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SITE REMEDIATION SUMMARY
and
SITE CLOSURE REQUEST

COG Operating LLC
Pine Springs 2 State SWD #001
Eddy County, New Mexico
Unit Letter "F", Section 02, Township 26 South, Range 25 East
Latitude 32.0719° North, Longitude 104.3666° West
NMOCD Incident No. NVV2003729185

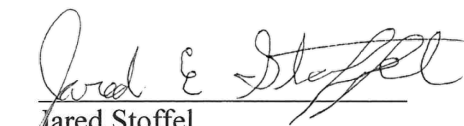
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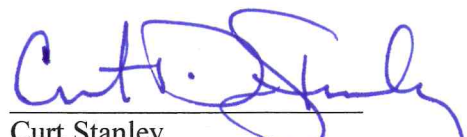
COG Operating LLC
600 W Illinois Ave
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Prepared By:

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April 2020


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INTRODUCTION & BACKGROUND INFORMATION

TRC Environmental Corporation (TRC), on behalf of COG Operating LLC (COG), has prepared this *Site Remediation Summary and Site Closure Request* for the Release Site known as the Pine Springs 2 State SWD #001 (the Site). The legal description of the Site is Unit Letter "F", Section 02, Township 26 South, Range 25 East, in Eddy County, New Mexico. The subject property is owned by the State of New Mexico and administered by New Mexico State Land Office (NMSLO). The GPS coordinates for the Site are N 32.0719°, W 104.3666°. A topographic map is provided as **Figure 1**. Photographs are provided in the photolog as **Appendix C**.

On December 27, 2019, COG discovered an apparent illegal dumping from a third party transportation vehicle. It was estimated at the time of discovery, approximately one-hundred nineteen (119) bbls (barrels) of produced water was released at the Site. The Release was attributed to an illegal dumping by a transport vehicle along the edge of the pad leading to the tank battery. Immediately following the discovery, a vacuum truck was dispatched to recover all freestanding fluids. The C-141 was submitted to the NMOCD on January 10, 2020. The Release was assigned an NMOCD Incident No. NVV2003729185. The Form C-141 indicated a volume of one hundred nineteen (119) bbls of produced water was released. No fluids were recovered during initial response activities. The Release affected an area initially measuring approximately 9,100 square feet (sq. ft.) in the pasture adjacent to the tank battery pad. A copy of the submitted Form C-141 for the Release is provided in **Appendix A**.

A groundwater database maintained by The New Mexico Office of the State Engineer (NMOSE) identified a groundwater well located approximately six tenths (0.6) miles south of the Release point. The database indicated the groundwater well has a depth to groundwater of approximately twenty-three (23) feet below ground surface (bgs). No surface water was observed within one thousand (1,000) feet of the Release. An aerial map with nearby water wells and wetland data is provided as **Figure 2**. A map of floodplain data and karst data is provided as **Figure 3**.

Based on the depth to groundwater at the Release Site, the NMOCD *Closure Criteria for Soils Impacted by a Release* warrants the most stringent closure criteria listed. Additionally, the Pine Springs 2 State SWD #001 location is within a 'high karst' area as outlined in Bureau of Land Management (BLM) publicly available Karst Potential Map. The karst potential map is provided as **Figure 3**. Consequently, COG utilized the most stringent NMOCD Closure Criteria for Soils Impacted by a Release for the Pine Springs 2 State SWD #1 as follows:

- Benzene – 10 mg/kg
- Benzene, toluene, ethylbenzene, and xylenes (BTEX) – 50 mg/kg
- Total Petroleum Hydrocarbons (TPH) – 100 mg/kg
- Chloride – 600 mg/kg

REMEDIATION SUMMARY

On March 24, 2020, excavation activities commenced to excavate impacted soils from the Release Site. Excavation activities began at the northern terminus of the Release area and progressed southward. The excavation was advanced horizontally and vertically until visual and olfactory evidence indicated the impacted soil was removed. Furthermore, the floor and sidewalls of the



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excavation were field screened for chloride concentrations to ensure the chloride impacted soil was removed. The excavation footprint was approximately sixteen thousand (16,000) square feet. Excavated depths ranged from approximately one (1) foot to three and a quarter (3.25) feet bgs. Floor and sidewall confirmation samples were collected at a frequency of one (1) five-point composite soil sample for every two hundred (200) square feet of excavation. Confirmation soil sample locations and the excavation footprint are depicted in **Figure 4**.

On March 24, 2020, six (6) five-point composite floor confirmation soil samples (FL-1 @ 2', FL-2 @ 2', FL-3 @ 2', FL-4 @ 2', FL-5 @ 2', and FL-6 @ 2') were collected and submitted to Xenco Laboratories in Carlsbad, NM for chloride, TPH, and BTEX analyses. A review of the analytical results indicated each soil sample exhibited chloride, TPH, and BTEX concentrations below NMOCD regulatory guidelines.

On March 25, 2020, thirteen (13) five-point composite floor confirmation samples (FL-7 @ 2', FL-8 @ 2', FL-9 @ 2', FL-10 @ 2', FL-11 @ 2', FL-12 @ 2', FL-13 @ 2', FL-14 @ 2', FL-15 @ 2', FL-16 @ 2', FL-17 @ 2', FL-18 @ 2', and FL-19 @ 2') and five (5) five-point composite sidewall confirmation samples (NSW-1, ESW-1, ESW-2, WSW-1, and WSW-2) were collected and submitted to the laboratory for chloride, TPH, and BTEX analyses. A review of the analytical results indicated each soil sample exhibited chloride, TPH, and BTEX concentrations below NMOCD regulatory guidelines, with the exception of soil samples FL-12 @ 2' and FL-17 @ 2', which exhibited chloride concentrations above NMOCD regulatory guidelines. Following review of the laboratory analytical results, the areas represented by soil samples FL-12 @ 2' and FL-17 @ 2' were excavated to a greater vertical extent.

On March 26, 2020, five (5) five-point composite floor confirmation soil samples FL-24 @ 1', FL-26 @ 1', FL-28 @ 1', FL-29 @ 1', and FL-38 @ 1') were collected and submitted to the laboratory for chloride, TPH, and BTEX analyses. A review of the analytical results indicated each soil sample exhibited chloride, TPH, and BTEX concentrations below NMOCD regulatory guidelines.

On March 27, 2020, nineteen (19) five-point composite floor confirmation soil samples (FL-12 @ 2.5', FL-17 @ 2.5', FL-20 @ 2', FL-21 @ 2', FL-22 @ 2', FL-23 @ 1.5', FL-25 @ 2', FL-27 @ 2', FL-30 @ 2', FL-31 @ 2', FL-32 @ 2', FL-33 @ 1', FL-34 @ 1', FL-35 @ 3', FL-36 @ 3', FL-37 @ 1.5', FL-39 @ 1', FL-42 @ 1', and FL-43 @ 1') were collected and submitted to the laboratory for chloride, TPH, and BTEX analyses. A review of the analytical results indicated each soil sample exhibited chloride, TPH, and BTEX concentrations below NMOCD regulatory guidelines.

On March 30, 2020, sixteen (16) five-point composite floor confirmation soil samples (FL-40 @ 2', FL-41 @ 2', FL-44 @ 1.5', FL-45 @ 1.5', FL-46 @ 2', FL-47 @ 1', FL-48 @ 1', FL-49 @ 2', FL-50 @ 3', FL-51 @ 3', FL-52 @ 3', FL-53 @ 3', FL-54 @ 3', FL-55 @ 3', FL-56 @ 3', and FL-57 @ 3') were collected and submitted to the laboratory for chloride, TPH, and BTEX analyses. A review of the analytical results indicated each soil sample exhibited chloride, TPH, and BTEX concentrations below NMOCD regulatory guidelines, with the exception of soil sample FL-56 @ 3', which exhibited chloride concentrations above NMOCD regulatory guidelines. Following review of the laboratory analytical results, the area represented by soil sample FL-56 @ 3' was excavated to a greater vertical extent.



