE Confirmation 5-6**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-041

Date Collected: 05.31.18 11.15

Sample Depth: 5 - 6

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.06.18 09.08

Basis: Wet Weight

Seq Number: 3052603

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3.20	9.94	0.352	mg/kg	06.07.18 07.51	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 16.42

Basis: Wet Weight

Seq Number: 3052890

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.88	15.0	9.88	mg/kg	06.10.18 10.13	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.88	15.0	9.88	mg/kg	06.10.18 10.13	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.88	15.0	9.88	mg/kg	06.10.18 10.13	U	1
Total TPH	PHC635	<9.88	15.0	9.88	mg/kg	06.10.18 10.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	06.10.18 10.13	
o-Terphenyl	84-15-1	127	%	70-135	06.10.18 10.13	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SE Confirmation 5-6**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-041

Date Collected: 05.31.18 11.15

Sample Depth: 5 - 6

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.07.18 16.45

Basis: Wet Weight

Seq Number: 3052687

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000497	0.000994	0.000497	mg/kg	06.07.18 19.27	U	1
Toluene	108-88-3	<0.000497	0.000994	0.000497	mg/kg	06.07.18 19.27	U	1
Ethylbenzene	100-41-4	<0.000497	0.000994	0.000497	mg/kg	06.07.18 19.27	U	1
m,p-Xylenes	179601-23-1	<0.000994	0.00199	0.000994	mg/kg	06.07.18 19.27	U	1
o-Xylene	95-47-6	<0.000497	0.000994	0.000497	mg/kg	06.07.18 19.27	U	1
Total Xylenes	1330-20-7	<0.000497	0.000994	0.000497	mg/kg	06.07.18 19.27	U	1
Total BTEX		<0.000497	0.000994	0.000497	mg/kg	06.07.18 19.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	100	%	74-126	06.07.18 19.27	
1,2-Dichloroethane-D4	17060-07-0	104	%	80-120	06.07.18 19.27	
Toluene-D8	2037-26-5	98	%	73-132	06.07.18 19.27	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SE Confirmation 6-7**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-042

Date Collected: 05.31.18 11.15

Sample Depth: 6 - 7

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.06.18 09.08

Basis: Wet Weight

Seq Number: 3052603

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3.22	9.96	0.353	mg/kg	06.07.18 08.02	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 16.42

Basis: Wet Weight

Seq Number: 3052890

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.88	15.0	9.88	mg/kg	06.10.18 10.34	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.88	15.0	9.88	mg/kg	06.10.18 10.34	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.88	15.0	9.88	mg/kg	06.10.18 10.34	U	1
Total TPH	PHC635	<9.88	15.0	9.88	mg/kg	06.10.18 10.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	06.10.18 10.34	
o-Terphenyl	84-15-1	124	%	70-135	06.10.18 10.34	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SE Confirmation 6-7**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-042

Date Collected: 05.31.18 11.15

Sample Depth: 6 - 7

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.07.18 16.45

Basis: Wet Weight

Seq Number: 3052687

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000497	0.000994	0.000497	mg/kg	06.07.18 19.43	U	1
Toluene	108-88-3	<0.000497	0.000994	0.000497	mg/kg	06.07.18 19.43	U	1
Ethylbenzene	100-41-4	<0.000497	0.000994	0.000497	mg/kg	06.07.18 19.43	U	1
m,p-Xylenes	179601-23-1	<0.000994	0.00199	0.000994	mg/kg	06.07.18 19.43	U	1
o-Xylene	95-47-6	<0.000497	0.000994	0.000497	mg/kg	06.07.18 19.43	U	1
Total Xylenes	1330-20-7	<0.000497	0.000994	0.000497	mg/kg	06.07.18 19.43	U	1
Total BTEX		<0.000497	0.000994	0.000497	mg/kg	06.07.18 19.43	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	103	%	74-126	06.07.18 19.43			
1,2-Dichloroethane-D4	17060-07-0	101	%	80-120	06.07.18 19.43			
Toluene-D8	2037-26-5	102	%	73-132	06.07.18 19.43			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SE Confirmation 7-8**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-043

Date Collected: 05.31.18 11.15

Sample Depth: 7 - 8

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.06.18 09.08

Basis: Wet Weight

Seq Number: 3052603

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3.67	9.98	0.353	mg/kg	06.07.18 08.13	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 16.42

Basis: Wet Weight

Seq Number: 3052890

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.88	15.0	9.88	mg/kg	06.10.18 10.55	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.88	15.0	9.88	mg/kg	06.10.18 10.55	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.88	15.0	9.88	mg/kg	06.10.18 10.55	U	1
Total TPH	PHC635	<9.88	15.0	9.88	mg/kg	06.10.18 10.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-135	06.10.18 10.55	
o-Terphenyl	84-15-1	132	%	70-135	06.10.18 10.55	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SE Confirmation 7-8**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-043

Date Collected: 05.31.18 11.15

Sample Depth: 7 - 8

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.07.18 15.00

Basis: Wet Weight

Seq Number: 3052687

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000501	0.00100	0.000501	mg/kg	06.07.18 16.58	U	1
Toluene	108-88-3	<0.000501	0.00100	0.000501	mg/kg	06.07.18 16.58	U	1
Ethylbenzene	100-41-4	<0.000501	0.00100	0.000501	mg/kg	06.07.18 16.58	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/kg	06.07.18 16.58	U	1
o-Xylene	95-47-6	<0.000501	0.00100	0.000501	mg/kg	06.07.18 16.58	U	1
Total Xylenes	1330-20-7	<0.000501	0.00100	0.000501	mg/kg	06.07.18 16.58	U	1
Total BTEX		<0.000501	0.00100	0.000501	mg/kg	06.07.18 16.58	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	102	%	74-126	06.07.18 16.58			
1,2-Dichloroethane-D4	17060-07-0	104	%	80-120	06.07.18 16.58			
Toluene-D8	2037-26-5	93	%	73-132	06.07.18 16.58			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SE Confirmation 8-9**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-044

Date Collected: 05.31.18 11.15

Sample Depth: 8 - 9

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.06.18 09.08

Basis: Wet Weight

Seq Number: 3052603

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2.23	9.82	0.348	mg/kg	06.07.18 08.24	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 16.42

Basis: Wet Weight

Seq Number: 3052890

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.88	15.0	9.88	mg/kg	06.10.18 11.16	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.88	15.0	9.88	mg/kg	06.10.18 11.16	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.88	15.0	9.88	mg/kg	06.10.18 11.16	U	1
Total TPH	PHC635	<9.88	15.0	9.88	mg/kg	06.10.18 11.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-135	06.10.18 11.16	
o-Terphenyl	84-15-1	131	%	70-135	06.10.18 11.16	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SE Confirmation 8-9**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-044

Date Collected: 05.31.18 11.15

Sample Depth: 8 - 9

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.07.18 16.45

Basis: Wet Weight

Seq Number: 3052687

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000498	0.000996	0.000498	mg/kg	06.07.18 19.59	U	1
Toluene	108-88-3	<0.000498	0.000996	0.000498	mg/kg	06.07.18 19.59	U	1
Ethylbenzene	100-41-4	<0.000498	0.000996	0.000498	mg/kg	06.07.18 19.59	U	1
m,p-Xylenes	179601-23-1	<0.000996	0.00199	0.000996	mg/kg	06.07.18 19.59	U	1
o-Xylene	95-47-6	<0.000498	0.000996	0.000498	mg/kg	06.07.18 19.59	U	1
Total Xylenes	1330-20-7	<0.000498	0.000996	0.000498	mg/kg	06.07.18 19.59	U	1
Total BTEX		<0.000498	0.000996	0.000498	mg/kg	06.07.18 19.59	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	102	%	74-126	06.07.18 19.59			
1,2-Dichloroethane-D4	17060-07-0	102	%	80-120	06.07.18 19.59			
Toluene-D8	2037-26-5	105	%	73-132	06.07.18 19.59			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SE Confirmation 9-10**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-045

Date Collected: 05.31.18 11.15

Sample Depth: 9 - 10

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.06.18 09.08

Basis: Wet Weight

Seq Number: 3052603

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2.40	9.94	0.352	mg/kg	06.07.18 08.34	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 16.42

Basis: Wet Weight

Seq Number: 3052890

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.88	15.0	9.88	mg/kg	06.10.18 11.37	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.88	15.0	9.88	mg/kg	06.10.18 11.37	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.88	15.0	9.88	mg/kg	06.10.18 11.37	U	1
Total TPH	PHC635	<9.88	15.0	9.88	mg/kg	06.10.18 11.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	06.10.18 11.37	
o-Terphenyl	84-15-1	129	%	70-135	06.10.18 11.37	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **SE Confirmation 9-10**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-045

Date Collected: 05.31.18 11.15

Sample Depth: 9 - 10

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.07.18 16.45

Basis: Wet Weight

Seq Number: 3052687

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000495	0.000990	0.000495	mg/kg	06.07.18 20.15	U	1
Toluene	108-88-3	<0.000495	0.000990	0.000495	mg/kg	06.07.18 20.15	U	1
Ethylbenzene	100-41-4	<0.000495	0.000990	0.000495	mg/kg	06.07.18 20.15	U	1
m,p-Xylenes	179601-23-1	<0.000990	0.00198	0.000990	mg/kg	06.07.18 20.15	U	1
o-Xylene	95-47-6	<0.000495	0.000990	0.000495	mg/kg	06.07.18 20.15	U	1
Total Xylenes	1330-20-7	<0.000495	0.000990	0.000495	mg/kg	06.07.18 20.15	U	1
Total BTEX		<0.000495	0.000990	0.000495	mg/kg	06.07.18 20.15	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	96	%	74-126	06.07.18 20.15			
1,2-Dichloroethane-D4	17060-07-0	102	%	80-120	06.07.18 20.15			
Toluene-D8	2037-26-5	109	%	73-132	06.07.18 20.15			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NW Confirmation 0-1**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-046

Date Collected: 05.31.18 11.35

Sample Depth: 0 - 1

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.06.18 09.08

Basis: Wet Weight

Seq Number: 3052603

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	31.5	9.96	0.353	mg/kg	06.07.18 08.45		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 16.42

Basis: Wet Weight

Seq Number: 3052890

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	29.4	15.0	9.88	mg/kg	06.10.18 11.58		1
C10-C28 Diesel Range Organics	C10C28DRO	13.2	15.0	9.88	mg/kg	06.10.18 11.58	J	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.88	15.0	9.88	mg/kg	06.10.18 11.58	U	1
Total TPH	PHC635	42.6	15.0	9.88	mg/kg	06.10.18 11.58		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	06.10.18 11.58	
o-Terphenyl	84-15-1	127	%	70-135	06.10.18 11.58	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NW Confirmation 0-1**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-046

Date Collected: 05.31.18 11.35

Sample Depth: 0 - 1

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.07.18 16.45

Basis: Wet Weight

Seq Number: 3052687

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000504	0.00101	0.000504	mg/kg	06.07.18 21.04	U	1
Toluene	108-88-3	<0.000504	0.00101	0.000504	mg/kg	06.07.18 21.04	U	1
Ethylbenzene	100-41-4	<0.000504	0.00101	0.000504	mg/kg	06.07.18 21.04	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00202	0.00101	mg/kg	06.07.18 21.04	U	1
o-Xylene	95-47-6	<0.000504	0.00101	0.000504	mg/kg	06.07.18 21.04	U	1
Total Xylenes	1330-20-7	<0.000504	0.00101	0.000504	mg/kg	06.07.18 21.04	U	1
Total BTEX		<0.000504	0.00101	0.000504	mg/kg	06.07.18 21.04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	104	%	74-126	06.07.18 21.04			
1,2-Dichloroethane-D4	17060-07-0	123	%	80-120	06.07.18 21.04	**		
Toluene-D8	2037-26-5	101	%	73-132	06.07.18 21.04			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NW Confirmation 1-2**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-047

Date Collected: 05.31.18 11.35

Sample Depth: 1 - 2

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.06.18 09.08

Basis: Wet Weight

Seq Number: 3052603

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	26.9	9.82	0.348	mg/kg	06.07.18 08.56		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 16.42

Basis: Wet Weight

Seq Number: 3052890

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	26.0	15.0	9.88	mg/kg	06.10.18 12.19		1
C10-C28 Diesel Range Organics	C10C28DRO	22.6	15.0	9.88	mg/kg	06.10.18 12.19		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.88	15.0	9.88	mg/kg	06.10.18 12.19	U	1
Total TPH	PHC635	48.6	15.0	9.88	mg/kg	06.10.18 12.19		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	06.10.18 12.19	
o-Terphenyl	84-15-1	118	%	70-135	06.10.18 12.19	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NW Confirmation 1-2**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-047

Date Collected: 05.31.18 11.35

Sample Depth: 1 - 2

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.07.18 16.45

Basis: Wet Weight

Seq Number: 3052687

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000499	0.000998	0.000499	mg/kg	06.07.18 20.31	U	1
Toluene	108-88-3	<0.000499	0.000998	0.000499	mg/kg	06.07.18 20.31	U	1
Ethylbenzene	100-41-4	<0.000499	0.000998	0.000499	mg/kg	06.07.18 20.31	U	1
m,p-Xylenes	179601-23-1	<0.000998	0.00200	0.000998	mg/kg	06.07.18 20.31	U	1
o-Xylene	95-47-6	<0.000499	0.000998	0.000499	mg/kg	06.07.18 20.31	U	1
Total Xylenes	1330-20-7	<0.000499	0.000998	0.000499	mg/kg	06.07.18 20.31	U	1
Total BTEX		<0.000499	0.000998	0.000499	mg/kg	06.07.18 20.31	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	102	%	74-126	06.07.18 20.31			
1,2-Dichloroethane-D4	17060-07-0	99	%	80-120	06.07.18 20.31			
Toluene-D8	2037-26-5	101	%	73-132	06.07.18 20.31			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NW Confirmation 2-3**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-048

Date Collected: 05.31.18 11.35

Sample Depth: 2 - 3

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.06.18 09.08

Basis: Wet Weight

Seq Number: 3052603

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	22.3	9.92	0.351	mg/kg	06.07.18 09.07		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 16.42

Basis: Wet Weight

Seq Number: 3052890

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.88	15.0	9.88	mg/kg	06.10.18 12.41	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.88	15.0	9.88	mg/kg	06.10.18 12.41	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.88	15.0	9.88	mg/kg	06.10.18 12.41	U	1
Total TPH	PHC635	<9.88	15.0	9.88	mg/kg	06.10.18 12.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	121	%	70-135	06.10.18 12.41	
o-Terphenyl	84-15-1	133	%	70-135	06.10.18 12.41	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NW Confirmation 2-3**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-048

Date Collected: 05.31.18 11.35

Sample Depth: 2 - 3

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.14.18 08.57

Basis: Wet Weight

Seq Number: 3053406

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000498	0.000996	0.000498	mg/kg	06.14.18 14.04	U	1
Toluene	108-88-3	<0.000498	0.000996	0.000498	mg/kg	06.14.18 14.04	U	1
Ethylbenzene	100-41-4	<0.000498	0.000996	0.000498	mg/kg	06.14.18 14.04	U	1
m,p-Xylenes	179601-23-1	<0.000996	0.00199	0.000996	mg/kg	06.14.18 14.04	U	1
o-Xylene	95-47-6	<0.000498	0.000996	0.000498	mg/kg	06.14.18 14.04	U	1
Total Xylenes	1330-20-7	<0.000498	0.000996	0.000498	mg/kg	06.14.18 14.04	U	1
Total BTEX		<0.000498	0.000996	0.000498	mg/kg	06.14.18 14.04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	103	%	74-126	06.14.18 14.04			
1,2-Dichloroethane-D4	17060-07-0	101	%	80-120	06.14.18 14.04			
Toluene-D8	2037-26-5	89	%	73-132	06.14.18 14.04			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NW Confirmation 3-4**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-049

Date Collected: 05.31.18 11.35

Sample Depth: 3 - 4

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.06.18 09.08

Basis: Wet Weight

Seq Number: 3052603

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	28.2	9.90	0.350	mg/kg	06.07.18 09.39		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 16.42

Basis: Wet Weight

Seq Number: 3052890

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.88	15.0	9.88	mg/kg	06.10.18 13.02	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.88	15.0	9.88	mg/kg	06.10.18 13.02	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.88	15.0	9.88	mg/kg	06.10.18 13.02	U	1
Total TPH	PHC635	<9.88	15.0	9.88	mg/kg	06.10.18 13.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	06.10.18 13.02	
o-Terphenyl	84-15-1	122	%	70-135	06.10.18 13.02	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NW Confirmation 3-4**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-049

Date Collected: 05.31.18 11.35

Sample Depth: 3 - 4

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.07.18 16.45

Basis: Wet Weight

Seq Number: 3052687

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000504	0.00101	0.000504	mg/kg	06.07.18 20.47	U	1
Toluene	108-88-3	<0.000504	0.00101	0.000504	mg/kg	06.07.18 20.47	U	1
Ethylbenzene	100-41-4	<0.000504	0.00101	0.000504	mg/kg	06.07.18 20.47	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00202	0.00101	mg/kg	06.07.18 20.47	U	1
o-Xylene	95-47-6	<0.000504	0.00101	0.000504	mg/kg	06.07.18 20.47	U	1
Total Xylenes	1330-20-7	<0.000504	0.00101	0.000504	mg/kg	06.07.18 20.47	U	1
Total BTEX		<0.000504	0.00101	0.000504	mg/kg	06.07.18 20.47	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	109	%	74-126	06.07.18 20.47			
1,2-Dichloroethane-D4	17060-07-0	110	%	80-120	06.07.18 20.47			
Toluene-D8	2037-26-5	106	%	73-132	06.07.18 20.47			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NW Confirmation 4-5**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-050

Date Collected: 05.31.18 11.35

Sample Depth: 4 - 5

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.06.18 09.08

Basis: Wet Weight

Seq Number: 3052603

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4.48	9.82	0.348	mg/kg	06.07.18 09.50	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 16.42

Basis: Wet Weight

Seq Number: 3052890

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.88	15.0	9.88	mg/kg	06.10.18 22.57	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.88	15.0	9.88	mg/kg	06.10.18 22.57	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.88	15.0	9.88	mg/kg	06.10.18 22.57	U	1
Total TPH	PHC635	<9.88	15.0	9.88	mg/kg	06.10.18 22.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	06.10.18 22.57	
o-Terphenyl	84-15-1	127	%	70-135	06.10.18 22.57	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NW Confirmation 4-5**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-050