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On March 31, 2020, eleven (11) five-point composite floor confirmation soil samples (FL-56 @ 3.25', FL-58 @ 3', FL-59 @ 3', FL-60 @ 3', FL-61 @ 3', FL-62 @ 3', FL-63 @ 3', FL-64 @ 3', FL-65 @ 1.5', FL-67 @ 1.5', and FL-68 @ 3') and three (3) five-point composite sidewall confirmation soil samples (NSW-2, ESW-3, and WSW-3) were collected and submitted to the laboratory for chloride, TPH, and BTEX analyses. A review of the analytical results indicated each soil sample exhibited chloride, TPH, and BTEX concentrations below NMOCD regulatory guidelines.

On April 1, 2020, fourteen (14) five-point composite floor confirmation soil samples (FL-66 @ 3', FL-69 @ 2.5', FL-70 @ 2.5', FL-71 @ 3', FL-72 @ 3', FL-73 @ 3', FL-74 @ 3', FL-75 @ 3', FL-76 @ 3', FL-77 @ 3', FL-78 @ 3', FL-79 @ 3', FL-80 @ 3', and FL-81 @ 3') and ten (10) five-point composite sidewall confirmation soil samples (ESW-4, ESW-5, ESW-6, ESW-7, WSW-4, WSW-5, WSW-6, WSW-7, WSW-8, and SSW-1) were collected and submitted to the laboratory for chloride, TPH, and BTEX analyses. A review of the analytical results indicated each soil sample exhibited chloride, TPH, and BTEX concentrations below NMOCD regulatory guidelines.

During excavation activities, excavated soil was loaded directly into either twenty (20) yard dump trucks or twenty (20) yard roll off bins and transported under manifest to R360 Red Bluff Facility for disposal. A total of approximately twenty-two hundred (2,200) cubic yards (cy) of impacted soil was transported to R360 Red Bluff. Following a final review of the analytical data, the excavation was backfilled to grade with locally sourced non-impacted 'like' material. A summary of analytical data is shown in **Table 1**. Laboratory analytical reports are provided in **Appendix D**.

SITE CLOSURE REQUEST

Remediation activities were conducted in accordance with NMCOD regulatory guidelines. Laboratory analytical results from excavation confirmation soil samples indicated TPH, BTEX, and/or chloride concentrations were below the NMOCD regulatory guidelines in the submitted confirmation soil samples. The impacted soil was transported under manifest to the R360 Red Bluff Facility, and the Site was returned to grade with locally sourced non-impacted backfill material. Based on laboratory analytical results and field activities conducted to date, TRC recommends COG provide copies of this Remediation Summary and Site Closure Request to the NMOCD and NMSLO and request closure status to the Pine Springs 2 State SWD #1.

LIMITATION

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

TRC has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. TRC has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. TRC has prepared this report, in a professional manner, using the degree of skill and care exercised



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by similar environmental consultants. TRC also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

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

DISTRIBUTION

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Malaga, NM 88263
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10 Desta Dr STE 150E
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COG- Pine Springs 2 State SWD #001

Date: 04/30/2020

Table 1											
Concentrations of BTEX, TPH, and/or Chloride in Soil											
Sample ID	Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					E300
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chlorides (mg/kg)
Sidewalls											
NSW-1	3/25/2020	--	In-Situ	<0.00200	<0.00200	<50.3	<50.3	<50.3	<50.3	<50.3	240
NSW-2	3/31/2020	--	In-Situ	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	173
ESW-1	3/25/2020	--	In-Situ	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	52.4
ESW-2	3/25/2020	--	In-Situ	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	221
ESW-3	3/31/2020	--	In-Situ	<0.00199	<0.00199	<50.2	<50.2	<50.2	<50.2	<50.2	175
ESW-4	4/1/2020	--	In-Situ	<0.00202	<0.00202	<50.3	<50.3	<50.3	<50.3	<50.3	212
ESW-5	4/1/2020	--	In-Situ	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	95.3
ESW-6	4/1/2020	--	In-Situ	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	65.5
ESW-7	4/1/2020	--	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	56.6
WSW-1	3/25/2020	--	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	368
WSW-2	3/25/2020	--	In-Situ	<0.00201	<0.00201	<50.1	<50.1	<50.1	<50.1	<50.1	569
WSW-3	3/31/2020	--	In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	174
WSW-4	4/1/2020	--	In-Situ	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	82.9
WSW-5	4/1/2020	--	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	90.3
WSW-6	4/1/2020	--	In-Situ	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	59.7
WSW-7	4/1/2020	--	In-Situ	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	50.7
WSW-8	4/1/2020	--	In-Situ	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	85.4
SSW-1	4/1/2020	--	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	89.4
NMOCD Closure Criteria				10	50	-	-	-	-	100	600

COG- Pine Springs 2 State SWD #001

Date: 04/30/2020

Table 1											
Concentrations of BTEX, TPH, and/or Chloride in Soil											
Sample ID	Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					E300
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chlorides (mg/kg)
Floor Samples											
FL-1@2'	3/24/2020	2'	In-Situ	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	150
FL-2@2'	3/24/2020	2'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	264
FL-3@2'	3/24/2020	2'	In-Situ	<0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	<50.2	314
FL-4@2'	3/24/2020	2'	In-Situ	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	347
FL-5@2'	3/24/2020	2'	In-Situ	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	517
FL-6@2'	3/24/2020	2'	In-Situ	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	509
FL-7@2'	3/25/2020	2'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	209
FL-8@2'	3/25/2020	2'	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	310
FL-9@2'	3/25/2020	2'	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	414
FL-10@2'	3/25/2020	2'	In-Situ	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	285
FL-11@2'	3/25/2020	2'	In-Situ	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	396
FL-12@2'	3/25/2020	2'	Excavated	<0.00200	<0.00200	<50.3	<50.3	<50.3	<50.3	<50.3	629
FL-12@2.5'	3/27/2020	2.5'	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	132
FL-13@2'	3/25/2020	2'	In-Situ	<0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	<50.2	<49.8
FL-14@2'	3/25/2020	2'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	246
FL-15@2'	3/25/2020	2'	In-Situ	<0.00200	<0.00200	<50.3	<50.3	<50.3	<50.3	<50.3	471
FL-16@2'	3/25/2020	2'	In-Situ	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	449
FL-17@2'	3/25/2020	2'	Excavated	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	829
FL-17@2.5'	3/27/2020	2.5'	In-Situ	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	371
NMOCD Closure Criteria				10	50	-	-	-	-	100	600

COG- Pine Springs 2 State SWD #001

Date: 04/30/2020

Table 1											
Concentrations of BTEX, TPH, and/or Chloride in Soil											
Sample ID	Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					E300
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chlorides (mg/kg)
FL-18@2'	3/25/2020	2'	In-Situ	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	303
FL-19@2'	3/25/2020	2'	In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	126
FL-20@2'	3/27/2020	2'	In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	103
FL-21@2'	3/27/2020	2'	In-Situ	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	213
FL-22@2'	3/27/2020	2'	In-Situ	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	171
FL-23@1.5'	3/27/2020	1.5'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	362
FL-24@1'	3/26/2020	1'	In-Situ	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	505
FL-25@2'	3/27/2020	2'	In-Situ	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	82.9
FL-26@1'	3/26/2020	1'	In-Situ	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	467
FL-27@2'	3/27/2020	2'	In-Situ	<0.00199	<0.00199	<50.2	<50.2	<50.2	<50.2	<50.2	166
FL-28@1'	3/26/2020	1'	In-Situ	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	423
FL-29@1'	3/26/2020	1'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	146
FL-30@2'	3/27/2020	2'	In-Situ	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	241
FL-31@2'	3/27/2020	2'	In-Situ	<0.00199	<0.00199	<50.2	<50.2	<50.2	<50.2	<50.2	58.9
FL-32@2'	3/27/2020	2'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	58.2
FL-33@1'	3/27/2020	1'	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	202
FL-34@1'	3/27/2020	1'	In-Situ	<0.00198	<0.00198	<50.1	<50.1	<50.1	<50.1	<50.1	530
FL-35@3'	3/27/2020	3'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	110
FL-36@3'	3/27/2020	3'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	90.0
FL-37@1.5'	3/27/2020	1.5'	In-Situ	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	136
FL-38@1'	3/26/2020	1'	In-Situ	<0.00202	<0.00202	<50.2	<50.2	<50.2	<50.2	<50.2	232
NMOCD Closure Criteria				10	50	-	-	-	-	100	600

COG- Pine Springs 2 State SWD #001

Date: 04/30/2020

Table 1											
Concentrations of BTEX, TPH, and/or Chloride in Soil											
Sample ID	Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					E300
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chlorides (mg/kg)
FL-39@1'	3/27/2020	1'	In-Situ	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	212
FL-40@2'	3/30/2020	2'	In-Situ	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	289
FL-41@2'	3/30/2020	2'	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	270
FL-42@1'	3/27/2020	1'	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	289
FL-43@1'	3/27/2020	1'	In-Situ	<0.00201	<0.00201	<50.3	<50.3	<50.3	<50.3	<50.3	172
FL-44@1.5'	3/30/2020	1.5'	In-Situ	<0.00202	<0.00202	<50.3	<50.3	<50.3	<50.3	<50.3	280
FL-45@1.5'	3/30/2020	1.5'	In-Situ	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	98.4
FL-46@2'	3/30/2020	2'	In-Situ	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	368
FL-47@1'	3/30/2020	1'	In-Situ	<0.00199	<0.00199	<50.2	<50.2	<50.2	<50.2	<50.2	375
FL-48@1'	3/30/2020	1'	In-Situ	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	401
FL-49@2'	3/30/2020	2'	In-Situ	<0.00199	<0.00199	<50.2	<50.2	<50.2	<50.2	<50.2	169
FL-50@3'	3/30/2020	3'	In-Situ	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	227
FL-51@3'	3/30/2020	3'	In-Situ	<0.00198	<0.00198	<50.1	<50.1	<50.1	<50.1	<50.1	382
FL-52@3'	3/30/2020	3'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	372
FL-53@3'	3/30/2020	3'	In-Situ	<0.00202	<0.00202	<50.2	<50.2	<50.2	<50.2	<50.2	452
FL-54@3'	3/30/2020	3'	In-Situ	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	<49.9	146
FL-55@3'	3/30/2020	3'	In-Situ	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	163
FL-56@3'	3/30/2020	3'	Excavated	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	662
FL-56@3.25'	3/31/2020	3.25'	In-Situ	<0.00200	<0.00200	<50.3	<50.3	<50.3	<50.3	<50.3	150
FL-57@3'	3/30/2020	3'	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	219
FL-58@3'	3/31/2020	3'	In-Situ	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	248
NMOCD Closure Criteria				10	50	-	-	-	-	100	600

COG- Pine Springs 2 State SWD #001

Date: 04/30/2020

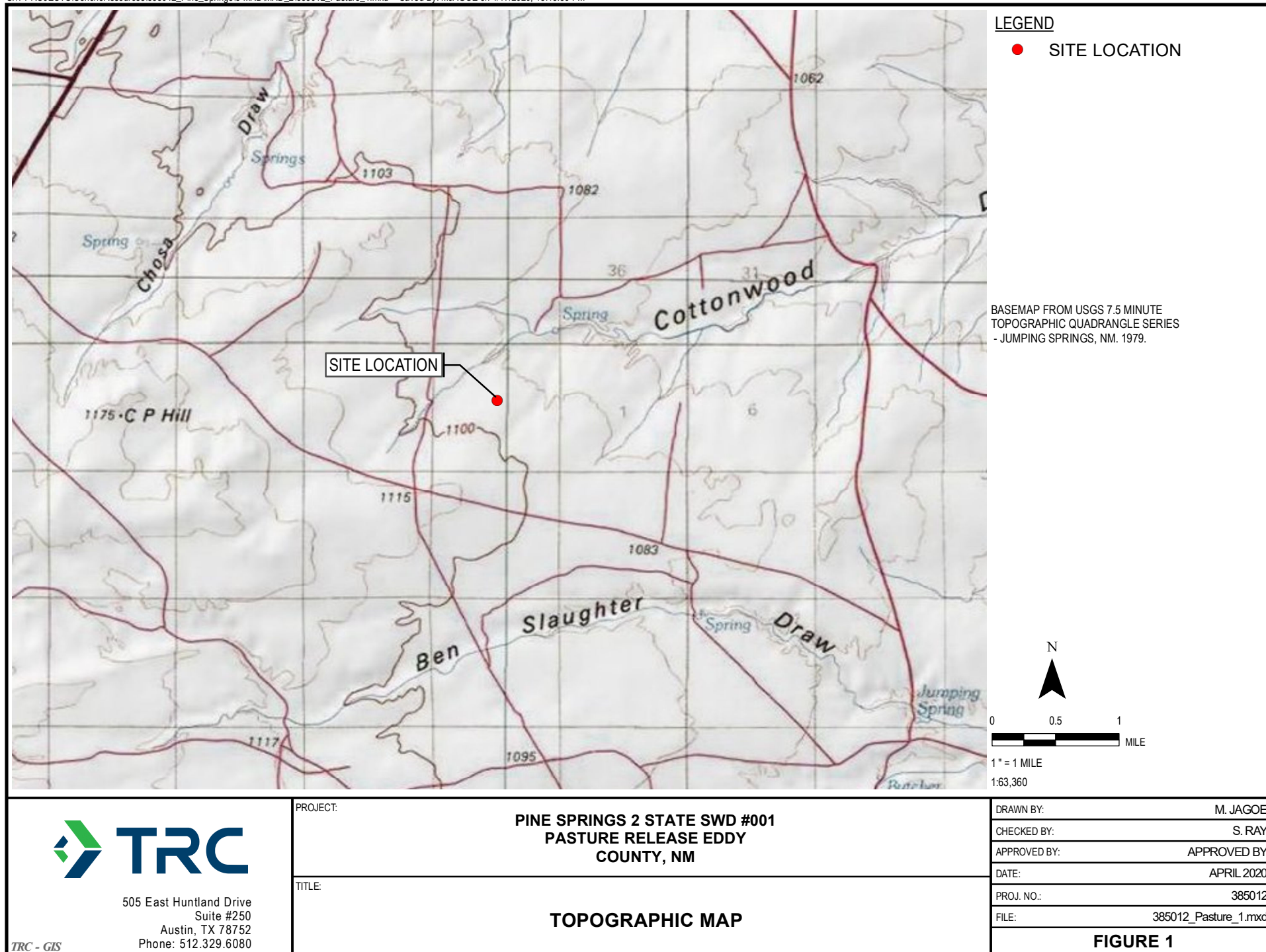
Table 1											
Concentrations of BTEX, TPH, and/or Chloride in Soil											
Sample ID	Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					E300
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chlorides (mg/kg)
FL-59@3'	3/31/2020	3'	In-Situ	<0.00199	<0.00199	<50.3	<50.3	<50.3	<50.3	<50.3	242
FL-60@3'	3/31/2020	3'	In-Situ	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	167
FL-61@3'	3/31/2020	3'	In-Situ	<0.00198	<0.00198	<50.2	<50.2	<50.2	<50.2	<50.2	243
FL-62@3'	3/31/2020	3'	In-Situ	<0.00198	<0.00198	<50.1	<50.1	<50.1	<50.1	<50.1	128
FL-63@3'	3/31/2020	3'	In-Situ	<0.00199	<0.00199	<50.2	<50.2	<50.2	<50.2	<50.2	591
FL-64@3'	3/31/2020	3'	In-Situ	<0.00200	<0.00200	<50.3	<50.3	<50.3	<50.3	<50.3	230
FL-65@1.5'	3/31/2020	1.5'	In-Situ	<0.00198	<0.00198	<50.2	<50.2	<50.2	<50.2	<50.2	188
FL-66@3'	4/1/2020	3'	In-Situ	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	335
FL-67@1.5'	3/31/2020	1.5'	In-Situ	<0.00201	<0.00201	<50.1	<50.1	<50.1	<50.1	<50.1	91.2
FL-68@3'	3/31/2020	3'	In-Situ	<0.00201	<0.00201	<50.2	<50.2	<50.2	<50.2	<50.2	312
FL-69@2.5'	4/1/2020	2.5'	In-Situ	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	67.7
FL-70@2.5'	4/1/2020	2.5'	In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	329
FL-71@3'	4/1/2020	3'	In-Situ	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	454
FL-72@3'	4/1/2020	3'	In-Situ	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	63.9
FL-73@3'	4/1/2020	3'	In-Situ	<0.00200	<0.00200	<50.3	<50.3	<50.3	<50.3	<50.3	108
FL-74@3'	4/1/2020	3'	In-Situ	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	371
FL-75@3'	4/1/2020	3'	In-Situ	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	322
NMOCD Closure Criteria				10	50	-	-	-	-	100	600