Date Collected: 05.31.18 11.35

Sample Depth: 4 - 5

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.14.18 08.57

Basis: Wet Weight

Seq Number: 3053406

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000502	0.00100	0.000502	mg/kg	06.14.18 14.21	U	1
Toluene	108-88-3	<0.000502	0.00100	0.000502	mg/kg	06.14.18 14.21	U	1
Ethylbenzene	100-41-4	<0.000502	0.00100	0.000502	mg/kg	06.14.18 14.21	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00201	0.00100	mg/kg	06.14.18 14.21	U	1
o-Xylene	95-47-6	<0.000502	0.00100	0.000502	mg/kg	06.14.18 14.21	U	1
Total Xylenes	1330-20-7	<0.000502	0.00100	0.000502	mg/kg	06.14.18 14.21	U	1
Total BTEX		<0.000502	0.00100	0.000502	mg/kg	06.14.18 14.21	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	113	%	74-126	06.14.18 14.21			
1,2-Dichloroethane-D4	17060-07-0	102	%	80-120	06.14.18 14.21			
Toluene-D8	2037-26-5	89	%	73-132	06.14.18 14.21			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NW Confirmation 5-6**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-051

Date Collected: 05.31.18 11.35

Sample Depth: 5 - 6

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.06.18 09.08

Basis: Wet Weight

Seq Number: 3052603

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5.21	9.82	0.348	mg/kg	06.07.18 10.01	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 16.42

Basis: Wet Weight

Seq Number: 3052890

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.88	15.0	9.88	mg/kg	06.10.18 23.39	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.88	15.0	9.88	mg/kg	06.10.18 23.39	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.88	15.0	9.88	mg/kg	06.10.18 23.39	U	1
Total TPH	PHC635	<9.88	15.0	9.88	mg/kg	06.10.18 23.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-135	06.10.18 23.39	
o-Terphenyl	84-15-1	130	%	70-135	06.10.18 23.39	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NW Confirmation 5-6**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-051

Date Collected: 05.31.18 11.35

Sample Depth: 5 - 6

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.07.18 16.45

Basis: Wet Weight

Seq Number: 3052687

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000497	0.000994	0.000497	mg/kg	06.07.18 21.36	U	1
Toluene	108-88-3	<0.000497	0.000994	0.000497	mg/kg	06.07.18 21.36	U	1
Ethylbenzene	100-41-4	<0.000497	0.000994	0.000497	mg/kg	06.07.18 21.36	U	1
m,p-Xylenes	179601-23-1	<0.000994	0.00199	0.000994	mg/kg	06.07.18 21.36	U	1
o-Xylene	95-47-6	<0.000497	0.000994	0.000497	mg/kg	06.07.18 21.36	U	1
Total Xylenes	1330-20-7	<0.000497	0.000994	0.000497	mg/kg	06.07.18 21.36	U	1
Total BTEX		<0.000497	0.000994	0.000497	mg/kg	06.07.18 21.36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	108	%	74-126	06.07.18 21.36			
1,2-Dichloroethane-D4	17060-07-0	122	%	80-120	06.07.18 21.36	**		
Toluene-D8	2037-26-5	106	%	73-132	06.07.18 21.36			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NW Confirmation 6-7**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-052

Date Collected: 05.31.18 11.35

Sample Depth: 6 - 7

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.06.18 09.08

Basis: Wet Weight

Seq Number: 3052603

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5.95	9.82	0.348	mg/kg	06.07.18 14.49	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 16.42

Basis: Wet Weight

Seq Number: 3052890

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.88	15.0	9.88	mg/kg	06.11.18 00.00	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.88	15.0	9.88	mg/kg	06.11.18 00.00	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.88	15.0	9.88	mg/kg	06.11.18 00.00	U	1
Total TPH	PHC635	<9.88	15.0	9.88	mg/kg	06.11.18 00.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	06.11.18 00.00	
o-Terphenyl	84-15-1	124	%	70-135	06.11.18 00.00	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NW Confirmation 6-7**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-052

Date Collected: 05.31.18 11.35

Sample Depth: 6 - 7

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.07.18 16.45

Basis: Wet Weight

Seq Number: 3052687

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000497	0.000994	0.000497	mg/kg	06.07.18 21.20	U	1
Toluene	108-88-3	<0.000497	0.000994	0.000497	mg/kg	06.07.18 21.20	U	1
Ethylbenzene	100-41-4	<0.000497	0.000994	0.000497	mg/kg	06.07.18 21.20	U	1
m,p-Xylenes	179601-23-1	<0.000994	0.00199	0.000994	mg/kg	06.07.18 21.20	U	1
o-Xylene	95-47-6	<0.000497	0.000994	0.000497	mg/kg	06.07.18 21.20	U	1
Total Xylenes	1330-20-7	<0.000497	0.000994	0.000497	mg/kg	06.07.18 21.20	U	1
Total BTEX		<0.000497	0.000994	0.000497	mg/kg	06.07.18 21.20	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	102	%	74-126	06.07.18 21.20			
1,2-Dichloroethane-D4	17060-07-0	109	%	80-120	06.07.18 21.20			
Toluene-D8	2037-26-5	103	%	73-132	06.07.18 21.20			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NW Confirmation 7-8**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-053

Date Collected: 05.31.18 11.35

Sample Depth: 7 - 8

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.06.18 09.08

Basis: Wet Weight

Seq Number: 3052603

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5.74	9.88	0.350	mg/kg	06.07.18 15.00	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 16.42

Basis: Wet Weight

Seq Number: 3052890

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.88	15.0	9.88	mg/kg	06.11.18 00.21	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.88	15.0	9.88	mg/kg	06.11.18 00.21	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.88	15.0	9.88	mg/kg	06.11.18 00.21	U	1
Total TPH	PHC635	<9.88	15.0	9.88	mg/kg	06.11.18 00.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-135	06.11.18 00.21	
o-Terphenyl	84-15-1	128	%	70-135	06.11.18 00.21	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NW Confirmation 7-8**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-053

Date Collected: 05.31.18 11.35

Sample Depth: 7 - 8

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.09.18 12.05

Basis: Wet Weight

Seq Number: 3053013

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000499	0.000998	0.000499	mg/kg	06.09.18 13.58	U	1
Toluene	108-88-3	0.000918	0.000998	0.000499	mg/kg	06.09.18 13.58	J	1
Ethylbenzene	100-41-4	<0.000499	0.000998	0.000499	mg/kg	06.09.18 13.58	U	1
m,p-Xylenes	179601-23-1	<0.000998	0.00200	0.000998	mg/kg	06.09.18 13.58	U	1
o-Xylene	95-47-6	<0.000499	0.000998	0.000499	mg/kg	06.09.18 13.58	U	1
Total Xylenes	1330-20-7	<0.000499	0.000998	0.000499	mg/kg	06.09.18 13.58	U	1
Total BTEX		0.000918	0.000998	0.000499	mg/kg	06.09.18 13.58	J	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	111	%	74-126	06.09.18 13.58			
1,2-Dichloroethane-D4	17060-07-0	125	%	80-120	06.09.18 13.58		**	
Toluene-D8	2037-26-5	93	%	73-132	06.09.18 13.58			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NW Confirmation 8-9**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-054

Date Collected: 05.31.18 11.35

Sample Depth: 8 - 9

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.06.18 09.08

Basis: Wet Weight

Seq Number: 3052603

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2.77	9.90	0.350	mg/kg	06.07.18 15.11	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 16.42

Basis: Wet Weight

Seq Number: 3052890

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.88	15.0	9.88	mg/kg	06.11.18 00.42	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.88	15.0	9.88	mg/kg	06.11.18 00.42	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.88	15.0	9.88	mg/kg	06.11.18 00.42	U	1
Total TPH	PHC635	<9.88	15.0	9.88	mg/kg	06.11.18 00.42	U	1

Surrogate

1-Chlorooctane

o-Terphenyl

Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
111-85-3	112	%	70-135	06.11.18 00.42	
84-15-1	121	%	70-135	06.11.18 00.42	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NW Confirmation 8-9**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-054

Date Collected: 05.31.18 11.35

Sample Depth: 8 - 9

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.09.18 12.05

Basis: Wet Weight

Seq Number: 3053013

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000495	0.000990	0.000495	mg/kg	06.09.18 14.30	U	1
Toluene	108-88-3	0.000634	0.000990	0.000495	mg/kg	06.09.18 14.30	J	1
Ethylbenzene	100-41-4	<0.000495	0.000990	0.000495	mg/kg	06.09.18 14.30	U	1
m,p-Xylenes	179601-23-1	<0.000990	0.00198	0.000990	mg/kg	06.09.18 14.30	U	1
o-Xylene	95-47-6	<0.000495	0.000990	0.000495	mg/kg	06.09.18 14.30	U	1
Total Xylenes	1330-20-7	<0.000495	0.000990	0.000495	mg/kg	06.09.18 14.30	U	1
Total BTEX		0.000634	0.000990	0.000495	mg/kg	06.09.18 14.30	J	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	118	%	74-126	06.09.18 14.30			
1,2-Dichloroethane-D4	17060-07-0	123	%	80-120	06.09.18 14.30		**	
Toluene-D8	2037-26-5	94	%	73-132	06.09.18 14.30			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NW Confirmation 9-10**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-055

Date Collected: 05.31.18 11.35

Sample Depth: 9 - 10

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.06.18 17.08

Basis: Wet Weight

Seq Number: 3052553

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6.33	9.82	0.348	mg/kg	06.07.18 02.27	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 16.42

Basis: Wet Weight

Seq Number: 3052890

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	28.8	15.0	9.88	mg/kg	06.11.18 01.03		1
C10-C28 Diesel Range Organics	C10C28DRO	14.1	15.0	9.88	mg/kg	06.11.18 01.03	J	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	12.1	15.0	9.88	mg/kg	06.11.18 01.03	J	1
Total TPH	PHC635	55.0	15.0	9.88	mg/kg	06.11.18 01.03		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	06.11.18 01.03	
o-Terphenyl	84-15-1	126	%	70-135	06.11.18 01.03	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NW Confirmation 9-10**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-055

Date Collected: 05.31.18 11.35

Sample Depth: 9 - 10

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.08.18 18.30

Basis: Wet Weight

Seq Number: 3053017

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000501	0.00100	0.000501	mg/kg	06.08.18 22.23	U	1
Toluene	108-88-3	0.00163	0.00100	0.000501	mg/kg	06.08.18 22.23		1
Ethylbenzene	100-41-4	<0.000501	0.00100	0.000501	mg/kg	06.08.18 22.23	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/kg	06.08.18 22.23	U	1
o-Xylene	95-47-6	<0.000501	0.00100	0.000501	mg/kg	06.08.18 22.23	U	1
Total Xylenes	1330-20-7	<0.000501	0.00100	0.000501	mg/kg	06.08.18 22.23	U	1
Total BTEX		0.00163	0.00100	0.000501	mg/kg	06.08.18 22.23		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	109	%	74-126	06.08.18 22.23			
1,2-Dichloroethane-D4	17060-07-0	122	%	80-120	06.08.18 22.23	**		
Toluene-D8	2037-26-5	97	%	73-132	06.08.18 22.23			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NE Confirmation 0-1**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-056

Date Collected: 05.31.18 11.45

Sample Depth: 0 - 1

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.06.18 17.08

Basis: Wet Weight

Seq Number: 3052553

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9.39	9.88	0.350	mg/kg	06.07.18 03.00	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 16.42

Basis: Wet Weight

Seq Number: 3052890

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	24.8	15.0	9.88	mg/kg	06.11.18 01.24		1
C10-C28 Diesel Range Organics	C10C28DRO	12.6	15.0	9.88	mg/kg	06.11.18 01.24	J	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.88	15.0	9.88	mg/kg	06.11.18 01.24	U	1
Total TPH	PHC635	37.4	15.0	9.88	mg/kg	06.11.18 01.24		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	06.11.18 01.24	
o-Terphenyl	84-15-1	122	%	70-135	06.11.18 01.24	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NE Confirmation 0-1**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-056

Date Collected: 05.31.18 11.45

Sample Depth: 0 - 1

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.08.18 18.30

Basis: Wet Weight

Seq Number: 3053017

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000502	0.00100	0.000502	mg/kg	06.08.18 20.14	U	1
Toluene	108-88-3	<0.000502	0.00100	0.000502	mg/kg	06.08.18 20.14	U	1
Ethylbenzene	100-41-4	<0.000502	0.00100	0.000502	mg/kg	06.08.18 20.14	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00201	0.00100	mg/kg	06.08.18 20.14	U	1
o-Xylene	95-47-6	<0.000502	0.00100	0.000502	mg/kg	06.08.18 20.14	U	1
Total Xylenes	1330-20-7	<0.000502	0.00100	0.000502	mg/kg	06.08.18 20.14	U	1
Total BTEX		<0.000502	0.00100	0.000502	mg/kg	06.08.18 20.14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	112	%	74-126	06.08.18 20.14			
1,2-Dichloroethane-D4	17060-07-0	122	%	80-120	06.08.18 20.14		**	
Toluene-D8	2037-26-5	93	%	73-132	06.08.18 20.14			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NE Confirmation 1-2**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-057

Date Collected: 05.31.18 11.45

Sample Depth: 1 - 2

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.06.18 17.08

Basis: Wet Weight

Seq Number: 3052553

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	18.0	9.90	0.350	mg/kg	06.07.18 03.10		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 16.42

Basis: Wet Weight

Seq Number: 3052890

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	30.3	15.0	9.88	mg/kg	06.11.18 01.45		1
C10-C28 Diesel Range Organics	C10C28DRO	11.9	15.0	9.88	mg/kg	06.11.18 01.45	J	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.88	15.0	9.88	mg/kg	06.11.18 01.45	U	1
Total TPH	PHC635	42.2	15.0	9.88	mg/kg	06.11.18 01.45		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	06.11.18 01.45	
o-Terphenyl	84-15-1	122	%	70-135	06.11.18 01.45	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NE Confirmation 1-2**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-057

Date Collected: 05.31.18 11.45

Sample Depth: 1 - 2

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.08.18 18.30

Basis: Wet Weight

Seq Number: 3053017

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/kg	06.08.18 22.39	U	1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/kg	06.08.18 22.39	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/kg	06.08.18 22.39	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/kg	06.08.18 22.39	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/kg	06.08.18 22.39	U	1
Total Xylenes	1330-20-7	<0.000500	0.00100	0.000500	mg/kg	06.08.18 22.39	U	1
Total BTEX		<0.000500	0.00100	0.000500	mg/kg	06.08.18 22.39	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	106	%	74-126	06.08.18 22.39			
1,2-Dichloroethane-D4	17060-07-0	116	%	80-120	06.08.18 22.39			
Toluene-D8	2037-26-5	98	%	73-132	06.08.18 22.39			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NE Confirmation 2-3**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-058

Date Collected: 05.31.18 11.45

Sample Depth: 2 - 3

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.06.18 17.08

Basis: Wet Weight

Seq Number: 3052553

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	29.7	9.96	0.353	mg/kg	06.07.18 03.21		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 16.42

Basis: Wet Weight

Seq Number: 3052890

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	29.5	15.0	9.88	mg/kg	06.11.18 02.06		1
C10-C28 Diesel Range Organics	C10C28DRO	13.3	15.0	9.88	mg/kg	06.11.18 02.06	J	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	9.90	15.0	9.88	mg/kg	06.11.18 02.06	J	1
Total TPH	PHC635	52.7	15.0	9.88	mg/kg	06.11.18 02.06		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	06.11.18 02.06	
o-Terphenyl	84-15-1	123	%	70-135	06.11.18 02.06	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NE Confirmation 2-3**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-058

Date Collected: 05.31.18 11.45

Sample Depth: 2 - 3

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.08.18 18.30

Basis: Wet Weight

Seq Number: 3053017

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000499	0.000998	0.000499	mg/kg	06.08.18 22.55	U	1
Toluene	108-88-3	<0.000499	0.000998	0.000499	mg/kg	06.08.18 22.55	U	1
Ethylbenzene	100-41-4	<0.000499	0.000998	0.000499	mg/kg	06.08.18 22.55	U	1
m,p-Xylenes	179601-23-1	<0.000998	0.00200	0.000998	mg/kg	06.08.18 22.55	U	1
o-Xylene	95-47-6	<0.000499	0.000998	0.000499	mg/kg	06.08.18 22.55	U	1
Total Xylenes	1330-20-7	<0.000499	0.000998	0.000499	mg/kg	06.08.18 22.55	U	1
Total BTEX		<0.000499	0.000998	0.000499	mg/kg	06.08.18 22.55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	110	%	74-126	06.08.18 22.55			
1,2-Dichloroethane-D4	17060-07-0	114	%	80-120	06.08.18 22.55			
Toluene-D8	2037-26-5	98	%	73-132	06.08.18 22.55			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NE Confirmation 3-4**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-059

Date Collected: 05.31.18 11.45

Sample Depth: 3 - 4

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.06.18 17.08

Basis: Wet Weight

Seq Number: 3052553

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	18.2	9.94	0.352	mg/kg	06.07.18 03.54		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.07.18 16.42

Basis: Wet Weight

Seq Number: 3052890

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.88	15.0	9.88	mg/kg	06.11.18 02.27	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.88	15.0	9.88	mg/kg	06.11.18 02.27	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.88	15.0	9.88	mg/kg	06.11.18 02.27	U	1
Total TPH	PHC635	<9.88	15.0	9.88	mg/kg	06.11.18 02.27	U	1

Surrogate

1-Chlorooctane

o-Terphenyl

Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
111-85-3	112	%	70-135	06.11.18 02.27	
84-15-1	119	%	70-135	06.11.18 02.27	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NE Confirmation 3-4**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-059

Date Collected: 05.31.18 11.45

Sample Depth: 3 - 4

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.08.18 18.30

Basis: Wet Weight

Seq Number: 3053017

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000495	0.000990	0.000495	mg/kg	06.08.18 23.11	U	1
Toluene	108-88-3	<0.000495	0.000990	0.000495	mg/kg	06.08.18 23.11	U	1
Ethylbenzene	100-41-4	<0.000495	0.000990	0.000495	mg/kg	06.08.18 23.11	U	1
m,p-Xylenes	179601-23-1	<0.000990	0.00198	0.000990	mg/kg	06.08.18 23.11	U	1
o-Xylene	95-47-6	<0.000495	0.000990	0.000495	mg/kg	06.08.18 23.11	U	1
Total Xylenes	1330-20-7	<0.000495	0.000990	0.000495	mg/kg	06.08.18 23.11	U	1
Total BTEX		<0.000495	0.000990	0.000495	mg/kg	06.08.18 23.11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	111	%	74-126	06.08.18 23.11			
1,2-Dichloroethane-D4	17060-07-0	113	%	80-120	06.08.18 23.11			
Toluene-D8	2037-26-5	98	%	73-132	06.08.18 23.11			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NE Confirmation 4-5**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-060

Date Collected: 05.31.18 11.45

Sample Depth: 4 - 5

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.06.18 17.08

Basis: Wet Weight

Seq Number: 3052553

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2.25	9.86	0.349	mg/kg	06.07.18 04.04	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.08.18 11.51

Basis: Wet Weight

Seq Number: 3052956

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.83	14.9	9.83	mg/kg	06.10.18 19.47	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.83	14.9	9.83	mg/kg	06.10.18 19.47	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.83	14.9	9.83	mg/kg	06.10.18 19.47	U	1
Total TPH	PHC635	<9.83	14.9	9.83	mg/kg	06.10.18 19.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	124	%	70-135	06.10.18 19.47	
o-Terphenyl	84-15-1	135	%	70-135	06.10.18 19.47	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NE Confirmation 4-5**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-060

Date Collected: 05.31.18 11.45

Sample Depth: 4 - 5

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.08.18 18.30

Basis: Wet Weight

Seq Number: 3053017

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000500	0.00100	0.000500	mg/kg	06.08.18 23.28	U	1
Toluene	108-88-3	<0.000500	0.00100	0.000500	mg/kg	06.08.18 23.28	U	1
Ethylbenzene	100-41-4	<0.000500	0.00100	0.000500	mg/kg	06.08.18 23.28	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/kg	06.08.18 23.28	U	1
o-Xylene	95-47-6	<0.000500	0.00100	0.000500	mg/kg	06.08.18 23.28	U	1
Total Xylenes	1330-20-7	<0.000500	0.00100	0.000500	mg/kg	06.08.18 23.28	U	1
Total BTEX		<0.000500	0.00100	0.000500	mg/kg	06.08.18 23.28	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	115	%	74-126	06.08.18 23.28			
1,2-Dichloroethane-D4	17060-07-0	124	%	80-120	06.08.18 23.28		**	
Toluene-D8	2037-26-5	94	%	73-132	06.08.18 23.28			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NE Confirmation 5-6**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-061

Date Collected: 05.31.18 11.45

Sample Depth: 5 - 6

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.06.18 17.08

Basis: Wet Weight

Seq Number: 3052553

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3.55	9.90	0.350	mg/kg	06.07.18 04.15	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.08.18 12.00

Basis: Wet Weight

Seq Number: 3052956

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.79	14.9	9.79	mg/kg	06.10.18 20.08	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.79	14.9	9.79	mg/kg	06.10.18 20.08	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.79	14.9	9.79	mg/kg	06.10.18 20.08	U	1
Total TPH	PHC635	<9.79	14.9	9.79	mg/kg	06.10.18 20.08	U	1

Surrogate

1-Chlorooctane

o-Terphenyl

Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
111-85-3	118	%	70-135	06.10.18 20.08	
84-15-1	128	%	70-135	06.10.18 20.08	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NE Confirmation 5-6**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-061

Date Collected: 05.31.18 11.45

Sample Depth: 5 - 6

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.08.18 18.30

Basis: Wet Weight

Seq Number: 3053017

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000502	0.00100	0.000502	mg/kg	06.08.18 23.44	U	1
Toluene	108-88-3	<0.000502	0.00100	0.000502	mg/kg	06.08.18 23.44	U	1
Ethylbenzene	100-41-4	<0.000502	0.00100	0.000502	mg/kg	06.08.18 23.44	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00201	0.00100	mg/kg	06.08.18 23.44	U	1
o-Xylene	95-47-6	<0.000502	0.00100	0.000502	mg/kg	06.08.18 23.44	U	1
Total Xylenes	1330-20-7	<0.000502	0.00100	0.000502	mg/kg	06.08.18 23.44	U	1
Total BTEX		<0.000502	0.00100	0.000502	mg/kg	06.08.18 23.44	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	113	%	74-126	06.08.18 23.44			
1,2-Dichloroethane-D4	17060-07-0	121	%	80-120	06.08.18 23.44		**	
Toluene-D8	2037-26-5	95	%	73-132	06.08.18 23.44			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NE Confirmation 6-7**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-062

Date Collected: 05.31.18 11.45

Sample Depth: 6 - 7

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.06.18 17.08

Basis: Wet Weight

Seq Number: 3052553

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9.39	9.88	0.350	mg/kg	06.07.18 04.26	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.08.18 12.03

Basis: Wet Weight

Seq Number: 3052956

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.83	14.9	9.83	mg/kg	06.10.18 20.29	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.83	14.9	9.83	mg/kg	06.10.18 20.29	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.83	14.9	9.83	mg/kg	06.10.18 20.29	U	1
Total TPH	PHC635	<9.83	14.9	9.83	mg/kg	06.10.18 20.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-135	06.10.18 20.29	
o-Terphenyl	84-15-1	128	%	70-135	06.10.18 20.29	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NE Confirmation 6-7**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-062

Date Collected: 05.31.18 11.45

Sample Depth: 6 - 7

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.08.18 18.30

Basis: Wet Weight

Seq Number: 3053017

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000502	0.00100	0.000502	mg/kg	06.09.18 00.00	U	1
Toluene	108-88-3	<0.000502	0.00100	0.000502	mg/kg	06.09.18 00.00	U	1
Ethylbenzene	100-41-4	<0.000502	0.00100	0.000502	mg/kg	06.09.18 00.00	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00201	0.00100	mg/kg	06.09.18 00.00	U	1
o-Xylene	95-47-6	<0.000502	0.00100	0.000502	mg/kg	06.09.18 00.00	U	1
Total Xylenes	1330-20-7	<0.000502	0.00100	0.000502	mg/kg	06.09.18 00.00	U	1
Total BTEX		<0.000502	0.00100	0.000502	mg/kg	06.09.18 00.00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	113	%	74-126	06.09.18 00.00			
1,2-Dichloroethane-D4	17060-07-0	119	%	80-120	06.09.18 00.00			
Toluene-D8	2037-26-5	87	%	73-132	06.09.18 00.00			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NE Confirmation 7-8**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-063

Date Collected: 05.31.18 11.45

Sample Depth: 7 - 8

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.06.18 17.08

Basis: Wet Weight

Seq Number: 3052553

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1.51	9.92	0.351	mg/kg	06.07.18 04.37	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.08.18 12.06

Basis: Wet Weight

Seq Number: 3052956

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.83	14.9	9.83	mg/kg	06.10.18 20.50	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.83	14.9	9.83	mg/kg	06.10.18 20.50	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.83	14.9	9.83	mg/kg	06.10.18 20.50	U	1
Total TPH	PHC635	<9.83	14.9	9.83	mg/kg	06.10.18 20.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-135	06.10.18 20.50	
o-Terphenyl	84-15-1	130	%	70-135	06.10.18 20.50	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NE Confirmation 7-8**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-063

Date Collected: 05.31.18 11.45

Sample Depth: 7 - 8

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.08.18 18.30

Basis: Wet Weight

Seq Number: 3053017

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000501	0.00100	0.000501	mg/kg	06.09.18 00.16	U	1
Toluene	108-88-3	<0.000501	0.00100	0.000501	mg/kg	06.09.18 00.16	U	1
Ethylbenzene	100-41-4	<0.000501	0.00100	0.000501	mg/kg	06.09.18 00.16	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00200	0.00100	mg/kg	06.09.18 00.16	U	1
o-Xylene	95-47-6	<0.000501	0.00100	0.000501	mg/kg	06.09.18 00.16	U	1
Total Xylenes	1330-20-7	<0.000501	0.00100	0.000501	mg/kg	06.09.18 00.16	U	1
Total BTEX		<0.000501	0.00100	0.000501	mg/kg	06.09.18 00.16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	115	%	74-126	06.09.18 00.16			
1,2-Dichloroethane-D4	17060-07-0	116	%	80-120	06.09.18 00.16			
Toluene-D8	2037-26-5	90	%	73-132	06.09.18 00.16			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NE Confirmation 8-9**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-064

Date Collected: 05.31.18 11.45

Sample Depth: 8 - 9

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.06.18 17.08

Basis: Wet Weight

Seq Number: 3052553

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3.50	9.77	0.346	mg/kg	06.07.18 04.48	J	1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.08.18 12.09

Basis: Wet Weight

Seq Number: 3052956

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.84	14.9	9.84	mg/kg	06.10.18 21.12	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.84	14.9	9.84	mg/kg	06.10.18 21.12	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.84	14.9	9.84	mg/kg	06.10.18 21.12	U	1
Total TPH	PHC635	<9.84	14.9	9.84	mg/kg	06.10.18 21.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	06.10.18 21.12	
o-Terphenyl	84-15-1	127	%	70-135	06.10.18 21.12	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NE Confirmation 8-9**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-064

Date Collected: 05.31.18 11.45

Sample Depth: 8 - 9

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.08.18 18.30

Basis: Wet Weight

Seq Number: 3053017

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000499	0.000998	0.000499	mg/kg	06.09.18 00.32	U	1
Toluene	108-88-3	<0.000499	0.000998	0.000499	mg/kg	06.09.18 00.32	U	1
Ethylbenzene	100-41-4	<0.000499	0.000998	0.000499	mg/kg	06.09.18 00.32	U	1
m,p-Xylenes	179601-23-1	<0.000998	0.00200	0.000998	mg/kg	06.09.18 00.32	U	1
o-Xylene	95-47-6	<0.000499	0.000998	0.000499	mg/kg	06.09.18 00.32	U	1
Total Xylenes	1330-20-7	<0.000499	0.000998	0.000499	mg/kg	06.09.18 00.32	U	1
Total BTEX		<0.000499	0.000998	0.000499	mg/kg	06.09.18 00.32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	117	%	74-126	06.09.18 00.32			
1,2-Dichloroethane-D4	17060-07-0	119	%	80-120	06.09.18 00.32			
Toluene-D8	2037-26-5	92	%	73-132	06.09.18 00.32			



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NE Confirmation 9-10**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-065

Date Collected: 05.31.18 11.45

Sample Depth: 9 - 10

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 06.06.18 17.08

Basis: Wet Weight

Seq Number: 3052553

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.3	9.88	0.350	mg/kg	06.07.18 04.58		1

Analytical Method: TPH by SW 8015B

Prep Method: SW8015P

Tech: ARL

% Moisture:

Analyst: ISU

Date Prep: 06.08.18 12.12

Basis: Wet Weight

Seq Number: 3052956

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<9.78	14.9	9.78	mg/kg	06.10.18 21.33	U	1
C10-C28 Diesel Range Organics	C10C28DRO	<9.78	14.9	9.78	mg/kg	06.10.18 21.33	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<9.78	14.9	9.78	mg/kg	06.10.18 21.33	U	1
Total TPH	PHC635	<9.78	14.9	9.78	mg/kg	06.10.18 21.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	123	%	70-135	06.10.18 21.33	
o-Terphenyl	84-15-1	135	%	70-135	06.10.18 21.33	



Certificate of Analytical Results 587854

R2M Engineering, Lubbock, TX

Venables

Sample Id: **NE Confirmation 9-10**

Matrix: Soil

Date Received: 05.31.18 16.00

Lab Sample Id: 587854-065

Date Collected: 05.31.18 11.45

Sample Depth: 9 - 10

Analytical Method: BTEX by SW 8260B

Prep Method: SW5035A

Tech: CHH

% Moisture:

Analyst: CHH

Date Prep: 06.08.18 18.30

Basis: Wet Weight

Seq Number: 3053017

SUB: TX104704215-18-26

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000495	0.000990	0.000495	mg/kg	06.09.18 00.49	U	1
Toluene	108-88-3	<0.000495	0.000990	0.000495	mg/kg	06.09.18 00.49	U	1
Ethylbenzene	100-41-4	<0.000495	0.000990	0.000495	mg/kg	06.09.18 00.49	U	1
m,p-Xylenes	179601-23-1	<0.000990	0.00198	0.000990	mg/kg	06.09.18 00.49	U	1
o-Xylene	95-47-6	<0.000495	0.000990	0.000495	mg/kg	06.09.18 00.49	U	1
Total Xylenes	1330-20-7	<0.000495	0.000990	0.000495	mg/kg	06.09.18 00.49	U	1
Total BTEX		<0.000495	0.000990	0.000495	mg/kg	06.09.18 00.49	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Dibromofluoromethane	1868-53-7	113	%	74-126	06.09.18 00.49			
1,2-Dichloroethane-D4	17060-07-0	120	%	80-120	06.09.18 00.49			
Toluene-D8	2037-26-5	87	%	73-132	06.09.18 00.49			

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

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

R2M Engineering
Venables

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3052514

Matrix: Solid

Prep Method: SW9056P

MB Sample Id: 7656058-1-BLK

LCS Sample Id: 7656058-1-BKS

Date Prep: 06.05.18

LCSD Sample Id: 7656058-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.354	100	98.7	99	99.1	99	80-120	0	20	mg/kg	06.06.18 06:54	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3052603

Matrix: Solid

Prep Method: E300P

MB Sample Id: 7656061-1-BLK

LCS Sample Id: 7656061-1-BKS

Date Prep: 06.06.18

LCSD Sample Id: 7656061-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.354	100	101	101	99.2	99	80-120	2	20	mg/kg	06.07.18 05:42	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3052553

Matrix: Solid

Prep Method: E300P

MB Sample Id: 7656150-1-BLK

LCS Sample Id: 7656150-1-BKS

Date Prep: 06.06.18

LCSD Sample Id: 7656150-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.354	100	99.6	100	100	100	80-120	0	20	mg/kg	06.06.18 19:58	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3052514

Matrix: Soil

Prep Method: SW9056P

Parent Sample Id: 588042-001

MS Sample Id: 588042-001 S

Date Prep: 06.05.18

MSD Sample Id: 588042-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	6.42	24.5	28.8	91	28.9	92	80-120	0	20	mg/kg	06.06.18 07:36	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3052603

Matrix: Soil

Prep Method: E300P

Parent Sample Id: 587854-007

MS Sample Id: 587854-007 S

Date Prep: 06.06.18

MSD Sample Id: 587854-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	884	99.4	963	79	967	84	80-120	0	20	mg/kg	06.07.18 06:14	X

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 $\text{Log Diff.} = \text{Log}(\text{Sample Duplicate}) - \text{Log}(\text{Original Sample})$

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

R2M Engineering
Venables

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3052603

Matrix: Soil

Prep Method: E300P

Parent Sample Id: 587854-054

MS Sample Id: 587854-054 S

Date Prep: 06.06.18

MSD Sample Id: 587854-054 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2.77	98.6	103	102	103	102	80-120	0	20	mg/kg	06.07.18 15:22	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3052553

Matrix: Soil

Prep Method: E300P

Parent Sample Id: 587854-055

MS Sample Id: 587854-055 S

Date Prep: 06.06.18

MSD Sample Id: 587854-055 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	6.33	98.2	108	104	108	104	80-120	0	20	mg/kg	06.07.18 02:38	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3052553

Matrix: Soil

Prep Method: E300P

Parent Sample Id: 588400-010

MS Sample Id: 588400-010 S

Date Prep: 06.06.18

MSD Sample Id: 588400-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	116	119	243	107	243	107	80-120	0	20	mg/kg	06.06.18 21:03	

Analytical Method: TPH by SW 8015B

Seq Number: 3052891

Matrix: Solid

Prep Method: SW8015P

MB Sample Id: 7656193-1-BLK

LCS Sample Id: 7656193-1-BKS

Date Prep: 06.07.18

LCSD Sample Id: 7656193-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C10 Gasoline Range Hydrocarbons	<9.88	1000	860	86	838	84	70-135	3	35	mg/kg	06.09.18 23:02	
C10-C28 Diesel Range Organics	<9.88	1000	978	98	948	95	70-135	3	35	mg/kg	06.09.18 23:02	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	109		116		116		70-135	%	06.09.18 23:02
o-Terphenyl	118		114		110		70-135	%	06.09.18 23:02

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

R2M Engineering
Venables

Analytical Method: TPH by SW 8015B

Seq Number: 3052890

MB Sample Id: 7656229-1-BLK

Matrix: Solid

LCS Sample Id: 7656229-1-BKS

Prep Method: SW8015P

Date Prep: 06.07.18

LCSD Sample Id: 7656229-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C10 Gasoline Range Hydrocarbons	<9.88	1000	880	88	900	90	70-135	2	35	mg/kg	06.10.18 08:07	
C10-C28 Diesel Range Organics	<9.88	1000	993	99	1050	105	70-135	6	35	mg/kg	06.10.18 08:07	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane	115		122		121		70-135	%	06.10.18 08:07			
o-Terphenyl	127		119		122		70-135	%	06.10.18 08:07			

Analytical Method: TPH by SW 8015B

Seq Number: 3052956

MB Sample Id: 7656271-1-BLK

Matrix: Solid

LCS Sample Id: 7656271-1-BKS

Prep Method: SW8015P

Date Prep: 06.08.18

LCSD Sample Id: 7656271-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C10 Gasoline Range Hydrocarbons	<9.88	1000	823	82	838	84	70-135	2	35	mg/kg	06.10.18 18:00	
C10-C28 Diesel Range Organics	<9.88	1000	877	88	929	93	70-135	6	35	mg/kg	06.10.18 18:00	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane	113		112		115		70-135	%	06.10.18 18:00			
o-Terphenyl	123		104		108		70-135	%	06.10.18 18:00			

Analytical Method: TPH by SW 8015B

Seq Number: 3052891

Parent Sample Id: 587854-012

Matrix: Soil

MS Sample Id: 587854-012 S

Prep Method: SW8015P

Date Prep: 06.07.18

MSD Sample Id: 587854-012 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C10 Gasoline Range Hydrocarbons	<9.87	999	846	85	850	86	70-135	0	35	mg/kg	06.10.18 00:05	
C10-C28 Diesel Range Organics	<9.87	999	974	97	993	100	70-135	2	35	mg/kg	06.10.18 00:05	
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane			113		118		70-135	%	06.10.18 00:05			
o-Terphenyl			112		113		70-135	%	06.10.18 00:05			