COG- Pine Springs 2 State SWD #001

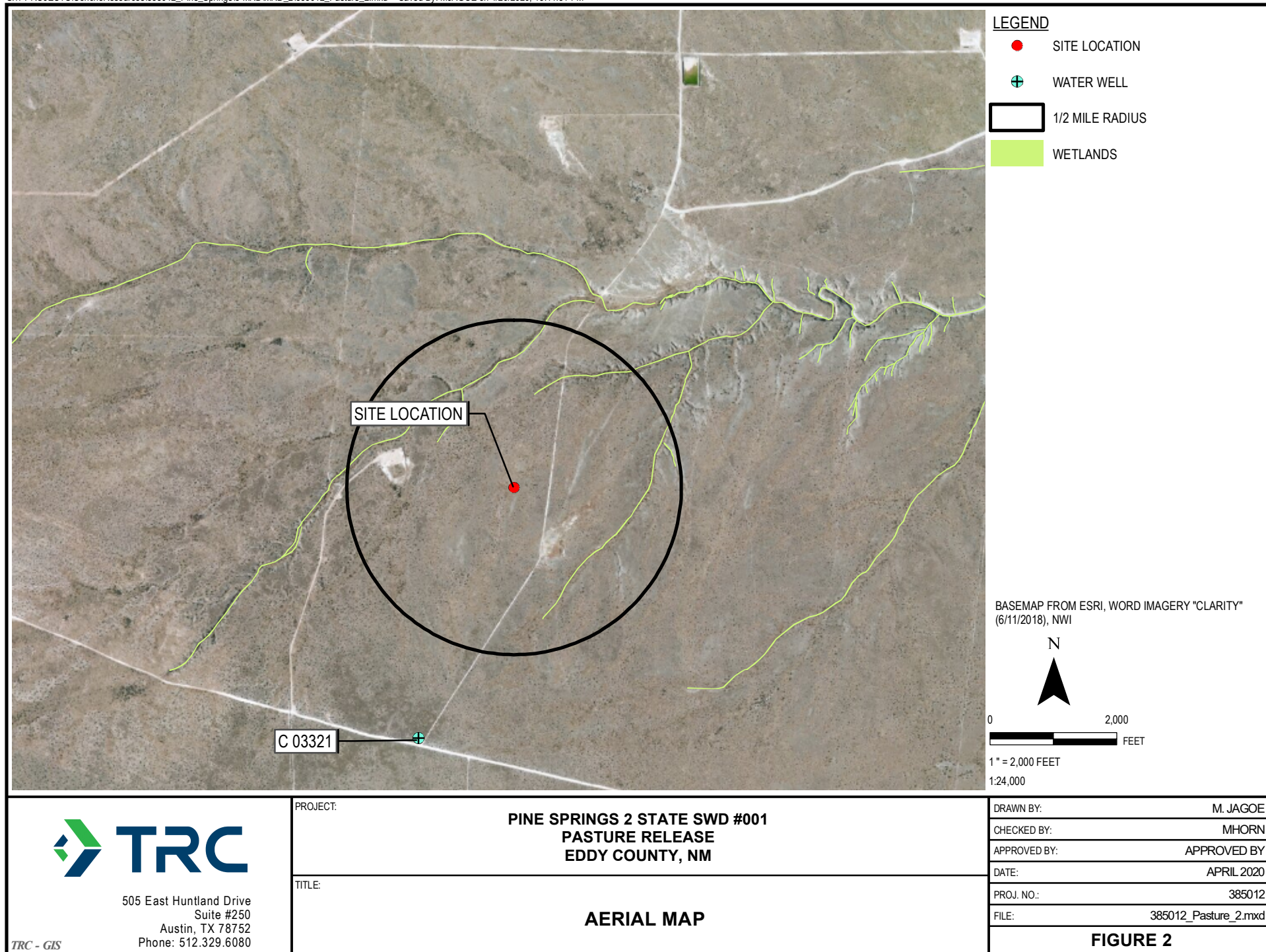
Date: 04/30/2020

Table 1											
Concentrations of BTEX, TPH, and/or Chloride in Soil											
Sample ID	Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					E300
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chlorides (mg/kg)
FL-76@3'	4/1/2020	3'	In-Situ	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	109
FL-77@3'	4/1/2020	3'	In-Situ	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	71.4
FL-78@3'	4/1/2020	3'	In-Situ	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	69.6
FL-79@3'	4/1/2020	3'	In-Situ	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	62.9
FL-80@3'	4/1/2020	3'	In-Situ	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	99.9
FL-81@3'	4/1/2020	3'	In-Situ	<0.00198	<0.00198	<50.2	<50.2	<50.2	<50.2	<50.2	99.1
NMOCD Closure Criteria				10	50	-	-	-	-	100	600

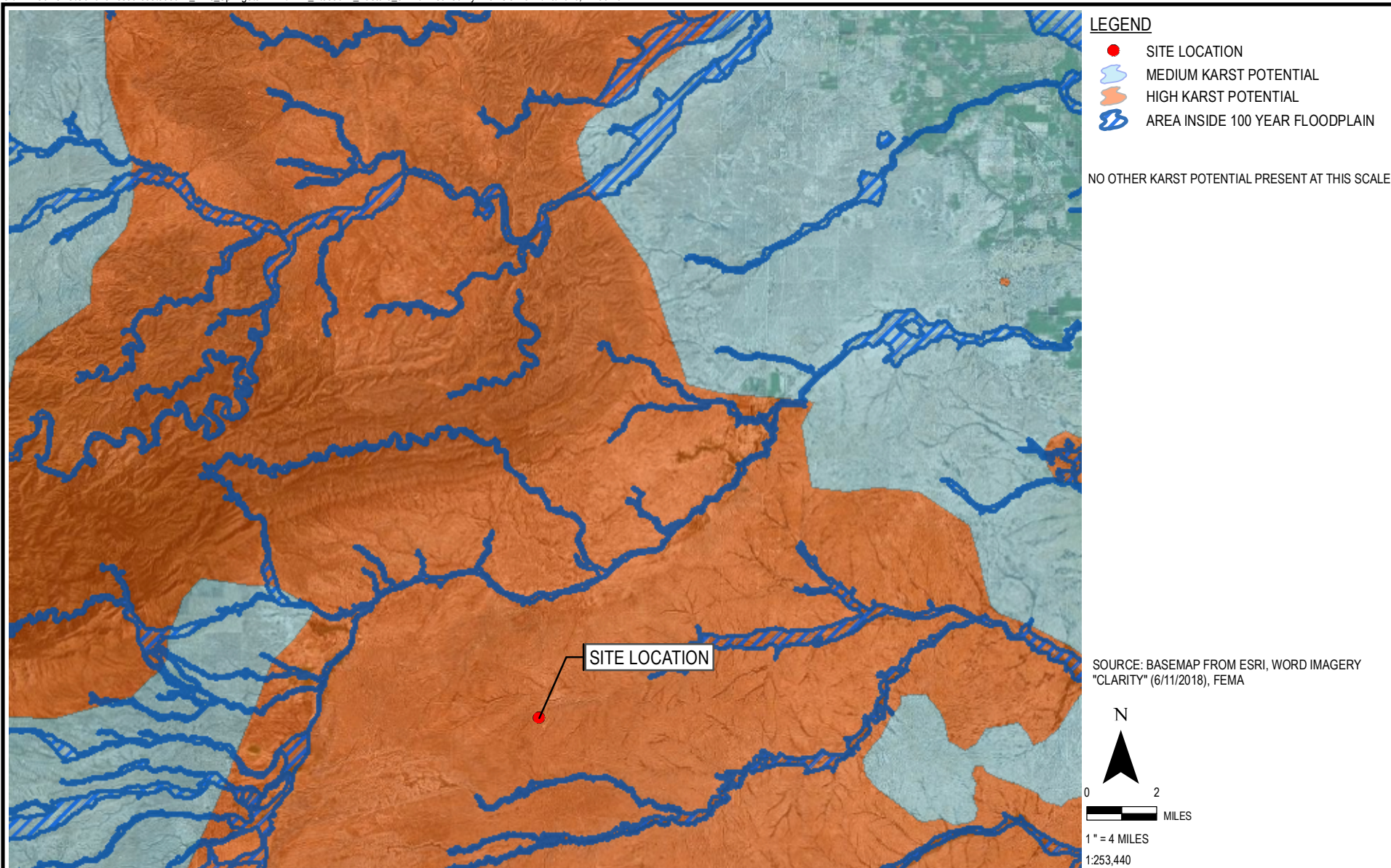
S:\1-PROJECTS\ConchoResources\385012_Pine_Springs\5-MXD\MXD_2\385012_Pasture_1.mxd -- Saved By: MJAGOE on 4/17/2020, 15:43:36 PM