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 $\text{Log Diff.} = \text{Log}(\text{Sample Duplicate}) - \text{Log}(\text{Original Sample})$

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



QC Summary 587854

R2M Engineering Venables

Analytical Method: TPH by SW 8015B

Seq Number: 3052890

Parent Sample Id: 587854-040

Matrix: Soil

MS Sample Id: 587854-040 S

Prep Method: SW8015P

Date Prep: 06.07.18

MSD Sample Id: 587854-040 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C10 Gasoline Range Hydrocarbons	<9.88	1000	861	86	782	78	70-135	10	35	mg/kg	06.10.18 09:31	
C10-C28 Diesel Range Organics	<9.88	1000	984	98	880	88	70-135	11	35	mg/kg	06.10.18 09:31	
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits			Units	Analysis Date	
1-Chlorooctane			120		106		70-135			%	06.10.18 09:31	
o-Terphenyl			115		99		70-135			%	06.10.18 09:31	

Analytical Method: TPH by SW 8015B

Seq Number: 3052956

Parent Sample Id: 587854-060

Matrix: Soil

MS Sample Id: 587854-060 S

Prep Method: SW8015P

Date Prep: 06.08.18

MSD Sample Id: 587854-060 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C10 Gasoline Range Hydrocarbons	<9.82	994	1000	101	1010	102	70-135	1	35	mg/kg	06.11.18 10:33	
C10-C28 Diesel Range Organics	<9.82	994	1170	118	1190	120	70-135	2	35	mg/kg	06.11.18 10:33	
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits			Units	Analysis Date	
1-Chlorooctane			112		114		70-135			%	06.11.18 10:33	
o-Terphenyl			108		109		70-135			%	06.11.18 10:33	

Analytical Method: BTEX by SW 8260B

Seq Number: 3052363

MB Sample Id: 7656048-1-BLK

Matrix: Solid

LCS Sample Id: 7656048-1-BKS

Prep Method: SW5035A

Date Prep: 06.04.18

LCSD Sample Id: 7656048-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000500	0.100	0.0938	94	0.0978	98	62-132	4	25	mg/kg	06.04.18 20:27	
Toluene	<0.000500	0.100	0.0941	94	0.0963	96	66-124	2	25	mg/kg	06.04.18 20:27	
Ethylbenzene	<0.000500	0.100	0.0981	98	0.104	104	71-134	6	25	mg/kg	06.04.18 20:27	
m,p-Xylenes	<0.00100	0.200	0.207	104	0.220	110	69-128	6	25	mg/kg	06.04.18 20:27	
o-Xylene	<0.000500	0.100	0.101	101	0.106	106	72-131	5	25	mg/kg	06.04.18 20:27	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
Dibromofluoromethane	110		101		98		74-126			%	06.04.18 20:27	
1,2-Dichloroethane-D4	83		115		115		80-120			%	06.04.18 20:27	
Toluene-D8	97		102		106		73-132			%	06.04.18 20:27	

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

$[D] = 100 * (C-A) / B$
 $RPD = 200 * |(C-E) / (C+E)|$
 $[D] = 100 * (C) / [B]$
 $\text{Log Diff.} = \text{Log}(\text{Sample Duplicate}) - \text{Log}(\text{Original Sample})$

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

R2M Engineering
Venables

Analytical Method: BTEX by SW 8260B

Seq Number: 3052687

MB Sample Id: 7656244-1-BLK

Matrix: Solid

LCS Sample Id: 7656244-1-BKS

Prep Method: SW5030B

Date Prep: 06.07.18

LCSD Sample Id: 7656244-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000500	0.100	0.0912	91	0.0909	91	62-132	0	25	mg/kg	06.07.18 15:15	
Toluene	<0.000500	0.100	0.0984	98	0.0992	99	66-124	1	25	mg/kg	06.07.18 15:15	
Ethylbenzene	<0.000500	0.100	0.0985	99	0.0997	100	71-134	1	25	mg/kg	06.07.18 15:15	
m,p-Xylenes	<0.00100	0.200	0.204	102	0.206	103	69-128	1	25	mg/kg	06.07.18 15:15	
o-Xylene	<0.000500	0.100	0.102	102	0.107	107	72-131	5	25	mg/kg	06.07.18 15:15	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	95		97		94		74-126	%	06.07.18 15:15
1,2-Dichloroethane-D4	95		101		100		80-120	%	06.07.18 15:15
Toluene-D8	100		101		103		73-132	%	06.07.18 15:15

Analytical Method: BTEX by SW 8260B

Seq Number: 3053017

MB Sample Id: 7656434-1-BLK

Matrix: Solid

LCS Sample Id: 7656434-1-BKS

Prep Method: SW5030B

Date Prep: 06.08.18

LCSD Sample Id: 7656434-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000500	0.100	0.0872	87	0.0975	98	62-132	11	25	mg/kg	06.08.18 18:12	
Toluene	<0.000500	0.100	0.0869	87	0.0911	91	66-124	5	25	mg/kg	06.08.18 18:12	
Ethylbenzene	<0.000500	0.100	0.0890	89	0.0909	91	71-134	2	25	mg/kg	06.08.18 18:12	
m,p-Xylenes	<0.00100	0.200	0.178	89	0.178	89	69-128	0	25	mg/kg	06.08.18 18:12	
o-Xylene	<0.000500	0.100	0.0874	87	0.0874	87	72-131	0	25	mg/kg	06.08.18 18:12	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	110		104		103		74-126	%	06.08.18 18:12
1,2-Dichloroethane-D4	102		112		120		80-120	%	06.08.18 18:12
Toluene-D8	93		103		98		73-132	%	06.08.18 18:12

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

R2M Engineering
Venables

Analytical Method: BTEX by SW 8260B

Seq Number: 3053013

MB Sample Id: 7656432-1-BLK

Matrix: Solid

LCS Sample Id: 7656432-1-BKS

Prep Method: SW5035A

Date Prep: 06.09.18

LCSD Sample Id: 7656432-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000500	0.100	0.111	111	0.110	110	62-132	1	25	mg/kg	06.09.18 09:41	
Toluene	<0.000500	0.100	0.106	106	0.106	106	66-124	0	25	mg/kg	06.09.18 09:41	
Ethylbenzene	<0.000500	0.100	0.111	111	0.111	111	71-134	0	25	mg/kg	06.09.18 09:41	
m,p-Xylenes	<0.00100	0.200	0.222	111	0.222	111	69-128	0	25	mg/kg	06.09.18 09:41	
o-Xylene	<0.000500	0.100	0.113	113	0.111	111	72-131	2	25	mg/kg	06.09.18 09:41	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	109		98		101		74-126	%	06.09.18 09:41
1,2-Dichloroethane-D4	117		112		117		80-120	%	06.09.18 09:41
Toluene-D8	88		101		105		73-132	%	06.09.18 09:41

Analytical Method: BTEX by SW 8260B

Seq Number: 3053406

MB Sample Id: 7656643-1-BLK

Matrix: Solid

LCS Sample Id: 7656643-1-BKS

Prep Method: SW5035A

Date Prep: 06.14.18

LCSD Sample Id: 7656643-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000500	0.100	0.0912	91	0.0956	96	62-132	5	25	mg/kg	06.14.18 09:46	
Toluene	<0.000500	0.100	0.0859	86	0.0927	93	66-124	8	25	mg/kg	06.14.18 09:46	
Ethylbenzene	<0.000500	0.100	0.0883	88	0.0946	95	71-134	7	25	mg/kg	06.14.18 09:46	
m,p-Xylenes	<0.00100	0.200	0.187	94	0.201	101	69-128	7	25	mg/kg	06.14.18 09:46	
o-Xylene	<0.000500	0.100	0.0955	96	0.105	105	72-131	9	25	mg/kg	06.14.18 09:46	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	102		97		98		74-126	%	06.14.18 09:46
1,2-Dichloroethane-D4	103		103		101		80-120	%	06.14.18 09:46
Toluene-D8	95		97		100		73-132	%	06.14.18 09:46

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 $\text{Log Diff.} = \text{Log}(\text{Sample Duplicate}) - \text{Log}(\text{Original Sample})$

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

R2M Engineering
Venables

Analytical Method: BTEX by SW 8260B

Seq Number: 3052363

Parent Sample Id: 587854-012

Matrix: Soil

MS Sample Id: 587854-012 S

Prep Method: SW5035A

Date Prep: 06.04.18

MSD Sample Id: 587854-012 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000500	0.100	0.0716	72	0.0723	72	62-132	1	25	mg/kg	06.04.18 20:59	
Toluene	<0.000500	0.100	0.0712	71	0.0661	66	66-124	7	25	mg/kg	06.04.18 20:59	
Ethylbenzene	<0.000500	0.100	0.0745	75	0.0709	71	71-134	5	25	mg/kg	06.04.18 20:59	
m,p-Xylenes	<0.00100	0.200	0.150	75	0.143	72	69-128	5	25	mg/kg	06.04.18 20:59	
o-Xylene	<0.000500	0.100	0.0686	69	0.0639	64	72-131	7	25	mg/kg	06.04.18 20:59	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	104		105		74-126	%	06.04.18 20:59
1,2-Dichloroethane-D4	97		110		80-120	%	06.04.18 20:59
Toluene-D8	105		100		73-132	%	06.04.18 20:59

Analytical Method: BTEX by SW 8260B

Seq Number: 3053017

Parent Sample Id: 587856-004

Matrix: Soil

MS Sample Id: 587856-004 S

Prep Method: SW5030B

Date Prep: 06.08.18

MSD Sample Id: 587856-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000548	0.110	0.0753	68	0.0759	70	62-132	1	25	mg/kg	06.09.18 01:53	
Toluene	<0.000548	0.110	0.0636	58	0.0675	62	66-124	6	25	mg/kg	06.09.18 01:53	X
Ethylbenzene	<0.000548	0.110	0.0637	58	0.0675	62	71-134	6	25	mg/kg	06.09.18 01:53	X
m,p-Xylenes	<0.00110	0.219	0.123	56	0.130	60	69-128	6	25	mg/kg	06.09.18 01:53	X
o-Xylene	<0.000548	0.110	0.0590	54	0.0608	56	72-131	3	25	mg/kg	06.09.18 01:53	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	107		109		74-126	%	06.09.18 01:53
1,2-Dichloroethane-D4	124	**	119		80-120	%	06.09.18 01:53
Toluene-D8	92		98		73-132	%	06.09.18 01:53

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

R2M Engineering
Venables

Analytical Method: BTEX by SW 8260B

Seq Number: 3053013

Parent Sample Id: 587854-028

Matrix: Soil

MS Sample Id: 587854-028 S

Prep Method: SW5035A

Date Prep: 06.09.18

MSD Sample Id: 587854-028 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000496	0.0992	0.0755	76	0.0640	65	62-132	16	25	mg/kg	06.09.18 11:29	
Toluene	0.000602	0.0992	0.0720	72	0.0593	59	66-124	19	25	mg/kg	06.09.18 11:29	X
Ethylbenzene	<0.000496	0.0992	0.0744	75	0.0581	59	71-134	25	25	mg/kg	06.09.18 11:29	X
m,p-Xylenes	<0.000992	0.198	0.149	75	0.115	58	69-128	26	25	mg/kg	06.09.18 11:29	XF
o-Xylene	<0.000496	0.0992	0.0704	71	0.0568	57	72-131	21	25	mg/kg	06.09.18 11:29	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	108		108		74-126	%	06.09.18 11:29
1,2-Dichloroethane-D4	108		120		80-120	%	06.09.18 11:29
Toluene-D8	101		98		73-132	%	06.09.18 11:29

Analytical Method: BTEX by SW 8260B

Seq Number: 3053406

Parent Sample Id: 588431-010

Matrix: Soil

MS Sample Id: 588431-010 S

Prep Method: SW5035A

Date Prep: 06.14.18

MSD Sample Id: 588431-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000686	0.137	0.0787	57	0.0815	56	62-132	3	25	mg/kg	06.14.18 10:22	X
Toluene	<0.000686	0.137	0.0708	52	0.0752	52	66-124	6	25	mg/kg	06.14.18 10:22	X
Ethylbenzene	<0.000686	0.137	0.0754	55	0.0759	52	71-134	1	25	mg/kg	06.14.18 10:22	X
m,p-Xylenes	<0.00137	0.274	0.155	57	0.156	54	69-128	1	25	mg/kg	06.14.18 10:22	X
o-Xylene	<0.000686	0.137	0.0707	52	0.0703	48	72-131	1	25	mg/kg	06.14.18 10:22	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	0	**	109		74-126	%	06.14.18 10:22
1,2-Dichloroethane-D4	111		115		80-120	%	06.14.18 10:22
Toluene-D8	95		96		73-132	%	06.14.18 10:22

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

R2M Engineering
Venables

Analytical Method: BTEX by SW 8260B

Seq Number: 3052687

Parent Sample Id: 588381-001

Matrix: Soil

MS Sample Id: 588381-001 S

Prep Method: SW5030B

Date Prep: 06.07.18

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Benzene	<0.000575	0.115	0.0796	69	62-132	mg/kg	06.07.18 15:50	
Toluene	0.00358	0.115	0.0860	72	66-124	mg/kg	06.07.18 15:50	
Ethylbenzene	0.00264	0.115	0.0787	66	71-134	mg/kg	06.07.18 15:50	X
m,p-Xylenes	0.00605	0.230	0.162	68	69-128	mg/kg	06.07.18 15:50	X
o-Xylene	0.00369	0.115	0.0840	70	72-131	mg/kg	06.07.18 15:50	X

Surrogate	MS %Rec	MS Flag	Limits	Units	Analysis Date
Dibromofluoromethane	96		74-126	%	06.07.18 15:50
1,2-Dichloroethane-D4	107		80-120	%	06.07.18 15:50
Toluene-D8	99		73-132	%	06.07.18 15:50

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 $\text{Log Diff.} = \text{Log}(\text{Sample Duplicate}) - \text{Log}(\text{Original Sample})$

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

Stafford, TX (281) 240-4200
Dallas, TX (214) 902-0300

El Paso, TX (915) 585-3443
Lubbock, TX (806) 794-1296

Midland, TX (432) 704-5440
San Antonio, TX (210) 509-3334

Phoenix, AZ (480) 355-0900
Service Center - Baton Rouge

Service Center- Amarillo, TX (806)678-4514
Service Center- Hobbs, NM (575) 392-7550

www.xenco.com

[illegible]

Client / Reporting Information				Project Information				Analytical Information				Matrix Codes					
Company Name / Branch: <u>Q2W</u>				Project Name/Number: <u>Venables</u>													
Company Address:				Project Location: <u>Hobbs</u>													
Email:				Invoice To:													
Project Contact:				PO Number:													
Sampler's Name:																	
No.	Field ID / Point of Collection	Sample Depth	Collection Date	Time	Matrix	# of bottles	Number of preserved bottles							Field Comments			
							HCl	NaOH/Zn	Acetate	HNO3	H2SO4	NaOH	NaHSO4	MeOH	NONE		
1	<u>SB-3</u>		<u>5-31</u>	<u>5:40</u>	<u>5</u>	<u>1</u>									<u>X</u>	<u>Hold</u>	
2	<u>"</u>		<u>3-4</u>	<u>1050</u>	<u>1</u>	<u>1</u>									<u>X</u>	<u>TPH</u>	
3	<u>"</u>		<u>4-5</u>	<u>1</u>	<u>1</u>	<u>1</u>									<u>X</u>	<u>Chloride</u>	
4	<u>"</u>		<u>5-6</u>	<u>1100</u>	<u>5</u>	<u>1</u>									<u>X</u>	<u>TPH</u>	
5	<u>Stock pile 3</u>		<u>0-1</u>	<u>5-31</u>	<u>1330</u>	<u>5</u>									<u>X</u>	<u>Hold</u>	
6	<u>Stock pile 4</u>		<u>0-1</u>	<u>5-31</u>	<u>1330</u>	<u>5</u>									<u>X</u>	<u>TPH</u>	
7	<u>PIT Bottom</u>		<u>0-1</u>	<u>5-31</u>	<u>1325</u>	<u>5</u>									<u>X</u>	<u>Chloride</u>	
8																	
9																	
10																	
Turnaround Time (Business days)																	
☐ Same Day TAT ☒ 5 Day TAT ☐ Level II Std QC ☐ Level IV (Full Data Pkg / raw data)																	
☐ Next Day EMERGENCY ☐ 7 Day TAT ☐ Level III Std QC+ Forms ☐ TRRP Level IV																	
☐ 2 Day EMERGENCY ☐ Contract TAT ☐ Level 3 (CLP Forms) ☐ UST / RG-411																	
☐ 3 Day EMERGENCY ☐ Level II Report with TRRP checklist																	
TAT Starts Day received by Lab, if received by 5:00 pm																	
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY																	
Relinquished by Sampler:																	
1	<u>MOS</u>	Date Time:	<u>5-31-19</u>	Received By:	<u>16</u>	Date Time:	<u>5-31-19</u>	Relinquished By:	<u>2</u>	Date Time:	<u>5-31-19</u>	Relinquished By:	<u>2</u>	Date Time:	<u>5-31-19</u>	Relinquished By:	<u>2</u>
3		Date Time:		Received By:	<u>3</u>	Date Time:		Relinquished By:	<u>4</u>	Date Time:		Relinquished By:	<u>4</u>	Date Time:		Relinquished By:	<u>4</u>
5		Date Time:	<u>5/31/18</u>	Received By:	<u>16</u>	Date Time:	<u>5/31/18</u>	Relinquished By:	<u>16</u>	Date Time:	<u>5/31/18</u>	Relinquished By:	<u>16</u>	Date Time:	<u>5/31/18</u>	Relinquished By:	<u>16</u>
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.																	

Setting the Standard since 1990

Stafford, TX (281) 240-4200
 Dallas, TX (214) 902-0300

El Paso, TX (915) 585-3443
 Lubbock, TX (806) 794-1296

Phoenix, AZ (480) 355-0900
 Service Center - Baton Rouge, LA (832) 712-8143

Service Center- Amarillo, TX (806) 678-4514
 Service Center- Hobbs, NM (575) 392-7550

www.xenco.com

Xenco Quote #
 Xenco Job #
 587854

Client / Reporting Information		Project Information		Analytical Information		Matrix Codes	
Company Name / Branch:		Project Name/Number:					
Company Address:		Project Location:					
Email:		Invoice To:					
Phone No.:		PO Number:					
Project Contact:							
Sampler's Name:							
No.	Field ID / Point of Collection	Sample Depth	Date	Time	Matrix	# of bottles	Number of preserved bottles
1	SE Confirmation	0-1	5/31	1115	S	1	1
2	"	1-2					
3	"	2-3					
4	"	3-4					
5	"	4-5					
6	"	5-6					
7	"	6-7					
8	"	7-8					
9	"	8-9					
10	"	9-10					
Turnaround Time (Business days)							
☐ Same Day TAT ☒ 5 Day TAT ☐ Next Day EMERGENCY ☐ 7 Day TAT ☐ 2 Day EMERGENCY ☐ Contract TAT ☐ 3 Day EMERGENCY		☐ 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:			
TAT Starts Day received by Lab, if received by 5:00 pm							
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY							
Relinquished by Sampler		Received By:		Date Time:		Relinquished By:	
1		1		1		2	
Relinquished by:		Received By:		Date Time:		Relinquished By:	
3		3		3		4	
Relinquished by:		Received By:		Date Time:		Relinquished By:	
5		5		5		3	
Date Time:		Date Time:		Date Time:		Date Time:	
5/31/18 16:00		5/31/18 16:00		5/31/18 16:00		5/31/18 16:00	
Signature: [Signature]		Signature: [Signature]		Signature: [Signature]		Signature: [Signature]	
On Ice		Cooler Temp.		Thermo. Corr. Factor		IR-3	
3.3/3.3		3.3/3.3		3.3/3.3		3.3/3.3	

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 sampled 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.

Client / Reporting Information		Project Information		Analytical Information		Matrix Codes	
Company Name / Branch:		Project Name/Number:		Xenco Quote #		Xenco Job #	
Company Address:		Project Location:					
Email:		Invoice To:					
Phone No:		PO Number:					
Project Contact:							
Samplers Name:							
No.	Field ID / Point of Collection	Sample Depth	Collection	Date	Time	Matrix	# of bottles
1	NW Confirmation	0-1	5/31/18	11:35			
2	"	1-2					
3	"	2-3					
4	"	3-4					
5	"	4-5					
6	"	5-6					
7	"	6-7					
8	"	7-8					
9	"	8-9					
10	"	9-10					
Turnaround Time (Business days)							
☐ Same Day TAT ☒ 5 Day TAT ☐ Next Day EMERGENCY ☐ 7 Day TAT ☐ 2 Day EMERGENCY ☐ Contract TAT ☐ 3 Day EMERGENCY		☐ Level II Std QC ☐ Level III Std QC+ Forms ☐ Level 3 (CLP Forms) ☐ Level II Report with TRRP checklist		☐ Level IV (Full Data Pkg /raw data) ☐ TRRP Level IV ☐ UST / RG -411		Notes:	
TAT Starts Day received by Lab, if received by 5:00 pm							
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY							
Relinquished by Sampler:		Received By:		Date Time:		Relinquished By:	
1		1		2		2	
Relinquished by:		Received By:		Date Time:		Relinquished By:	
3		3		4		4	
Relinquished by:		Received By:		Date Time:		Relinquished By:	
5		5		5/31/18		5/31/18	
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.		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.		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.		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.	

Setting the Standard since 1990

Stafford, TX (281) 240-4200
Dallas, TX (214) 902-0300

Midland, TX (432) 704-5440
San Antonio, TX (210) 509-3334

Phoenix, AZ (480) 355-0900
Service Center - Baton Rouge, LA (832) 712-8143
Service Center - Amarillo, TX (806) 678-4514
Service Center - Hobbs, NM (575) 392-7550

Client / Reporting Information		Project Information		Analytical Information		Matrix Codes	
Company Name / Branch:		Project Name/Number:					
Company Address:		Project Location:					
Email:		Invoice To:					
Phone No:		PO Number:					
Project Contact:							
Samplers Name:							
No.	Field ID / Point of Collection	Sample Depth	Date	Time	Matrix	# of bottles	Number of preserved bottles
1	NE Confirmation	0-1	5/1	11:45	S	1	4
2	"	1-2					
3	"	2-3					
4	"	3-4					
5	"	4-5					
6	"	5-6					
7	"	6-7					
8	"	7-8					
9	"	8-9					
10	"	9-10					
Turnaround Time (Business days)							
☐ Same Day TAT ☐ 5 Day TAT ☐ Next Day EMERGENCY ☐ 7 Day TAT ☐ 2 Day EMERGENCY ☐ Contract TAT ☐ 3 Day EMERGENCY		☐ 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:			
TAT Starts Day received by Lab, if received by 5:00 pm							
Relinquished by Sampler:		SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY		FED-EX / UPS: Tracking #			
Date Time:		Received By:		Date Time:		Received By:	
1		1		2		2	
Relinquished by:		Received By:		Date Time:		Received By:	
3		3		4		4	
Relinquished by:		Received By:		Date Time:		Received By:	
5		5		5		5	
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.		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.		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.		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.	

Client / Reporting Information				Project Information				Analytical Information				Matrix Codes							
Company Name / Branch: ELZM				Project Name/Number: Venables															
Company Address:				Project Location: Hobbs															
Email:				Invoice To:															
Phone No:				PO Number:															
Project Contact:																			
Sampler's Name:																			
No.	Field ID / Point of Collection	Sample Depth	Collection	Date	Time	Matrix	# of bottles	HCl	NaOH/Zn	Acetate	HNO3	H2SO4	NaOH	NaHSO4	MeOH	NONE	Field Comments		
1	SB-01	2-3	831	1345	S	1											66		
2	"	3-4															67		
3	"	4-5															68		
4	"	5-6															69		
5	"																		
6																			
7																			
8																			
9																			
10																			
Turnaround Time (Business days)																			
☐ Same Day TAT ☒ 5 Day TAT ☐ Level II Std QC ☐ Level IV (Full Data Pkg /raw data) ☐ Next Day EMERGENCY ☐ 7 Day TAT ☐ Level III Std QC+ Forms ☐ TRRP Level IV ☐ 2 Day EMERGENCY ☐ Contract TAT ☐ Level 3 (CLP Forms) ☐ UST / RG -411 ☐ 3 Day EMERGENCY ☐ Level II Report with TRRP checklist																			
TAT Starts Day received by Lab, if received by 5:00 pm																			
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY																			
Relinquished by Sampler: MOS				Received By: 1				Date Time: 5-31-10				Relinquished By: 2				Date Time:			
Relinquished by: 3				Received By: 3				Date Time: 5-31-10				Relinquished By: 4				Date Time:			
Relinquished by: 5				Received By: 5				Date Time: 5/31/10 16:00				Relinquished By: 5				Date Time:			
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.																			



Inter-Office Shipment

Page 1 of 9

IOS Number **108129**

Date/Time: 06/01/18 11:39

Created by: Brenda Ward

Please send report to: Holly Taylor

Lab# From: **Lubbock**

Delivery Priority:

Address: 6701 Aberdeen, Suite 9 Lubbock, TX 79424

Lab# To: **Houston**

Air Bill No.: 868933180303

Phone:

E-Mail: holly.taylor@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
587854-001	S	Con 2001	05/31/18 07:30	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-001	S	Con 2001	05/31/18 07:30	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-001	S	Con 2001	05/31/18 07:30	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-003	S	Con 2002	05/31/18 07:33	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-003	S	Con 2002	05/31/18 07:33	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-003	S	Con 2002	05/31/18 07:33	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-005	S	Con 2003	05/31/18 07:39	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-005	S	Con 2003	05/31/18 07:39	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-005	S	Con 2003	05/31/18 07:39	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-007	S	Con 2004	05/31/18 07:44	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-007	S	Con 2004	05/31/18 07:44	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-007	S	Con 2004	05/31/18 07:44	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-012	S	SB-2.2	05/31/18 08:30	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-012	S	SB-2.2	05/31/18 08:30	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-012	S	SB-2.2	05/31/18 08:30	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-013	S	SB-2.3	05/31/18 08:40	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-013	S	SB-2.3	05/31/18 08:40	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-013	S	SB-2.3	05/31/18 08:40	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-014	S	SB-2.4	05/31/18 08:51	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-014	S	SB-2.4	05/31/18 08:51	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-014	S	SB-2.4	05/31/18 08:51	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-023	S	Stockpile 3	05/31/18 11:00	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-023	S	Stockpile 3	05/31/18 11:00	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-023	S	Stockpile 3	05/31/18 11:00	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-024	S	Stockpile 4	05/31/18 13:30	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	



Inter-Office Shipment

Page 2 of 9

IOS Number **108129**

Date/Time: 06/01/18 11:39

Created by: Brenda Ward

Please send report to: Holly Taylor

Lab# From: **Lubbock**

Delivery Priority:

Address: 6701 Aberdeen, Suite 9 Lubbock, TX 79424

Lab# To: **Houston**

Air Bill No.: 868933180303

Phone:

E-Mail: holly.taylor@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
587854-024	S	Stockpile 4	05/31/18 13:30	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-024	S	Stockpile 4	05/31/18 13:30	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-025	S	Pit Bottom	05/31/18 13:25	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-025	S	Pit Bottom	05/31/18 13:25	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-025	S	Pit Bottom	05/31/18 13:25	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-026	S	SW Confirmation 0-1	05/31/18 11:25	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-026	S	SW Confirmation 0-1	05/31/18 11:25	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-026	S	SW Confirmation 0-1	05/31/18 11:25	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-027	S	SW Confirmation 1-2	05/31/18 11:25	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-027	S	SW Confirmation 1-2	05/31/18 11:25	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-027	S	SW Confirmation 1-2	05/31/18 11:25	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-028	S	SW Confirmation 2-3	05/31/18 11:25	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-028	S	SW Confirmation 2-3	05/31/18 11:25	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-028	S	SW Confirmation 2-3	05/31/18 11:25	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-029	S	SW Confirmation 3-4	05/31/18 11:25	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-029	S	SW Confirmation 3-4	05/31/18 11:25	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-029	S	SW Confirmation 3-4	05/31/18 11:25	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-030	S	SW Confirmation 4-5	05/31/18 11:25	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-030	S	SW Confirmation 4-5	05/31/18 11:25	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-030	S	SW Confirmation 4-5	05/31/18 11:25	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-031	S	SW Confirmation 5-6	05/31/18 11:25	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-031	S	SW Confirmation 5-6	05/31/18 11:25	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-031	S	SW Confirmation 5-6	05/31/18 11:25	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-032	S	SW Confirmation 6-7	05/31/18 11:25	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-032	S	SW Confirmation 6-7	05/31/18 11:25	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	



Inter-Office Shipment

Page 3 of 9

IOS Number **108129**

Date/Time: 06/01/18 11:39

Created by: Brenda Ward

Please send report to: Holly Taylor

Lab# From: **Lubbock**

Delivery Priority:

Address: 6701 Aberdeen, Suite 9 Lubbock, TX 79424

Lab# To: **Houston**

Air Bill No.: 868933180303

Phone:

E-Mail: holly.taylor@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
587854-032	S	SW Confirmation 6-7	05/31/18 11:25	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-033	S	SW Confirmation 7-8	05/31/18 11:25	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-033	S	SW Confirmation 7-8	05/31/18 11:25	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-033	S	SW Confirmation 7-8	05/31/18 11:25	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-034	S	SW Confirmation 8-9	05/31/18 11:25	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-034	S	SW Confirmation 8-9	05/31/18 11:25	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-034	S	SW Confirmation 8-9	05/31/18 11:25	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-035	S	SW Confirmation 9-10	05/31/18 11:25	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-035	S	SW Confirmation 9-10	05/31/18 11:25	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-035	S	SW Confirmation 9-10	05/31/18 11:25	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-036	S	SE Confirmation 0-1	05/31/18 11:15	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-036	S	SE Confirmation 0-1	05/31/18 11:15	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-036	S	SE Confirmation 0-1	05/31/18 11:15	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-037	S	SE Confirmation 1-2	05/31/18 11:15	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-037	S	SE Confirmation 1-2	05/31/18 11:15	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-037	S	SE Confirmation 1-2	05/31/18 11:15	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-038	S	SE Confirmation 2-3	05/31/18 11:15	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-038	S	SE Confirmation 2-3	05/31/18 11:15	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-038	S	SE Confirmation 2-3	05/31/18 11:15	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-039	S	SE Confirmation 3-4	05/31/18 11:15	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-039	S	SE Confirmation 3-4	05/31/18 11:15	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-039	S	SE Confirmation 3-4	05/31/18 11:15	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-040	S	SE Confirmation 4-5	05/31/18 11:15	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-040	S	SE Confirmation 4-5	05/31/18 11:15	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-040	S	SE Confirmation 4-5	05/31/18 11:15	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	



Inter-Office Shipment

Page 4 of 9

IOS Number **108129**

Date/Time: 06/01/18 11:39

Created by: Brenda Ward

Please send report to: Holly Taylor

Lab# From: **Lubbock**

Delivery Priority:

Address: 6701 Aberdeen, Suite 9 Lubbock, TX 79424

Lab# To: **Houston**

Air Bill No.: 868933180303

Phone:

E-Mail: holly.taylor@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
587854-041	S	SE Confirmation 5-6	05/31/18 11:15	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-041	S	SE Confirmation 5-6	05/31/18 11:15	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-041	S	SE Confirmation 5-6	05/31/18 11:15	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-042	S	SE Confirmation 6-7	05/31/18 11:15	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-042	S	SE Confirmation 6-7	05/31/18 11:15	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-042	S	SE Confirmation 6-7	05/31/18 11:15	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-043	S	SE Confirmation 7-8	05/31/18 11:15	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-043	S	SE Confirmation 7-8	05/31/18 11:15	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-043	S	SE Confirmation 7-8	05/31/18 11:15	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-044	S	SE Confirmation 8-9	05/31/18 11:15	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-044	S	SE Confirmation 8-9	05/31/18 11:15	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-044	S	SE Confirmation 8-9	05/31/18 11:15	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-045	S	SE Confirmation 9-10	05/31/18 11:15	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-045	S	SE Confirmation 9-10	05/31/18 11:15	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-045	S	SE Confirmation 9-10	05/31/18 11:15	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-046	S	NW Confirmation 0-1	05/31/18 11:35	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-046	S	NW Confirmation 0-1	05/31/18 11:35	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-046	S	NW Confirmation 0-1	05/31/18 11:35	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-047	S	NW Confirmation 1-2	05/31/18 11:35	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-047	S	NW Confirmation 1-2	05/31/18 11:35	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-047	S	NW Confirmation 1-2	05/31/18 11:35	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-048	S	NW Confirmation 2-3	05/31/18 11:35	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-048	S	NW Confirmation 2-3	05/31/18 11:35	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-048	S	NW Confirmation 2-3	05/31/18 11:35	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-049	S	NW Confirmation 3-4	05/31/18 11:35	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	



Inter-Office Shipment

Page 5 of 9

IOS Number **108129**

Date/Time: 06/01/18 11:39

Created by: Brenda Ward

Please send report to: Holly Taylor

Lab# From: **Lubbock**

Delivery Priority:

Address: 6701 Aberdeen, Suite 9 Lubbock, TX 79424

Lab# To: **Houston**

Air Bill No.: 868933180303

Phone:

E-Mail: holly.taylor@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
587854-049	S	NW Confirmation 3-4	05/31/18 11:35	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-049	S	NW Confirmation 3-4	05/31/18 11:35	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-050	S	NW Confirmation 4-5	05/31/18 11:35	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-050	S	NW Confirmation 4-5	05/31/18 11:35	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-050	S	NW Confirmation 4-5	05/31/18 11:35	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-051	S	NW Confirmation 5-6	05/31/18 11:35	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-051	S	NW Confirmation 5-6	05/31/18 11:35	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-051	S	NW Confirmation 5-6	05/31/18 11:35	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-052	S	NW Confirmation 6-7	05/31/18 11:35	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-052	S	NW Confirmation 6-7	05/31/18 11:35	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-052	S	NW Confirmation 6-7	05/31/18 11:35	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-053	S	NW Confirmation 7-8	05/31/18 11:35	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-053	S	NW Confirmation 7-8	05/31/18 11:35	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-053	S	NW Confirmation 7-8	05/31/18 11:35	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-054	S	NW Confirmation 8-9	05/31/18 11:35	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-054	S	NW Confirmation 8-9	05/31/18 11:35	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-054	S	NW Confirmation 8-9	05/31/18 11:35	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-055	S	NW Confirmation 9-10	05/31/18 11:35	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-055	S	NW Confirmation 9-10	05/31/18 11:35	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-055	S	NW Confirmation 9-10	05/31/18 11:35	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-056	S	NE Confirmation 0-1	05/31/18 11:45	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-056	S	NE Confirmation 0-1	05/31/18 11:45	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-056	S	NE Confirmation 0-1	05/31/18 11:45	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-057	S	NE Confirmation 1-2	05/31/18 11:45	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-057	S	NE Confirmation 1-2	05/31/18 11:45	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	



Inter-Office Shipment

Page 6 of 9

IOS Number **108129**

Date/Time: 06/01/18 11:39

Created by: Brenda Ward

Please send report to: Holly Taylor

Lab# From: **Lubbock**

Delivery Priority:

Address: 6701 Aberdeen, Suite 9 Lubbock, TX 79424

Lab# To: **Houston**

Air Bill No.: 868933180303

Phone:

E-Mail: holly.taylor@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
587854-057	S	NE Confirmation 1-2	05/31/18 11:45	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-058	S	NE Confirmation 2-3	05/31/18 11:45	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-058	S	NE Confirmation 2-3	05/31/18 11:45	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-058	S	NE Confirmation 2-3	05/31/18 11:45	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-059	S	NE Confirmation 3-4	05/31/18 11:45	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-059	S	NE Confirmation 3-4	05/31/18 11:45	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-059	S	NE Confirmation 3-4	05/31/18 11:45	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-060	S	NE Confirmation 4-5	05/31/18 11:45	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-060	S	NE Confirmation 4-5	05/31/18 11:45	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-060	S	NE Confirmation 4-5	05/31/18 11:45	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-061	S	NE Confirmation 5-6	05/31/18 11:45	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-061	S	NE Confirmation 5-6	05/31/18 11:45	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-061	S	NE Confirmation 5-6	05/31/18 11:45	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-062	S	NE Confirmation 6-7	05/31/18 11:45	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-062	S	NE Confirmation 6-7	05/31/18 11:45	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-062	S	NE Confirmation 6-7	05/31/18 11:45	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-063	S	NE Confirmation 7-8	05/31/18 11:45	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-063	S	NE Confirmation 7-8	05/31/18 11:45	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-063	S	NE Confirmation 7-8	05/31/18 11:45	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-064	S	NE Confirmation 8-9	05/31/18 11:45	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	
587854-064	S	NE Confirmation 8-9	05/31/18 11:45	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-064	S	NE Confirmation 8-9	05/31/18 11:45	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-065	S	NE Confirmation 9-10	05/31/18 11:45	SW8015B_NM	TPH by SW 8015B	06/06/18	06/14/18	HTA	PHCC10C28	
587854-065	S	NE Confirmation 9-10	05/31/18 11:45	E300	Inorganic Anions by EPA 300/300.1	06/06/18	06/28/18	HTA	CL	
587854-065	S	NE Confirmation 9-10	05/31/18 11:45	SW8260BTX	BTEX by SW 8260B	06/06/18	06/14/18	HTA	BZ BZME EBZ XYLMP X	