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505 East Huntland Drive
Suite #250
Austin, TX 78752
Phone: 512.329.6080

TRC - GIS

PROJECT:

**PINE SPRINGS 2 STATE SWD #001
PASTURE RELEASE
EDDY COUNTY, NM**

TITLE:

KARST POTENTIAL MAP

DRAWN BY: M. JAGOE

CHECKED BY: S. RAY

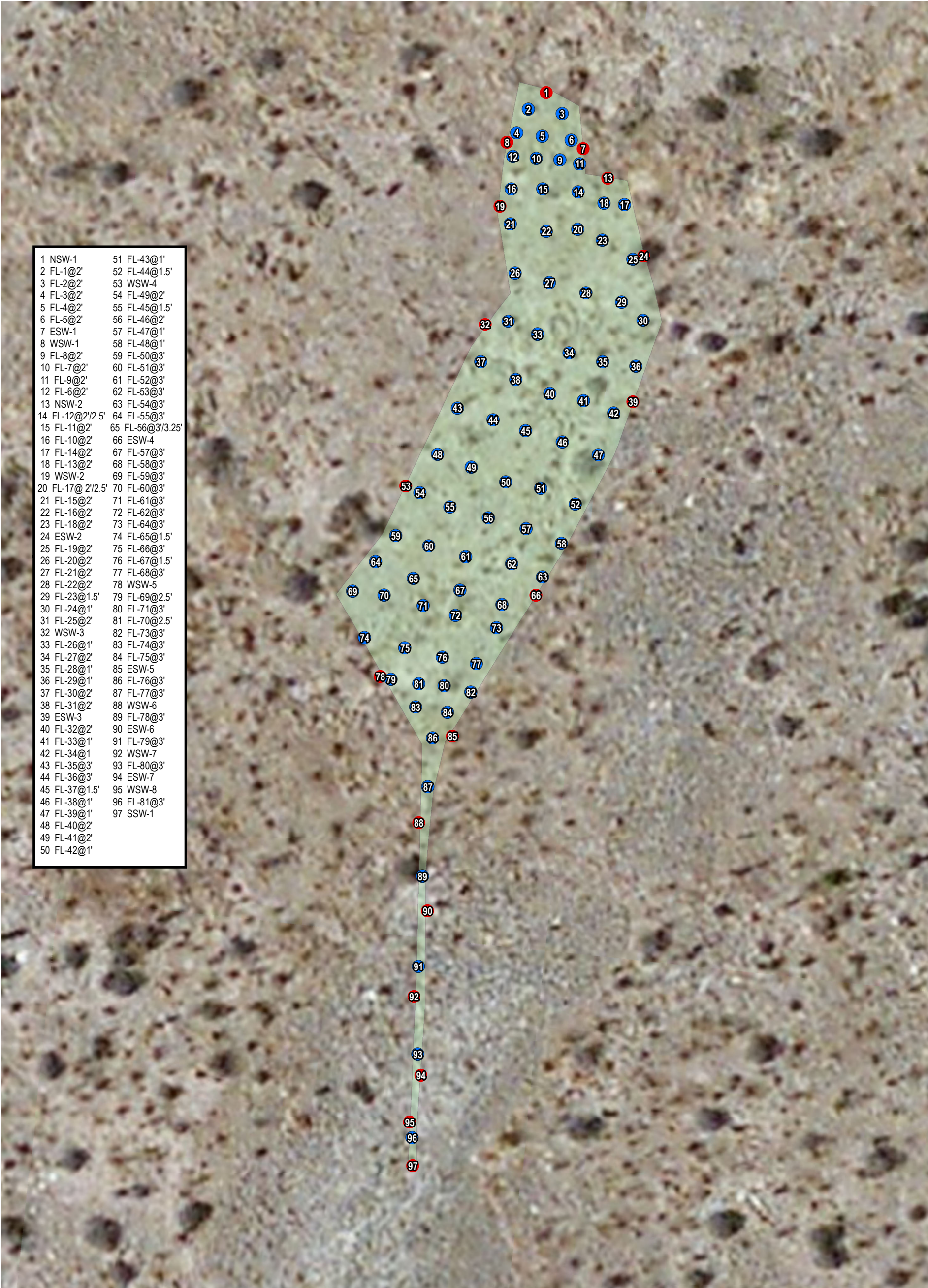
APPROVED BY:

DATE: APRIL 2020

PROJ. NO.: 385012

FILE: 385012_Pasture_3.mxd

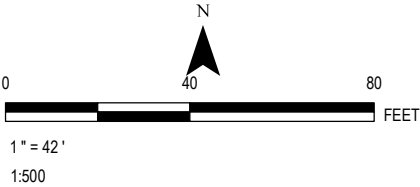
FIGURE 3



BASEMAP FROM ESRI, WORD IMAGERY "CLARITY" (6/11/2018)

LEGEND

- SAMPLE LOCATION
- SIDE WALL SAMPLE
- REMEDIATED AREA



 505 East Huntland Drive Suite #250 Austin, TX 78752 Phone: 512.329.6080	PROJECT:	PINE SPRINGS 2 STATE SWD #001 PASTURE RELEASE EDDY COUNTY, NM	DRAWN BY:	M. JAGOE
	TITLE:		CHECKED BY:	S. RAY
		CONFIRMATION SAMPLE LOCATION MAP	APPROVED BY:	APPROVED BY
			DATE:	APRIL 2020
			PROJ. NO.:	385012
			FILE:	385012_Pasture_4.mxd
			FIGURE 4	

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

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # (assigned by OCD)
Contact mailing address	

Location of Release Source

Latitude _____ Longitude _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Site Type
Date Release Discovered	API# (if applicable)

Unit Letter	Section	Township	Range	County

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☐ Private (Name: _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