Inter-Office Shipment

Page 7 of 9

IOS Number 108129

Date/Time: 06/01/18 11:39

Lab# From: **Lubbock**

Lab# To: **Houston**

Created by: Brenda Ward

Delivery Priority:

Air Bill No.: 868933180303

Please send report to: Holly Taylor

Address: 6701 Aberdeen, Suite 9 Lubbock, TX 79424

Phone:

E-Mail: holly.taylor@xenco.com



Inter-Office Shipment

Page 8 of 9

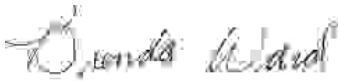
IOS Number 108129

Date/Time: 06/01/18 11:39 Created by: Brenda Ward
Lab# From: **Lubbock** Delivery Priority:
Lab# To: **Houston** Air Bill No.: 868933180303

Please send report to: Holly Taylor
Address: 6701 Aberdeen, Suite 9 Lubbock, TX 79424
Phone:
E-Mail: holly.taylor@xenco.com

Inter Office Shipment or Sample Comments:

Missing Samples: 007,013,019,020,021,022
Received Extra: Samples 023, 024, 025, 066

Relinquished By 
Brenda Ward

Date Relinquished: 06/04/2018

Received By: 
Monica Shakhshir

Date Received: 06/02/2018 09:20



Inter-Office Shipment

Page 9 of 9

IOS Number 108129

Date/Time: 06/01/18 11:39

Lab# From: **Lubbock**

Lab# To: **Houston**

Created by: Brenda Ward

Delivery Priority:

Air Bill No.: 868933180303

Please send report to: Holly Taylor

Address: 6701 Aberdeen, Suite 9 Lubbock, TX 79424

Phone:

E-Mail: holly.taylor@xenco.com

Cooler Temperature: 5.8



XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 108129

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : HOU-068

Sent By: Brenda Ward

Date Sent: 06/01/2018 11:39 AM

Received By: Monica Shakhshir

Date Received: 06/02/2018 09:20 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	5.8
#2 *Shipping container in good condition?	Yes
#3 *Samples received with appropriate temperature?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 *Custody Seals Signed and dated for Containers/coolers	Yes
#6 *IOS present?	Yes
#7 Any missing/extra samples?	Yes
#8 IOS agrees with sample label(s)/matrix?	Yes
#9 Sample matrix/ properties agree with IOS?	Yes
#10 Samples in proper container/ bottle?	Yes
#11 Samples properly preserved?	Yes
#12 Sample container(s) intact?	Yes
#13 Sufficient sample amount for indicated test(s)?	Yes
#14 All samples received within hold time?	Yes

Missing Samples:
007,013,019,020,021,022
Received Extra: Samples
023,024,025,066

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ Contacted by : _____ Date: _____

Checklist reviewed by:

Monica Shakhshir

Date: 06/02/2018



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In



Client: R2M Engineering

Date/ Time Received: 05/31/2018 04:00:00 PM

Work Order #: 587854

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)?	3.3
#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?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	Yes Houston Xenco
#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: 06/01/2018

Checklist reviewed by:


Holly Taylor

Date: 06/04/2018



Certificate of Analysis Summary 590437

R2M Engineering, Lubbock, TX

Project Name: Venables Case IRP 4935

Project Id:

Contact: Mason Sanders

Project Location: Hobbs IRP 4935

Date Received in Lab: Tue Jun-26-18 02:39 pm

Report Date: 28-JUN-18

Project Manager: Holly Taylor

Analysis Requested	Lab Id:	590437-001	590437-002	590437-003	590437-004	590437-005	590437-007
	Field Id:	SB-10 0-1	SB-10 1-2	SB-10 2-3	SB-10 3-4	SB-10A 0-1	SB-10B 0-1
	Depth:	0-1	1-2	2-3	3-4	0-1	0-1
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Jun-26-18 09:00	Jun-26-18 09:00	Jun-26-18 09:00	Jun-26-18 09:00	Jun-26-18 09:50	Jun-26-18 10:28
BTEX by EPA 8021B	Extracted:	Jun-27-18 11:00	Jun-27-18 11:00	Jun-27-18 11:00	Jun-27-18 11:00	Jun-27-18 11:00	Jun-27-18 11:00
	Analyzed:	Jun-28-18 05:31	Jun-28-18 00:26	Jun-28-18 00:54	Jun-27-18 21:43	Jun-28-18 01:21	Jun-28-18 02:17
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00902 0.0200	<0.00895 0.0198	<0.00873 0.0193	<0.00895 0.0198	<0.00885 0.0196	<0.00834 0.0185
Toluene		<0.00467 0.0200	<0.00463 0.0198	<0.00452 0.0193	<0.00463 0.0198	<0.00458 0.0196	<0.00432 0.0185
Ethylbenzene		<0.00615 0.0200	<0.00610 0.0198	<0.00595 0.0193	<0.00610 0.0198	<0.00603 0.0196	<0.00568 0.0185
m,p-Xylenes		<0.00681 0.0399	<0.00675 0.0396	<0.00658 0.0386	<0.00675 0.0396	<0.00667 0.0391	<0.00629 0.0369
o-Xylene		<0.00681 0.0200	<0.00675 0.0198	<0.00658 0.0193	<0.00675 0.0198	<0.00667 0.0196	<0.00629 0.0185
Total Xylenes		<0.00681 0.0200	<0.00675 0.0198	<0.00658 0.0193	<0.00675 0.0198	<0.00667 0.0196	<0.00629 0.0185
Total BTEX		<0.00467 0.0200	<0.00463 0.0198	<0.00452 0.0193	<0.00463 0.0198	<0.00458 0.0196	<0.00432 0.0185
DRO-ORO By SW8015B	Extracted:	Jun-27-18 12:00	Jun-27-18 12:00	Jun-27-18 12:00	Jun-27-18 12:00	Jun-27-18 12:00	Jun-27-18 12:00
	Analyzed:	Jun-27-18 12:45	Jun-27-18 14:29	Jun-27-18 15:04	Jun-27-18 15:39	Jun-27-18 16:15	Jun-27-18 17:25
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Diesel Range Organics (DRO)		157 25.0	84.6 24.8	61.9 25.1	34.6 24.8	41.3 25.2	<7.43 24.8
Oil Range Hydrocarbons (ORO)		33.4 25.0	17.3 J 24.8	18.7 J 25.1	11.2 J 24.8	9.71 J 25.2	<7.43 24.8
Inorganic Anions by EPA 300/300.1	Extracted:	Jun-28-18 08:30	Jun-28-18 08:30	Jun-28-18 08:30	Jun-28-18 08:30	Jun-28-18 08:30	Jun-28-18 08:30
	Analyzed:	Jun-28-18 09:35	Jun-28-18 10:25	Jun-28-18 10:37	Jun-28-18 10:50	Jun-28-18 11:02	Jun-28-18 11:14
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		219 25.0	74.6 25.0	51.6 25.0	58.9 25.0	48.1 25.0	19.6 J 25.0
TPH GRO by EPA 8015 Mod.	Extracted:	Jun-27-18 11:00	Jun-27-18 11:00	Jun-27-18 11:00	Jun-27-18 11:00	Jun-27-18 11:00	Jun-27-18 11:00
	Analyzed:	Jun-28-18 05:31	Jun-28-18 00:26	Jun-28-18 00:54	Jun-27-18 21:43	Jun-28-18 01:21	Jun-28-18 02:17
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
TPH-GRO		<0.270 3.99	<0.268 3.96	<0.262 3.86	<0.268 3.96	<0.265 3.91	<0.250 3.69

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

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

Holly Taylor
Project Manager



Certificate of Analysis Summary 590437

R2M Engineering, Lubbock, TX

Project Name: Venables Case IRP 4935

Project Id:

Contact: Mason Sanders

Project Location: Hobbs IRP 4935

Date Received in Lab: Tue Jun-26-18 02:39 pm

Report Date: 28-JUN-18

Project Manager: Holly Taylor

Analysis Requested	Lab Id:	590437-009	590437-010	590437-011	590437-012	590437-013	
	Field Id:	SF-4 0-1	SF-5 0-1	SF-6 0-1	Stockpile 1	Stockpile 2	
	Depth:	0-1	0-1	0-1	0-1	0-1	
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	
	Sampled:	Jun-26-18 10:40	Jun-26-18 10:43	Jun-26-18 10:48	Jun-26-18 08:40	Jun-26-18 08:42	
BTEX by EPA 8021B	Extracted:	Jun-27-18 11:00	Jun-27-18 11:00	Jun-27-18 11:00			
	Analyzed:	Jun-28-18 05:58	Jun-28-18 06:26	Jun-28-18 06:54			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
Benzene		<0.00800 0.0177	<0.00885 0.0196	<0.00810 0.0179			
Toluene		<0.00414 0.0177	<0.00458 0.0196	<0.00419 0.0179			
Ethylbenzene		<0.00545 0.0177	<0.00603 0.0196	<0.00552 0.0179			
m,p-Xylenes		<0.00604 0.0354	<0.00667 0.0391	<0.00611 0.0358			
o-Xylene		<0.00604 0.0177	<0.00667 0.0196	<0.00611 0.0179			
Total Xylenes		<0.00604 0.0177	<0.00667 0.0196	<0.00611 0.0179			
Total BTEX		<0.00414 0.0177	<0.00458 0.0196	<0.00419 0.0179			
DRO-ORO By SW8015B	Extracted:	Jun-27-18 12:00	Jun-27-18 12:00	Jun-27-18 12:00	Jun-27-18 12:00	Jun-27-18 12:00	
	Analyzed:	Jun-27-18 18:35	Jun-27-18 19:10	Jun-27-18 19:45	Jun-27-18 20:21	Jun-27-18 20:55	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Diesel Range Organics (DRO)		501 24.9	354 25.2	<7.45 24.9	214 25.2	263 24.9	
Oil Range Hydrocarbons (ORO)		110 24.9	80.5 25.2	<7.45 24.9	48.3 25.2	59.0 24.9	
Inorganic Anions by EPA 300/300.1	Extracted:	Jun-28-18 08:30	Jun-28-18 08:30	Jun-28-18 08:30			
	Analyzed:	Jun-28-18 11:52	Jun-28-18 12:17	Jun-28-18 13:06			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
Chloride		570 125	280 25.0	15.6 J 25.0			
TPH GRO by EPA 8015 Mod.	Extracted:	Jun-27-18 11:00	Jun-27-18 11:00	Jun-27-18 11:00	Jun-27-18 11:00	Jun-27-18 11:00	
	Analyzed:	Jun-28-18 05:58	Jun-28-18 06:26	Jun-28-18 06:54	Jun-28-18 07:21	Jun-28-18 03:13	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
TPH-GRO		<0.240 3.54	<0.265 3.91	<0.243 3.58	<0.265 3.91	<0.254 3.75	

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

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

Holly Taylor
Project Manager

Analytical Report 590437

for R2M Engineering

Project Manager: Mason Sanders

Venables Case IRP 4935

28-JUN-18

Collected By: Client



6701 Aberdeen, Suite 9 Lubbock, TX 79424

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-18-26), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (T104704295-17-16), 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 (T104704400-18-15)

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)

Xenco-Atlanta (LELAP Lab ID #04176)

Xenco-Tampa: Florida (E87429)

Xenco-Lakeland: Florida (E84098)



28-JUN-18

Project Manager: **Mason Sanders**

R2M Engineering

5012 50th

Suite 204

Lubbock, TX 79414

Reference: XENCO Report No(s): **590437**

Venables Case IRP 4935

Project Address: Hobbs IRP 4935

Mason Sanders:

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) 590437. 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. 590437 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

A handwritten signature in black ink that reads 'Holly Taylor'. The signature is written in a cursive, flowing style.

Holly Taylor

Project Manager

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

Certified and approved by numerous States and Agencies.

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

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



Sample Cross Reference 590437

R2M Engineering, Lubbock, TX

Venables Case IRP 4935

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SB-10 0-1	S	06-26-18 09:00	0 - 1	590437-001
SB-10 1-2	S	06-26-18 09:00	1 - 2	590437-002
SB-10 2-3	S	06-26-18 09:00	2 - 3	590437-003
SB-10 3-4	S	06-26-18 09:00	3 - 4	590437-004
SB-10A 0-1	S	06-26-18 09:50	0 - 1	590437-005
SB-10B 0-1	S	06-26-18 10:28	0 - 1	590437-007
SF-4 0-1	S	06-26-18 10:40	0 - 1	590437-009
SF-5 0-1	S	06-26-18 10:43	0 - 1	590437-010
SF-6 0-1	S	06-26-18 10:48	0 - 1	590437-011
Stockpile 1	S	06-26-18 08:40	0 - 1	590437-012
Stockpile 2	S	06-26-18 08:42	0 - 1	590437-013
SB-10A 1-2	S	06-26-18 09:50	1 - 2	Not Analyzed
SB-10B 1-2	S	06-26-18 10:28	1 - 2	Not Analyzed



CASE NARRATIVE

Client Name: R2M Engineering

Project Name: Venables Case IRP 4935

Project ID:
Work Order Number(s): 590437

Report Date: 28-JUN-18
Date Received: 06/26/2018

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:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3054840 DRO-ORO By SW8015B

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

Samples affected are: 590437-001 SD, 590437-001, 590437-009, 590437-010, 590437-012, 590437-013.

Surrogate Tricosane recovered above QC limits Data confirmed by re-analysis. Samples affected are: 7657413-1-BLK, 590437-001 S, 590437-001 SD, 590437-010, 590437-009, 590437-001, 590437-012, 590437-013.

Batch: LBA-3054857 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3054859 TPH GRO by EPA 8015 Mod.

Lab Sample ID 590437-004 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). TPH-GRO Relative Percent Difference (RPD) between matrix spike and duplicate was above quality control limits.

Samples in the analytical batch are: 590437-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013

Outlier/s are due to possible matrix interference.

Surrogate 4-Bromofluorobenzene recovered below QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 590437-004 SD.

Surrogate a,a,a-Trifluorotoluene recovered above QC limits Data confirmed by re-analysis. Samples affected are: 7657417-1-BLK, 590437-002.



Certificate of Analytical Results 590437

R2M Engineering, Lubbock, TX

Venables Case IRP 4935

Sample Id: **SB-10 0-1**

Matrix: Soil

Date Received: 06.26.18 14.39

Lab Sample Id: 590437-001

Date Collected: 06.26.18 09.00

Sample Depth: 0 - 1

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: RNL

% Moisture:

Analyst: RNL

Date Prep: 06.28.18 08.30

Basis: Wet Weight

Seq Number: 3054909

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	219	25.0	0.572	mg/kg	06.28.18 09.35		1

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: PGM

% Moisture:

Analyst: PGM

Date Prep: 06.27.18 12.00

Basis: Wet Weight

Seq Number: 3054840

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	157	25.0	7.49	mg/kg	06.27.18 12.45		1
Oil Range Hydrocarbons (ORO)	PHCG2835	33.4	25.0	7.49	mg/kg	06.27.18 12.45		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tricosane	638-67-5	198	%	65-144	06.27.18 12.45	**
n-Triacontane	638-68-6	156	%	46-152	06.27.18 12.45	**

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 06.27.18 11.00

Basis: Wet Weight

Seq Number: 3054857

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00902	0.0200	0.00902	mg/kg	06.28.18 05.31	U	1
Toluene	108-88-3	<0.00467	0.0200	0.00467	mg/kg	06.28.18 05.31	U	1
Ethylbenzene	100-41-4	<0.00615	0.0200	0.00615	mg/kg	06.28.18 05.31	U	1
m,p-Xylenes	179601-23-1	<0.00681	0.0399	0.00681	mg/kg	06.28.18 05.31	U	1
o-Xylene	95-47-6	<0.00681	0.0200	0.00681	mg/kg	06.28.18 05.31	U	1
Total Xylenes	1330-20-7	<0.00681	0.0200	0.00681	mg/kg	06.28.18 05.31	U	1
Total BTEX		<0.00467	0.0200	0.00467	mg/kg	06.28.18 05.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	68-120	06.28.18 05.31	
a,a,a-Trifluorotoluene	98-08-8	105	%	71-121	06.28.18 05.31	



Certificate of Analytical Results 590437

R2M Engineering, Lubbock, TX

Venables Case IRP 4935

Sample Id: **SB-10 0-1**

Matrix: Soil

Date Received: 06.26.18 14.39

Lab Sample Id: 590437-001

Date Collected: 06.26.18 09.00

Sample Depth: 0 - 1

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 06.27.18 11.00

Basis: Wet Weight

Seq Number: 3054859

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<0.270	3.99	0.270	mg/kg	06.28.18 05.31	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene	460-00-4	99	%	76-123	06.28.18 05.31			
a,a,a-Trifluorotoluene	98-08-8	88	%	69-120	06.28.18 05.31			



Certificate of Analytical Results 590437

R2M Engineering, Lubbock, TX

Venables Case IRP 4935

Sample Id: **SB-10 1-2**

Matrix: Soil

Date Received: 06.26.18 14.39

Lab Sample Id: 590437-002

Date Collected: 06.26.18 09.00

Sample Depth: 1 - 2

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: RNL

% Moisture:

Analyst: RNL

Date Prep: 06.28.18 08.30

Basis: Wet Weight

Seq Number: 3054909

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	74.6	25.0	0.572	mg/kg	06.28.18 10.25		1

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: PGM

% Moisture:

Analyst: PGM

Date Prep: 06.27.18 12.00

Basis: Wet Weight

Seq Number: 3054840

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	84.6	24.8	7.41	mg/kg	06.27.18 14.29		1
Oil Range Hydrocarbons (ORO)	PHCG2835	17.3	24.8	7.41	mg/kg	06.27.18 14.29	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tricosane	638-67-5	138	%	65-144	06.27.18 14.29	
n-Triacontane	638-68-6	118	%	46-152	06.27.18 14.29	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 06.27.18 11.00

Basis: Wet Weight

Seq Number: 3054857

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00895	0.0198	0.00895	mg/kg	06.28.18 00.26	U	1
Toluene	108-88-3	<0.00463	0.0198	0.00463	mg/kg	06.28.18 00.26	U	1
Ethylbenzene	100-41-4	<0.00610	0.0198	0.00610	mg/kg	06.28.18 00.26	U	1
m,p-Xylenes	179601-23-1	<0.00675	0.0396	0.00675	mg/kg	06.28.18 00.26	U	1
o-Xylene	95-47-6	<0.00675	0.0198	0.00675	mg/kg	06.28.18 00.26	U	1
Total Xylenes	1330-20-7	<0.00675	0.0198	0.00675	mg/kg	06.28.18 00.26	U	1
Total BTEX		<0.00463	0.0198	0.00463	mg/kg	06.28.18 00.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	68-120	06.28.18 00.26	
a,a,a-Trifluorotoluene	98-08-8	121	%	71-121	06.28.18 00.26	



Certificate of Analytical Results 590437

R2M Engineering, Lubbock, TX

Venables Case IRP 4935

Sample Id: **SB-10 1-2**

Matrix: Soil

Date Received: 06.26.18 14.39

Lab Sample Id: 590437-002

Date Collected: 06.26.18 09.00

Sample Depth: 1 - 2

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 06.27.18 11.00

Basis: Wet Weight

Seq Number: 3054859

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<0.268	3.96	0.268	mg/kg	06.28.18 00.26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene	460-00-4	93	%	76-123	06.28.18 00.26			
a,a,a-Trifluorotoluene	98-08-8	143	%	69-120	06.28.18 00.26	**		



Certificate of Analytical Results 590437

R2M Engineering, Lubbock, TX

Venables Case IRP 4935

Sample Id: **SB-10 2-3**

Matrix: Soil

Date Received: 06.26.18 14.39

Lab Sample Id: 590437-003

Date Collected: 06.26.18 09.00

Sample Depth: 2 - 3

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: RNL

% Moisture:

Analyst: RNL

Date Prep: 06.28.18 08.30

Basis: Wet Weight

Seq Number: 3054909

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	51.6	25.0	0.572	mg/kg	06.28.18 10.37		1

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: PGM

% Moisture:

Analyst: PGM

Date Prep: 06.27.18 12.00

Basis: Wet Weight

Seq Number: 3054840

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	61.9	25.1	7.50	mg/kg	06.27.18 15.04		1
Oil Range Hydrocarbons (ORO)	PHCG2835	18.7	25.1	7.50	mg/kg	06.27.18 15.04	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tricosane	638-67-5	142	%	65-144	06.27.18 15.04	
n-Triacontane	638-68-6	111	%	46-152	06.27.18 15.04	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 06.27.18 11.00

Basis: Wet Weight

Seq Number: 3054857

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00873	0.0193	0.00873	mg/kg	06.28.18 00.54	U	1
Toluene	108-88-3	<0.00452	0.0193	0.00452	mg/kg	06.28.18 00.54	U	1
Ethylbenzene	100-41-4	<0.00595	0.0193	0.00595	mg/kg	06.28.18 00.54	U	1
m,p-Xylenes	179601-23-1	<0.00658	0.0386	0.00658	mg/kg	06.28.18 00.54	U	1
o-Xylene	95-47-6	<0.00658	0.0193	0.00658	mg/kg	06.28.18 00.54	U	1
Total Xylenes	1330-20-7	<0.00658	0.0193	0.00658	mg/kg	06.28.18 00.54	U	1
Total BTEX		<0.00452	0.0193	0.00452	mg/kg	06.28.18 00.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	68-120	06.28.18 00.54	
a,a,a-Trifluorotoluene	98-08-8	115	%	71-121	06.28.18 00.54	



Certificate of Analytical Results 590437

R2M Engineering, Lubbock, TX

Venables Case IRP 4935

Sample Id: **SB-10 2-3**

Matrix: Soil

Date Received: 06.26.18 14.39

Lab Sample Id: 590437-003

Date Collected: 06.26.18 09.00

Sample Depth: 2 - 3

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 06.27.18 11.00

Basis: Wet Weight

Seq Number: 3054859

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<0.262	3.86	0.262	mg/kg	06.28.18 00.54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene	460-00-4	101	%	76-123	06.28.18 00.54			
a,a,a-Trifluorotoluene	98-08-8	95	%	69-120	06.28.18 00.54			



Certificate of Analytical Results 590437

R2M Engineering, Lubbock, TX

Venables Case IRP 4935

Sample Id: **SB-10 3-4**
Lab Sample Id: 590437-004

Matrix: Soil
Date Collected: 06.26.18 09.00

Date Received: 06.26.18 14.39
Sample Depth: 3 - 4

Analytical Method: Inorganic Anions by EPA 300/300.1

Tech: RNL

Analyst: RNL

Seq Number: 3054909

Date Prep: 06.28.18 08.30

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	58.9	25.0	0.572	mg/kg	06.28.18 10.50		1

Analytical Method: DRO-ORO By SW8015B

Tech: PGM

Analyst: PGM

Seq Number: 3054840

Date Prep: 06.27.18 12.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	34.6	24.8	7.43	mg/kg	06.27.18 15.39		1
Oil Range Hydrocarbons (ORO)	PHCG2835	11.2	24.8	7.43	mg/kg	06.27.18 15.39	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tricosane	638-67-5	114	%	65-144	06.27.18 15.39	
n-Triacontane	638-68-6	110	%	46-152	06.27.18 15.39	

Analytical Method: BTEX by EPA 8021B

Tech: MIT

Analyst: MIT

Seq Number: 3054857

Date Prep: 06.27.18 11.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00895	0.0198	0.00895	mg/kg	06.27.18 21.43	U	1
Toluene	108-88-3	<0.00463	0.0198	0.00463	mg/kg	06.27.18 21.43	U	1
Ethylbenzene	100-41-4	<0.00610	0.0198	0.00610	mg/kg	06.27.18 21.43	U	1
m,p-Xylenes	179601-23-1	<0.00675	0.0396	0.00675	mg/kg	06.27.18 21.43	U	1
o-Xylene	95-47-6	<0.00675	0.0198	0.00675	mg/kg	06.27.18 21.43	U	1
Total Xylenes	1330-20-7	<0.00675	0.0198	0.00675	mg/kg	06.27.18 21.43	U	1
Total BTEX		<0.00463	0.0198	0.00463	mg/kg	06.27.18 21.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107	%	68-120	06.27.18 21.43	
a,a,a-Trifluorotoluene	98-08-8	109	%	71-121	06.27.18 21.43	



Certificate of Analytical Results 590437

R2M Engineering, Lubbock, TX

Venables Case IRP 4935

Sample Id: **SB-10 3-4**

Matrix: Soil

Date Received: 06.26.18 14.39

Lab Sample Id: 590437-004

Date Collected: 06.26.18 09.00

Sample Depth: 3 - 4

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 06.27.18 11.00

Basis: Wet Weight

Seq Number: 3054859

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<0.268	3.96	0.268	mg/kg	06.27.18 21.43	UF	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene	460-00-4	104	%	76-123	06.27.18 21.43			
a,a,a-Trifluorotoluene	98-08-8	97	%	69-120	06.27.18 21.43			



Certificate of Analytical Results 590437

R2M Engineering, Lubbock, TX

Venables Case IRP 4935

Sample Id: **SB-10A 0-1**

Matrix: Soil

Date Received: 06.26.18 14.39

Lab Sample Id: 590437-005

Date Collected: 06.26.18 09.50

Sample Depth: 0 - 1

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: RNL

% Moisture:

Analyst: RNL

Date Prep: 06.28.18 08.30

Basis: Wet Weight

Seq Number: 3054909

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	48.1	25.0	0.572	mg/kg	06.28.18 11.02		1

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: PGM

% Moisture:

Analyst: PGM

Date Prep: 06.27.18 12.00

Basis: Wet Weight

Seq Number: 3054840

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	41.3	25.2	7.53	mg/kg	06.27.18 16.15		1
Oil Range Hydrocarbons (ORO)	PHCG2835	9.71	25.2	7.53	mg/kg	06.27.18 16.15	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tricosane	638-67-5	119	%	65-144	06.27.18 16.15	
n-Triacontane	638-68-6	101	%	46-152	06.27.18 16.15	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 06.27.18 11.00

Basis: Wet Weight

Seq Number: 3054857

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00885	0.0196	0.00885	mg/kg	06.28.18 01.21	U	1
Toluene	108-88-3	<0.00458	0.0196	0.00458	mg/kg	06.28.18 01.21	U	1
Ethylbenzene	100-41-4	<0.00603	0.0196	0.00603	mg/kg	06.28.18 01.21	U	1
m,p-Xylenes	179601-23-1	<0.00667	0.0391	0.00667	mg/kg	06.28.18 01.21	U	1
o-Xylene	95-47-6	<0.00667	0.0196	0.00667	mg/kg	06.28.18 01.21	U	1
Total Xylenes	1330-20-7	<0.00667	0.0196	0.00667	mg/kg	06.28.18 01.21	U	1
Total BTEX		<0.00458	0.0196	0.00458	mg/kg	06.28.18 01.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	68-120	06.28.18 01.21	
a,a,a-Trifluorotoluene	98-08-8	111	%	71-121	06.28.18 01.21	



Certificate of Analytical Results 590437

R2M Engineering, Lubbock, TX

Venables Case IRP 4935

Sample Id: **SB-10A 0-1**

Matrix: Soil

Date Received: 06.26.18 14.39

Lab Sample Id: 590437-005

Date Collected: 06.26.18 09.50

Sample Depth: 0 - 1

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 06.27.18 11.00

Basis: Wet Weight

Seq Number: 3054859

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<0.265	3.91	0.265	mg/kg	06.28.18 01.21	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene	460-00-4	101	%	76-123	06.28.18 01.21			
a,a,a-Trifluorotoluene	98-08-8	96	%	69-120	06.28.18 01.21			



Certificate of Analytical Results 590437

R2M Engineering, Lubbock, TX

Venables Case IRP 4935

Sample Id: **SB-10B 0-1**

Matrix: Soil

Date Received: 06.26.18 14.39

Lab Sample Id: 590437-007

Date Collected: 06.26.18 10.28

Sample Depth: 0 - 1

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: RNL

% Moisture:

Analyst: RNL

Date Prep: 06.28.18 08.30

Basis: Wet Weight

Seq Number: 3054909

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	19.6	25.0	0.572	mg/kg	06.28.18 11.14	J	1

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: PGM

% Moisture:

Analyst: PGM

Date Prep: 06.27.18 12.00

Basis: Wet Weight

Seq Number: 3054840

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	<7.43	24.8	7.43	mg/kg	06.27.18 17.25	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<7.43	24.8	7.43	mg/kg	06.27.18 17.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tricosane	638-67-5	94	%	65-144	06.27.18 17.25	
n-Triacontane	638-68-6	88	%	46-152	06.27.18 17.25	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 06.27.18 11.00

Basis: Wet Weight

Seq Number: 3054857

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00834	0.0185	0.00834	mg/kg	06.28.18 02.17	U	1
Toluene	108-88-3	<0.00432	0.0185	0.00432	mg/kg	06.28.18 02.17	U	1
Ethylbenzene	100-41-4	<0.00568	0.0185	0.00568	mg/kg	06.28.18 02.17	U	1
m,p-Xylenes	179601-23-1	<0.00629	0.0369	0.00629	mg/kg	06.28.18 02.17	U	1
o-Xylene	95-47-6	<0.00629	0.0185	0.00629	mg/kg	06.28.18 02.17	U	1
Total Xylenes	1330-20-7	<0.00629	0.0185	0.00629	mg/kg	06.28.18 02.17	U	1
Total BTEX		<0.00432	0.0185	0.00432	mg/kg	06.28.18 02.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	68-120	06.28.18 02.17	
a,a,a-Trifluorotoluene	98-08-8	112	%	71-121	06.28.18 02.17	



Certificate of Analytical Results 590437

R2M Engineering, Lubbock, TX

Venables Case IRP 4935

Sample Id: **SB-10B 0-1**

Matrix: Soil

Date Received: 06.26.18 14.39

Lab Sample Id: 590437-007

Date Collected: 06.26.18 10.28

Sample Depth: 0 - 1

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 06.27.18 11.00

Basis: Wet Weight

Seq Number: 3054859

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<0.250	3.69	0.250	mg/kg	06.28.18 02.17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene	460-00-4	102	%	76-123	06.28.18 02.17			
a,a,a-Trifluorotoluene	98-08-8	98	%	69-120	06.28.18 02.17			



Certificate of Analytical Results 590437

R2M Engineering, Lubbock, TX

Venables Case IRP 4935

Sample Id: **SF-4 0-1**
Lab Sample Id: 590437-009

Matrix: Soil
Date Collected: 06.26.18 10.40

Date Received: 06.26.18 14.39
Sample Depth: 0 - 1

Analytical Method: Inorganic Anions by EPA 300/300.1

Tech: RNL

Analyst: RNL

Seq Number: 3054909

Date Prep: 06.28.18 08.30

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	570	125	2.86	mg/kg	06.28.18 11.52		5

Analytical Method: DRO-ORO By SW8015B

Tech: PGM

Analyst: PGM

Seq Number: 3054840

Date Prep: 06.27.18 12.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	501	24.9	7.44	mg/kg	06.27.18 18.35		1
Oil Range Hydrocarbons (ORO)	PHCG2835	110	24.9	7.44	mg/kg	06.27.18 18.35		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tricosane	638-67-5	377	%	65-144	06.27.18 18.35	**
n-Triacontane	638-68-6	278	%	46-152	06.27.18 18.35	**

Analytical Method: BTEX by EPA 8021B

Tech: MIT

Analyst: MIT

Seq Number: 3054857

Date Prep: 06.27.18 11.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00800	0.0177	0.00800	mg/kg	06.28.18 05.58	U	1
Toluene	108-88-3	<0.00414	0.0177	0.00414	mg/kg	06.28.18 05.58	U	1
Ethylbenzene	100-41-4	<0.00545	0.0177	0.00545	mg/kg	06.28.18 05.58	U	1
m,p-Xylenes	179601-23-1	<0.00604	0.0354	0.00604	mg/kg	06.28.18 05.58	U	1
o-Xylene	95-47-6	<0.00604	0.0177	0.00604	mg/kg	06.28.18 05.58	U	1
Total Xylenes	1330-20-7	<0.00604	0.0177	0.00604	mg/kg	06.28.18 05.58	U	1
Total BTEX		<0.00414	0.0177	0.00414	mg/kg	06.28.18 05.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	92	%	68-120	06.28.18 05.58	
a,a,a-Trifluorotoluene	98-08-8	99	%	71-121	06.28.18 05.58	



Certificate of Analytical Results 590437

R2M Engineering, Lubbock, TX

Venables Case IRP 4935

Sample Id: **SF-4 0-1**
Lab Sample Id: 590437-009

Matrix: Soil
Date Collected: 06.26.18 10.40

Date Received: 06.26.18 14.39
Sample Depth: 0 - 1

Analytical Method: TPH GRO by EPA 8015 Mod.

Tech: MIT

Analyst: MIT

Seq Number: 3054859

Date Prep: 06.27.18 11.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<0.240	3.54	0.240	mg/kg	06.28.18 05.58	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene	460-00-4	90	%	76-123	06.28.18 05.58			
a,a,a-Trifluorotoluene	98-08-8	80	%	69-120	06.28.18 05.58			



Certificate of Analytical Results 590437

R2M Engineering, Lubbock, TX

Venables Case IRP 4935

Sample Id: SF-5 0-1
Lab Sample Id: 590437-010

Matrix: Soil
Date Collected: 06.26.18 10.43

Date Received: 06.26.18 14.39
Sample Depth: 0 - 1

Analytical Method: Inorganic Anions by EPA 300/300.1

Tech: RNL

Analyst: RNL

Seq Number: 3054909

Date Prep: 06.28.18 08.30

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	280	25.0	0.572	mg/kg	06.28.18 12.17		1

Analytical Method: DRO-ORO By SW8015B

Tech: PGM

Analyst: PGM

Seq Number: 3054840

Date Prep: 06.27.18 12.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	354	25.2	7.53	mg/kg	06.27.18 19.10		1
Oil Range Hydrocarbons (ORO)	PHCG2835	80.5	25.2	7.53	mg/kg	06.27.18 19.10		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tricosane	638-67-5	291	%	65-144	06.27.18 19.10	**
n-Triacontane	638-68-6	189	%	46-152	06.27.18 19.10	**

Analytical Method: BTEX by EPA 8021B

Tech: MIT

Analyst: MIT

Seq Number: 3054857

Date Prep: 06.27.18 11.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00885	0.0196	0.00885	mg/kg	06.28.18 06.26	U	1
Toluene	108-88-3	<0.00458	0.0196	0.00458	mg/kg	06.28.18 06.26	U	1
Ethylbenzene	100-41-4	<0.00603	0.0196	0.00603	mg/kg	06.28.18 06.26	U	1
m,p-Xylenes	179601-23-1	<0.00667	0.0391	0.00667	mg/kg	06.28.18 06.26	U	1
o-Xylene	95-47-6	<0.00667	0.0196	0.00667	mg/kg	06.28.18 06.26	U	1
Total Xylenes	1330-20-7	<0.00667	0.0196	0.00667	mg/kg	06.28.18 06.26	U	1
Total BTEX		<0.00458	0.0196	0.00458	mg/kg	06.28.18 06.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	68-120	06.28.18 06.26	
a,a,a-Trifluorotoluene	98-08-8	109	%	71-121	06.28.18 06.26	



Certificate of Analytical Results 590437

R2M Engineering, Lubbock, TX

Venables Case IRP 4935

Sample Id: **SF-5 0-1**

Matrix: Soil

Date Received: 06.26.18 14.39

Lab Sample Id: 590437-010

Date Collected: 06.26.18 10.43

Sample Depth: 0 - 1

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 06.27.18 11.00

Basis: Wet Weight

Seq Number: 3054859

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<0.265	3.91	0.265	mg/kg	06.28.18 06.26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene	460-00-4	100	%	76-123	06.28.18 06.26			
a,a,a-Trifluorotoluene	98-08-8	95	%	69-120	06.28.18 06.26			