☐ The source of the release has been stopped.	
☐ The impacted area has been secured to protect human health and the environment.	
☐ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
☐ All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: _____	Title: _____
Signature: <u>Patricia Espinoza</u>	Date: _____
email: _____	Telephone: _____
<u>OCD Only</u>	
Received by: _____	Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	≤50 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☒ Yes ☐ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas not on an exploration, development, production, or storage site?	☒ Yes ☐ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: *Each of the following items must be included in the report.*

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☐ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☐ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Incident ID	
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Ike Tavaréz Title: Senior HSE Supervisor

Signature:  Date: _____

email: itavaréz@concho.com Telephone: 432-685-2573

OCD Only

Received by: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- ☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☐ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: _____ Title: _____

Signature: MB _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____



Appendix B: Depth to Groundwater Data



New Mexico Office of the State Engineer

Wells with Well Log Information

(A CLW#### in the
POD suffix indicates the
POD has been replaced &
no longer serves a water
right

(R=POD has
been replaced,
O=orphaned,
C=the file is
closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest)

(NAD83 UTM in meters)

(in feet)

POD Number	Code	Subbasin	County	Source	q	q	q	Sec	Tws	Rng	X	Y	Distance	Start Date	Finish Date	Log File Date	Depth Well	Depth Water	Driller	License Number
C-03321		C	ED	Shallow	64	16	4	11	26S	25E	559375	3547431	623	02/06/2007	02/08/2007	04/30/2007	150	23		1348

Record Count: 1

UTM NAD83 Radius Search (in meters):

Easting (X): 559723.88

Northing (Y): 3547949.25

Radius: 1610

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

3/12/20 9:43 AM

WELLS WITH WELL LOG INFORMATION



Appendix C: Photographic Documentation

COG- Pine Springs State SWD #001

Date: 5/1/2020

Photographic Documentation

Photograph No. 1

Date:

4/1/2020

Direction:

West

Description:

View of the
Release area
prior to
remediation.



Photograph No. 2

Date:

4/2/2020

Direction:

Northeast

Description:

View of
excavated area.



COG- Pine Springs State SWD #001

Date: 5/1/2020

Photographic Documentation

Photograph No. 3

Date:

4/2/2020

Direction:

North

Description:

View of excavated area.



Photograph No. 4

Date:

12/6/2019

Direction:

Southeast

Description:

View of excavated area.



COG- Pine Springs State SWD #001

Date: 5/1/2020

Photographic Documentation

Photograph No. 5

Date:

4/15/2020

Direction:

North

Description:

**View of
backfilled area.**



Photograph No. 6

Date:

4/15/2020

Direction:

East

Description:

**View of
backfilled area.**





Appendix D: Laboratory Analytical Reports



Certificate of Analysis Summary 656917

TRC Solutions, Inc, Midland, TX

Project Name: Pine Springs 2 State SWD

Project Id:

Contact: JD McCormick

Project Location:

Date Received in Lab: Wed Mar-25-20 04:05 pm

Report Date: 26-MAR-20

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	656917-001	656917-002	656917-003	656917-004	656917-005	656917-006
	Field Id:	FL- 1 @2'	FL- 2 @2'	FL- 3 @2'	FL- 4 @2'	FL- 5 @2'	FL- 6 @2'
	Depth:	2- ft	2- ft	2- ft	2- ft	2- ft	2- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Mar-24-20 14:00	Mar-24-20 14:10	Mar-24-20 14:20	Mar-24-20 14:30	Mar-24-20 14:40	Mar-24-20 14:50
BTEX by EPA 8021B	Extracted:	Mar-25-20 18:43	Mar-25-20 18:43	Mar-25-20 18:43	Mar-25-20 18:43	Mar-25-20 18:43	Mar-25-20 18:43
	Analyzed:	Mar-25-20 23:07	Mar-25-20 23:28	Mar-25-20 23:48	Mar-26-20 00:09	Mar-26-20 00:29	Mar-26-20 00:49
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00402 0.00402	<0.00399 0.00399	<0.00402 0.00402	<0.00398 0.00398	<0.00399 0.00399	<0.00399 0.00399
o-Xylene		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00201 0.00201	<0.002 0.002	<0.00201 0.00201	<0.00199 0.00199	<0.002 0.002	<0.002 0.002
Total BTEX		<0.00201 0.00201	<0.002 0.002	<0.00201 0.00201	<0.00199 0.00199	<0.002 0.002	<0.002 0.002
Chloride by EPA 300	Extracted:	Mar-25-20 18:01	Mar-25-20 18:01	Mar-25-20 18:01	Mar-25-20 18:01	Mar-25-20 18:01	Mar-25-20 18:01
	Analyzed:	Mar-25-20 20:00	Mar-25-20 20:20	Mar-25-20 20:26	Mar-25-20 20:33	Mar-25-20 20:40	Mar-25-20 20:59
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		150 49.6	264 49.9	314 49.8	347 51.0	517 50.4	509 49.9
TPH By SW8015 Mod	Extracted:	Mar-25-20 17:30	Mar-25-20 17:30	Mar-25-20 17:30	Mar-25-20 17:30	Mar-25-20 17:30	Mar-25-20 17:30
	Analyzed:	Mar-26-20 05:33	Mar-26-20 06:34	Mar-26-20 06:54	Mar-26-20 07:15	Mar-26-20 07:35	Mar-26-20 07:55
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0	<50.2 50.2	<50.1 50.1	<50.2 50.2	<49.8 49.8
Diesel Range Organics (DRO)		<50.0 50.0	<50.0 50.0	<50.2 50.2	<50.1 50.1	<50.2 50.2	<49.8 49.8
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0	<50.2 50.2	<50.1 50.1	<50.2 50.2	<49.8 49.8
Total TPH		<50 50	<50 50	<50.2 50.2	<50.1 50.1	<50.2 50.2	<49.8 49.8

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

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Version: 1.9%

Jessica Kramer
Project Manager



Certificate of Analysis Summary 656917

TRC Solutions, Inc, Midland, TX

Project Name: Pine Springs 2 State SWD

Project Id:

Contact: JD McCormick

Project Location:

Date Received in Lab: Wed Mar-25-20 04:05 pm

Report Date: 26-MAR-20

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	656917-007	656917-008	656917-009	656917-010	656917-011	656917-012
	Field Id:	FL- 7 @2'	FL- 8 @2'	FL- 9 @2'	FL- 10 @2'	FL- 11 @2'	FL- 12 @2'
	Depth:	2- ft	2- ft	2- ft	2- ft	2- ft	2- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Mar-25-20 11:00	Mar-25-20 11:10	Mar-25-20 11:20	Mar-25-20 11:30	Mar-25-20 11:40	Mar-25-20 11:50
BTEX by EPA 8021B	Extracted:	Mar-25-20 18:43	Mar-25-20 18:43	Mar-25-20 18:43	Mar-25-20 18:43	Mar-25-20 18:43	Mar-25-20 18:43
	Analyzed:	Mar-26-20 01:10	Mar-26-20 01:30	Mar-26-20 01:51	Mar-26-20 02:11	Mar-26-20 03:12	Mar-26-20 03:33
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00399 0.00399	<0.00401 0.00401	<0.00401 0.00401	<0.00397 0.00397	<0.00401 0.00401	<0.00399 0.00399
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.002 0.002	<0.002 0.002	<0.002 0.002	<0.00198 0.00198	<0.002 0.002	<0.002 0.002
Total BTEX		<0.002 0.002	<0.002 0.002	<0.002 0.002	<0.00198 0.00198	<0.002 0.002	<0.002 0.002
Chloride by EPA 300	Extracted:	Mar-25-20 18:01	Mar-25-20 18:01	Mar-25-20 18:01	Mar-25-20 18:01	Mar-25-20 18:01	Mar-25-20 18:01
	Analyzed:	Mar-25-20 21:06	Mar-25-20 21:13	Mar-25-20 21:19	Mar-25-20 21:26	Mar-26-20 08:11	Mar-26-20 08:23
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		209 49.8	310 49.6	414 49.9	285 49.8	396 49.9	629 49.7
TPH By SW8015 Mod	Extracted:	Mar-25-20 17:30	Mar-25-20 17:30	Mar-25-20 17:30	Mar-25-20 17:30	Mar-25-20 17:30	Mar-25-20 17:30
	Analyzed:	Mar-26-20 08:16	Mar-26-20 08:36	Mar-26-20 09:06	Mar-26-20 09:26	Mar-26-20 10:07	Mar-26-20 10:28
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.1 50.1	<50.3 50.3
Diesel Range Organics (DRO)		<50.0 50.0	<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.1 50.1	<50.3 50.3
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.1 50.1	<50.3 50.3
Total TPH		<50 50	<49.9 49.9	<49.9 49.9	<50 50	<50.1 50.1	<50.3 50.3