Certificate of Analytical Results 590437

R2M Engineering, Lubbock, TX

Venables Case IRP 4935

Sample Id: SF-6 0-1
Lab Sample Id: 590437-011

Matrix: Soil
Date Collected: 06.26.18 10.48

Date Received: 06.26.18 14.39
Sample Depth: 0 - 1

Analytical Method: Inorganic Anions by EPA 300/300.1

Tech: RNL

Analyst: RNL

Seq Number: 3054909

Date Prep: 06.28.18 08.30

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	15.6	25.0	0.572	mg/kg	06.28.18 13.06	J	1

Analytical Method: DRO-ORO By SW8015B

Tech: PGM

Analyst: PGM

Seq Number: 3054840

Date Prep: 06.27.18 12.00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	<7.45	24.9	7.45	mg/kg	06.27.18 19.45	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<7.45	24.9	7.45	mg/kg	06.27.18 19.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Tricosane	638-67-5	92	%	65-144	06.27.18 19.45	
n-Triacontane	638-68-6	91	%	46-152	06.27.18 19.45	

Analytical Method: BTEX by EPA 8021B

Tech: MIT

Analyst: MIT

Seq Number: 3054857

Date Prep: 06.27.18 11.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00810	0.0179	0.00810	mg/kg	06.28.18 06.54	U	1
Toluene	108-88-3	<0.00419	0.0179	0.00419	mg/kg	06.28.18 06.54	U	1
Ethylbenzene	100-41-4	<0.00552	0.0179	0.00552	mg/kg	06.28.18 06.54	U	1
m,p-Xylenes	179601-23-1	<0.00611	0.0358	0.00611	mg/kg	06.28.18 06.54	U	1
o-Xylene	95-47-6	<0.00611	0.0179	0.00611	mg/kg	06.28.18 06.54	U	1
Total Xylenes	1330-20-7	<0.00611	0.0179	0.00611	mg/kg	06.28.18 06.54	U	1
Total BTEX		<0.00419	0.0179	0.00419	mg/kg	06.28.18 06.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	68-120	06.28.18 06.54	
a,a,a-Trifluorotoluene	98-08-8	109	%	71-121	06.28.18 06.54	



Certificate of Analytical Results 590437

R2M Engineering, Lubbock, TX

Venables Case IRP 4935

Sample Id: **SF-6 0-1**
Lab Sample Id: 590437-011

Matrix: Soil
Date Collected: 06.26.18 10.48

Date Received: 06.26.18 14.39
Sample Depth: 0 - 1

Analytical Method: TPH GRO by EPA 8015 Mod.

Tech: MIT

Analyst: MIT

Seq Number: 3054859

Date Prep: 06.27.18 11.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<0.243	3.58	0.243	mg/kg	06.28.18 06.54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene	460-00-4	98	%	76-123	06.28.18 06.54			
a,a,a-Trifluorotoluene	98-08-8	91	%	69-120	06.28.18 06.54			



Certificate of Analytical Results 590437

R2M Engineering, Lubbock, TX

Venables Case IRP 4935

Sample Id: **Stockpile 1**

Matrix: Soil

Date Received: 06.26.18 14.39

Lab Sample Id: 590437-012

Date Collected: 06.26.18 08.40

Sample Depth: 0 - 1

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: PGM

% Moisture:

Analyst: PGM

Date Prep: 06.27.18 12.00

Basis: Wet Weight

Seq Number: 3054840

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	214	25.2	7.54	mg/kg	06.27.18 20.21		1
Oil Range Hydrocarbons (ORO)	PHCG2835	48.3	25.2	7.54	mg/kg	06.27.18 20.21		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Tricosane	638-67-5	194	%	65-144	06.27.18 20.21	**		
n-Triacontane	638-68-6	159	%	46-152	06.27.18 20.21	**		

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 06.27.18 11.00

Basis: Wet Weight

Seq Number: 3054859

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<0.265	3.91	0.265	mg/kg	06.28.18 07.21	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene	460-00-4	99	%	76-123	06.28.18 07.21			
a,a,a-Trifluorotoluene	98-08-8	93	%	69-120	06.28.18 07.21			



Certificate of Analytical Results 590437

R2M Engineering, Lubbock, TX

Venables Case IRP 4935

Sample Id: **Stockpile 2**

Matrix: Soil

Date Received: 06.26.18 14.39

Lab Sample Id: 590437-013

Date Collected: 06.26.18 08.42

Sample Depth: 0 - 1

Analytical Method: DRO-ORO By SW8015B

Prep Method: SW8015P

Tech: PGM

% Moisture:

Analyst: PGM

Date Prep: 06.27.18 12.00

Basis: Wet Weight

Seq Number: 3054840

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Diesel Range Organics (DRO)	C10C28DRO	263	24.9	7.45	mg/kg	06.27.18 20.55		1
Oil Range Hydrocarbons (ORO)	PHCG2835	59.0	24.9	7.45	mg/kg	06.27.18 20.55		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Tricosane	638-67-5	222	%	65-144	06.27.18 20.55	**		
n-Triacontane	638-68-6	186	%	46-152	06.27.18 20.55	**		

Analytical Method: TPH GRO by EPA 8015 Mod.

Prep Method: SW5030B

Tech: MIT

% Moisture:

Analyst: MIT

Date Prep: 06.27.18 11.00

Basis: Wet Weight

Seq Number: 3054859

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
TPH-GRO	8006-61-9	<0.254	3.75	0.254	mg/kg	06.28.18 03.13	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene	460-00-4	102	%	76-123	06.28.18 03.13			
a,a,a-Trifluorotoluene	98-08-8	98	%	69-120	06.28.18 03.13			

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

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

R2M Engineering
Venables Case IRP 4935

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3054909

Matrix: Solid

Prep Method: E300P

MB Sample Id: 7657496-1-BLK

LCS Sample Id: 7657496-1-BKS

Date Prep: 06.28.18

LCSD Sample Id: 7657496-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.572	250	254	102	251	100	90-110	1	20	mg/kg	06.28.18 09:10	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3054909

Matrix: Soil

Prep Method: E300P

Parent Sample Id: 590437-001

MS Sample Id: 590437-001 S

Date Prep: 06.28.18

MSD Sample Id: 590437-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	219	250	483	106	482	105	80-120	0	20	mg/kg	06.28.18 10:00	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3054909

Matrix: Soil

Prep Method: E300P

Parent Sample Id: 590437-010

MS Sample Id: 590437-010 S

Date Prep: 06.28.18

MSD Sample Id: 590437-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	280	250	537	103	556	110	80-120	3	20	mg/kg	06.28.18 12:41	

Analytical Method: DRO-ORO By SW8015B

Seq Number: 3054840

Matrix: Solid

Prep Method: SW8015P

MB Sample Id: 7657413-1-BLK

LCS Sample Id: 7657413-1-BKS

Date Prep: 06.27.18

LCSD Sample Id: 7657413-1-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	102	102	106	106	63-139	4	20	mg/kg	06.27.18 11:34	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Tricosane	1040	**	107		114		65-144	%	06.27.18 11:34
n-Triacontane	108		124		103		46-152	%	06.27.18 11:34

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

R2M Engineering
Venables Case IRP 4935

Analytical Method: DRO-ORO By SW8015B

Seq Number: 3054840

Parent Sample Id: 590437-001

Matrix: Soil

MS Sample Id: 590437-001 S

Prep Method: SW8015P

Date Prep: 06.27.18

MSD Sample Id: 590437-001 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)	157	100	250	93	254	97	63-139	2	20	mg/kg	06.27.18 13:19	
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits			Units	Analysis Date	
Tricosane			191	**	203	**	65-144			%	06.27.18 13:19	
n-Triacontane			142		156	**	46-152			%	06.27.18 13:19	

Analytical Method: BTEX by EPA 8021B

Seq Number: 3054857

MB Sample Id: 7657416-1-BLK

Matrix: Solid

LCS Sample Id: 7657416-1-BKS

Prep Method: SW5030B

Date Prep: 06.27.18

LCSD Sample Id: 7657416-1-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	1.99	100	1.89	95	55-120	5	20	mg/kg	06.27.18 18:30	
Toluene	<0.00468	2.00	2.14	107	2.09	105	77-120	2	20	mg/kg	06.27.18 18:30	
Ethylbenzene	<0.00616	2.00	2.02	101	1.97	99	77-120	3	20	mg/kg	06.27.18 18:30	
m,p-Xylenes	<0.00682	4.00	4.06	102	3.94	99	78-120	3	20	mg/kg	06.27.18 18:30	
o-Xylene	<0.00682	2.00	1.99	100	1.95	98	78-120	2	20	mg/kg	06.27.18 18:30	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
4-Bromofluorobenzene	92		93		93		68-120			%	06.27.18 18:30	
a,a,a-Trifluorotoluene	102		97		91		71-121			%	06.27.18 18:30	

Analytical Method: BTEX by EPA 8021B

Seq Number: 3054857

Parent Sample Id: 590437-004

Matrix: Soil

MS Sample Id: 590437-004 S

Prep Method: SW5030B

Date Prep: 06.27.18

MSD Sample Id: 590437-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00890	1.97	1.63	83	1.61	88	54-120	1	25	mg/kg	06.27.18 22:10	
Toluene	<0.00461	1.97	2.07	105	1.94	105	57-120	6	25	mg/kg	06.27.18 22:10	
Ethylbenzene	<0.00606	1.97	2.04	104	1.93	105	58-131	6	25	mg/kg	06.27.18 22:10	
m,p-Xylenes	<0.00671	3.94	4.08	104	3.86	105	62-124	6	25	mg/kg	06.27.18 22:10	
o-Xylene	<0.00671	1.97	2.02	103	1.91	104	62-124	6	25	mg/kg	06.27.18 22:10	
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits			Units	Analysis Date	
4-Bromofluorobenzene			99		100		68-120			%	06.27.18 22:10	
a,a,a-Trifluorotoluene			95		99		71-121			%	06.27.18 22:10	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference $[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 $\text{Log Diff.} = \text{Log}(\text{Sample Duplicate}) - \text{Log}(\text{Original Sample})$ LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD ResultMS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

R2M Engineering
Venables Case IRP 4935

Analytical Method: TPH GRO by EPA 8015 Mod.

Seq Number: 3054859

MB Sample Id: 7657417-1-BLK

Matrix: Solid

LCS Sample Id: 7657417-1-BKS

Prep Method: SW5030B

Date Prep: 06.27.18

LCSD Sample Id: 7657417-1-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	20.8	104	19.3	97	35-129	7	20	mg/kg	06.27.18 19:25	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
4-Bromofluorobenzene	88		103		102		76-123	%	06.27.18 19:25			
a,a,a-Trifluorotoluene	123	**	106		107		69-120	%	06.27.18 19:25			

Analytical Method: TPH GRO by EPA 8015 Mod.

Seq Number: 3054859

Parent Sample Id: 590437-004

Matrix: Soil

MS Sample Id: 590437-004 S

Prep Method: SW5030B

Date Prep: 06.27.18

MSD Sample Id: 590437-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
TPH-GRO	<0.256	18.9	18.4	97	11.0	55	35-129	50	20	mg/kg	06.27.18 23:05	F
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date			
4-Bromofluorobenzene			115		51	**	76-123	%	06.27.18 23:05			
a,a,a-Trifluorotoluene			87		72		69-120	%	06.27.18 23:05			

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference $[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD ResultMS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

590437

Xenco Quote # 590437 Xenco Job # 590437

Client / Reporting Information				Project Information				Analytical Information				Matrix Codes					
Company Name / Branch: RAM				Project Name/Number: Penables													
Company Address:				Project Location: Hobbs & RR RP 4935													
Email:				Invoice To:													
Project Contact:				PO Number:													
Sampler's Name:																	
No.	Field ID / Point of Collection	Sample Depth	Collection Date	Time	Matrix	# of bottles	HOI	NaOH/Zn	Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Field Comments	
1	SB-10	0-1	6-26	900	S	1											
2	11	1-2															
3	11	2-3															
4	11	3-4															
5	SB-10A	0-1		950													
6	11	1-2															
7	SB-10B	0-1		1020													
8	11	1-2															
9	SP4	0-1		1040													
10	SP5	0-1		1043													

Data Deliverable Information				Notes:			
☐ Same Day TAT	☐ 5 Day TAT	☐ Level II Std QC	☐ Level IV (Full Data Pkg / raw data)				
☐ Next Day EMERGENCY	☐ 7 Day TAT	☐ Level III Std QC+ Forms	☐ TRRP Level IV				
☒ 2 Day EMERGENCY	☐ Contract TAT	☐ Level 3 (CLP Forms)	☐ UST / RG -411				
☐ 3 Day EMERGENCY		☐ Level II Report with TRRP checklist					

TAT Starts Day received by Lab, if received by 5:00 pm			
Relinquished by Sampler:	Date Time:	Relinquished By:	Date Time:
1 MDS	6/26/14 1:39	2	
Relinquished by:	Date Time:	Relinquished By:	Date Time:
3		4	
Relinquished by:	Date Time:	Relinquished By:	Date Time:
5		6	

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY			
Relinquished by:	Date Time:	Relinquished By:	Date Time:
1 MDS	6/26/14 1:39	2	
Relinquished by:	Date Time:	Relinquished By:	Date Time:
3		4	
Relinquished by:	Date Time:	Relinquished By:	Date Time:
5		6	

FED-EX / UPS: Tracking #			
On Ice	Cooler Temp	Thermo. Cor. Factor	
☒	43	17.2	

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: R2M Engineering

Date/ Time Received: 06/26/2018 02:39:00 PM

Work Order #: 590437

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)?	12.2
#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?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

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

Analyst:

PH Device/Lot#:

Checklist completed by:


Brenda Ward

Date: 06/26/2018

Checklist reviewed by:


Holly Taylor

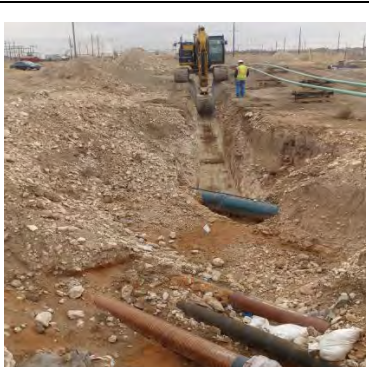
Date: 06/28/2018

Appendix D

Photo Log

APPENDIX D

Photo Log Pictures

	
Day of release	Day of release
	
Day of release	Light staining
	
Debris in trench facing north	Debris in trench facing south
	

APPENDIX D

Trench facing northeast 	Scraping debris from trench 
Trench facing northeast 	Line strike and SB-01 location 
Field efforts April 2, 2018 	Trench facing south 
Exposed line 	Exposed line 
Exposed line	Exposed line

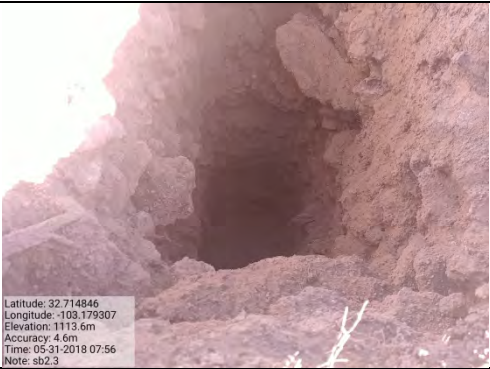
APPENDIX D

	
SB-03 and SB-3-C location	SB-03 and SB-3-C location
	
Excavator digging to depth for sample	Bottom of trench SB-3-C sample location
	
Field efforts April 3, 2018	Field efforts April 2, 2018
	
Plugged soil boring with bentonite	Site facing north northeast near strike

APPENDIX D

	
Stockpiles	View facing northwest
	
View facing south	Waste material in roll-off disposal
 Latitude: 32.71466 Longitude: -103.178406 Elevation: 1111.6m Accuracy: 4.6m Time: 05-31-2018 08:20 Note: 2003	 Latitude: 32.71457 Longitude: -103.17833 Elevation: 1113.6m Accuracy: 6.1m Time: 05-31-2018 08:21 Note: roll offs
Waste material in roll-off disposal	Roll-offs for disposal
 Latitude: 32.714601 Longitude: -103.179612 Elevation: 1120.6m Accuracy: 6.1m Time: 05-25-2018 07:43 Note: materials scraped	 Latitude: 32.714782 Longitude: -103.179351 Elevation: 1108.6m Accuracy: 4.6m Time: 05-31-2018 07:56 Note: sb2.2
Scraped stockpile	SB-2.2 inside trench

APPENDIX D

 Latitude: 32.714846 Longitude: -103.179307 Elevation: 1113.6m Accuracy: 4.6m Time: 05-31-2018 07:56 Note: sb2.3	 Latitude: 32.714872 Longitude: -103.17924 Elevation: 1113.5m Accuracy: 4.6m Time: 05-31-2018 07:56 Note: sb2.4
SB-2.3 Inside trench	SB-2.4 Inside trench
 Latitude: 32.714726 Longitude: -103.179458 Elevation: 1115.6m Accuracy: 6.1m Time: 05-25-2018 07:45 Note: strike area	 Latitude: 32.714641 Longitude: -103.179625 Elevation: 1120.6m Accuracy: 4.6m Time: 05-25-2018 07:43 Note: over spray area
Strike area	Over spray area
 Latitude: 32.714909 Longitude: -103.179116 Elevation: 1111.6m Accuracy: 4.6m Time: 05-31-2018 11:42 Note: pit 3	 Latitude: 32.714959 Longitude: -103.179092 Elevation: 1111.6m Accuracy: 4.6m Time: 05-31-2018 11:41 Note: pit 2
Excavation	Excavation
 Latitude: 32.71483 Longitude: -103.179616 Elevation: 1112.6m Accuracy: 4.6m Time: 05-25-2018 11:50 Note: scrape surface samples	 Latitude: 32.714641 Longitude: -103.179625 Elevation: 1120.6m Accuracy: 4.6m Time: 05-25-2018 07:43 Note: over spray area
Overspray surface sample area	Overspray surface sample area

APPENDIX D

	
Overspray surface sample area	Overspray surface sample area
	
Overspray surface sample area	SB-10, SB-10A, SB-10B soil borings