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

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Version: 1.9%

Jessica Kramer
Project Manager



Certificate of Analysis Summary 656917

TRC Solutions, Inc, Midland, TX

Project Name: Pine Springs 2 State SWD

Project Id:

Contact: JD McCormick

Project Location:

Date Received in Lab: Wed Mar-25-20 04:05 pm

Report Date: 26-MAR-20

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	656917-013	656917-014	656917-015	656917-016	656917-017	656917-018
	Field Id:	FL- 13 @2'	FL- 14 @2'	FL- 15 @2'	FL- 16 @2'	FL- 17 @2'	FL- 18 @2'
	Depth:	2- ft	2- ft	2- ft	2- ft	2- ft	2- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Mar-25-20 12:00	Mar-25-20 12:10	Mar-25-20 12:20	Mar-25-20 12:30	Mar-25-20 12:40	Mar-25-20 12:50
BTEX by EPA 8021B	Extracted:	Mar-25-20 18:43	Mar-25-20 18:43	Mar-25-20 18:43	Mar-25-20 18:43	Mar-25-20 18:43	Mar-25-20 18:43
	Analyzed:	Mar-26-20 03:53	Mar-26-20 04:14	Mar-26-20 04:34	Mar-26-20 04:54	Mar-26-20 05:15	Mar-26-20 05:35
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200
Toluene		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200
Ethylbenzene		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200
m,p-Xylenes		<0.00402 0.00402	<0.00399 0.00399	<0.00401 0.00401	<0.00398 0.00398	<0.00398 0.00398	<0.00401 0.00401
o-Xylene		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200
Total Xylenes		<0.00201 0.00201	<0.002 0.002	<0.002 0.002	<0.00199 0.00199	<0.00199 0.00199	<0.002 0.002
Total BTEX		<0.00201 0.00201	<0.002 0.002	<0.002 0.002	<0.00199 0.00199	<0.00199 0.00199	<0.002 0.002
Chloride by EPA 300	Extracted:	Mar-25-20 18:01	Mar-25-20 18:01	Mar-25-20 18:01	Mar-25-20 18:01	Mar-25-20 18:01	Mar-25-20 18:01
	Analyzed:	Mar-26-20 08:28	Mar-25-20 21:53	Mar-25-20 21:59	Mar-25-20 22:06	Mar-25-20 22:13	Mar-25-20 22:19
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		<49.8 49.8	246 50.1	471 49.8	449 49.8	829 49.9	303 50.1
TPH By SW8015 Mod	Extracted:	Mar-25-20 17:30	Mar-25-20 17:30	Mar-25-20 17:30	Mar-25-20 17:30	Mar-25-20 17:30	Mar-25-20 17:30
	Analyzed:	Mar-26-20 10:48	Mar-26-20 11:11	Mar-26-20 11:32	Mar-26-20 11:52	Mar-26-20 05:33	Mar-26-20 06:34
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.2 50.2	<50.0 50.0	<50.3 50.3	<50.1 50.1	<50.0 50.0	<50.2 50.2
Diesel Range Organics (DRO)		<50.2 50.2	<50.0 50.0	<50.3 50.3	<50.1 50.1	<50.0 50.0	<50.2 50.2
Motor Oil Range Hydrocarbons (MRO)		<50.2 50.2	<50.0 50.0	<50.3 50.3	<50.1 50.1	<50.0 50.0	<50.2 50.2
Total TPH		<50.2 50.2	<50 50	<50.3 50.3	<50.1 50.1	<50 50	<50.2 50.2

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Version: 1.9%

Jessica Kramer
Project Manager



Certificate of Analysis Summary 656917

TRC Solutions, Inc, Midland, TX

Project Name: Pine Springs 2 State SWD

Project Id:

Contact: JD McCormick

Project Location:

Date Received in Lab: Wed Mar-25-20 04:05 pm

Report Date: 26-MAR-20

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	656917-019					
	Field Id:	FL- 19 @2'					
	Depth:	2- ft					
	Matrix:	SOIL					
	Sampled:	Mar-25-20 13:00					
BTEX by EPA 8021B	Extracted:	Mar-25-20 18:43					
	Analyzed:	Mar-26-20 05:56					
	Units/RL:	mg/kg RL					
Benzene		<0.00199 0.00199					
Toluene		<0.00199 0.00199					
Ethylbenzene		<0.00199 0.00199					
m,p-Xylenes		<0.00398 0.00398					
o-Xylene		<0.00199 0.00199					
Total Xylenes		<0.00199 0.00199					
Total BTEX		<0.00199 0.00199					
Chloride by EPA 300	Extracted:	Mar-25-20 18:01					
	Analyzed:	Mar-25-20 22:26					
	Units/RL:	mg/kg RL					
Chloride		126 50.4					
TPH By SW8015 Mod	Extracted:	Mar-25-20 17:30					
	Analyzed:	Mar-26-20 06:54					
	Units/RL:	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9					
Diesel Range Organics (DRO)		<49.9 49.9					
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9					
Total TPH		<49.9 49.9					

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Version: 1.0%

Jessica Kramer
Project Manager

Analytical Report 656917

for
TRC Solutions, Inc

Project Manager: JD McCormick

Pine Springs 2 State SWD

26-MAR-20

Collected By: Client



**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)

Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)

Xenco-Carlsbad (LELAP): Louisiana (05092)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)

Xenco-Tampa: Florida (E87429), North Carolina (483)



26-MAR-20

Project Manager: **JD McCormick**
TRC Solutions, Inc
2057 Commerce
Midland, TX 79703

Reference: XENCO Report No(s): **656917**
Pine Springs 2 State SWD
Project Address:

JD McCormick:

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) 656917. 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. 656917 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 'Jessica Kramer'.

Jessica Kramer

Project Manager

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

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Sample Cross Reference 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FL- 1 @2'	S	03-24-20 14:00	2 ft	656917-001
FL- 2 @2'	S	03-24-20 14:10	2 ft	656917-002
FL- 3 @2'	S	03-24-20 14:20	2 ft	656917-003
FL- 4 @2'	S	03-24-20 14:30	2 ft	656917-004
FL- 5 @2'	S	03-24-20 14:40	2 ft	656917-005
FL- 6 @2'	S	03-24-20 14:50	2 ft	656917-006
FL- 7 @2'	S	03-25-20 11:00	2 ft	656917-007
FL- 8 @2'	S	03-25-20 11:10	2 ft	656917-008
FL- 9 @2'	S	03-25-20 11:20	2 ft	656917-009
FL- 10 @2'	S	03-25-20 11:30	2 ft	656917-010
FL- 11 @2'	S	03-25-20 11:40	2 ft	656917-011
FL- 12 @2'	S	03-25-20 11:50	2 ft	656917-012
FL- 13 @2'	S	03-25-20 12:00	2 ft	656917-013
FL- 14 @2'	S	03-25-20 12:10	2 ft	656917-014
FL- 15 @2'	S	03-25-20 12:20	2 ft	656917-015
FL- 16 @2'	S	03-25-20 12:30	2 ft	656917-016
FL- 17 @2'	S	03-25-20 12:40	2 ft	656917-017
FL- 18 @2'	S	03-25-20 12:50	2 ft	656917-018
FL- 19 @2'	S	03-25-20 13:00	2 ft	656917-019



CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: Pine Springs 2 State SWD

Project ID:

Work Order Number(s): 656917

Report Date: 26-MAR-20

Date Received: 03/25/2020

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3120970 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 1 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-001

Date Collected: 03.24.20 14.00

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.01

Basis: Wet Weight

Seq Number: 3120987

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	150	49.6	mg/kg	03.25.20 20.00		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.25.20 17.30

Basis: Wet Weight

Seq Number: 3121009

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.26.20 05.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.26.20 05.33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.26.20 05.33	U	1
Total TPH	PHC635	<50	50	mg/kg	03.26.20 05.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	03.26.20 05.33	
o-Terphenyl	84-15-1	112	%	70-135	03.26.20 05.33	



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 1 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-001

Date Collected: 03.24.20 14.00

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.43

Basis: Wet Weight

Seq Number: 3120970

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.25.20 23.07	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.25.20 23.07	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.25.20 23.07	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.25.20 23.07	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.25.20 23.07	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.25.20 23.07	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.25.20 23.07	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.25.20 23.07		
4-Bromofluorobenzene	460-00-4	96	%	70-130	03.25.20 23.07		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 2 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-002

Date Collected: 03.24.20 14.10

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.01

Basis: Wet Weight

Seq Number: 3120987

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	264	49.9	mg/kg	03.25.20 20.20		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.25.20 17.30

Basis: Wet Weight

Seq Number: 3121009

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.26.20 06.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.26.20 06.34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.26.20 06.34	U	1
Total TPH	PHC635	<50	50	mg/kg	03.26.20 06.34	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	111	%	70-135	03.26.20 06.34		
o-Terphenyl	84-15-1	117	%	70-135	03.26.20 06.34		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 2 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-002

Date Collected: 03.24.20 14.10

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.43

Basis: Wet Weight

Seq Number: 3120970

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.25.20 23.28	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.25.20 23.28	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.25.20 23.28	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.25.20 23.28	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.25.20 23.28	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.25.20 23.28	U	1
Total BTEX		<0.002	0.002	mg/kg	03.25.20 23.28	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	03.25.20 23.28		
1,4-Difluorobenzene	540-36-3	110	%	70-130	03.25.20 23.28		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 3 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-003

Date Collected: 03.24.20 14.20

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.01

Basis: Wet Weight

Seq Number: 3120987

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	314	49.8	mg/kg	03.25.20 20.26		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.25.20 17.30

Basis: Wet Weight

Seq Number: 3121009

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.26.20 06.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.26.20 06.54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.26.20 06.54	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.26.20 06.54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	114	%	70-135	03.26.20 06.54		
o-Terphenyl	84-15-1	118	%	70-135	03.26.20 06.54		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 3 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-003

Date Collected: 03.24.20 14.20

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.43

Basis: Wet Weight

Seq Number: 3120970

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.25.20 23.48	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.25.20 23.48	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.25.20 23.48	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.25.20 23.48	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.25.20 23.48	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.25.20 23.48	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.25.20 23.48	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	95	%	70-130	03.25.20 23.48		
1,4-Difluorobenzene	540-36-3	110	%	70-130	03.25.20 23.48		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 4 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-004

Date Collected: 03.24.20 14.30

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.01

Basis: Wet Weight

Seq Number: 3120987

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	347	51.0	mg/kg	03.25.20 20.33		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.25.20 17.30

Basis: Wet Weight

Seq Number: 3121009

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	03.26.20 07.15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	03.26.20 07.15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	03.26.20 07.15	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	03.26.20 07.15	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	103	%	70-135	03.26.20 07.15		
o-Terphenyl	84-15-1	108	%	70-135	03.26.20 07.15		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 4 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-004

Date Collected: 03.24.20 14.30

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.43

Basis: Wet Weight

Seq Number: 3120970

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.26.20 00.09	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.26.20 00.09	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.26.20 00.09	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.26.20 00.09	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.26.20 00.09	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.26.20 00.09	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.26.20 00.09	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	93	%	70-130	03.26.20 00.09		
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.26.20 00.09		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 5 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-005

Date Collected: 03.24.20 14.40

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.01

Basis: Wet Weight

Seq Number: 3120987

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	517	50.4	mg/kg	03.25.20 20.40		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.25.20 17.30

Basis: Wet Weight

Seq Number: 3121009

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.26.20 07.35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.26.20 07.35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.26.20 07.35	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.26.20 07.35	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	106	%	70-135	03.26.20 07.35		
o-Terphenyl	84-15-1	111	%	70-135	03.26.20 07.35		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 5 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-005

Date Collected: 03.24.20 14.40

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.43

Basis: Wet Weight

Seq Number: 3120970

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.26.20 00.29	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.26.20 00.29	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.26.20 00.29	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.26.20 00.29	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.26.20 00.29	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.26.20 00.29	U	1
Total BTEX		<0.002	0.002	mg/kg	03.26.20 00.29	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	109	%	70-130	03.26.20 00.29		
4-Bromofluorobenzene	460-00-4	97	%	70-130	03.26.20 00.29		



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TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 6 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-006

Date Collected: 03.24.20 14.50

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.01

Basis: Wet Weight

Seq Number: 3120987

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	509	49.9	mg/kg	03.25.20 20.59		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.25.20 17.30

Basis: Wet Weight

Seq Number: 3121009

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	03.26.20 07.55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	03.26.20 07.55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	03.26.20 07.55	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	03.26.20 07.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	03.26.20 07.55	
o-Terphenyl	84-15-1	114	%	70-135	03.26.20 07.55	



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 6 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-006

Date Collected: 03.24.20 14.50

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.43

Basis: Wet Weight

Seq Number: 3120970

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.26.20 00.49	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.26.20 00.49	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.26.20 00.49	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.26.20 00.49	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.26.20 00.49	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.26.20 00.49	U	1
Total BTEX		<0.002	0.002	mg/kg	03.26.20 00.49	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.26.20 00.49		
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.26.20 00.49		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 7 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-007

Date Collected: 03.25.20 11.00

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.01

Basis: Wet Weight

Seq Number: 3120987

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	209	49.8	mg/kg	03.25.20 21.06		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.25.20 17.30

Basis: Wet Weight

Seq Number: 3121009

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.26.20 08.16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.26.20 08.16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.26.20 08.16	U	1
Total TPH	PHC635	<50	50	mg/kg	03.26.20 08.16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	105	%	70-135	03.26.20 08.16		
o-Terphenyl	84-15-1	109	%	70-135	03.26.20 08.16		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 7 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-007

Date Collected: 03.25.20 11.00

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.43

Basis: Wet Weight

Seq Number: 3120970

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.26.20 01.10	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.26.20 01.10	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.26.20 01.10	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.26.20 01.10	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.26.20 01.10	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.26.20 01.10	U	1
Total BTEX		<0.002	0.002	mg/kg	03.26.20 01.10	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	112	%	70-130	03.26.20 01.10		
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.26.20 01.10		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 8 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-008

Date Collected: 03.25.20 11.10

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.01

Basis: Wet Weight

Seq Number: 3120987

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	310	49.6	mg/kg	03.25.20 21.13		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.25.20 17.30

Basis: Wet Weight

Seq Number: 3121009

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.26.20 08.36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.26.20 08.36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.26.20 08.36	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.26.20 08.36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	108	%	70-135	03.26.20 08.36		
o-Terphenyl	84-15-1	114	%	70-135	03.26.20 08.36		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 8 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-008

Date Collected: 03.25.20 11.10

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.43

Basis: Wet Weight

Seq Number: 3120970

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.26.20 01.30	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.26.20 01.30	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.26.20 01.30	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.26.20 01.30	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.26.20 01.30	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.26.20 01.30	U	1
Total BTEX		<0.002	0.002	mg/kg	03.26.20 01.30	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	03.26.20 01.30		
1,4-Difluorobenzene	540-36-3	112	%	70-130	03.26.20 01.30		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 9 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-009

Date Collected: 03.25.20 11.20

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.01

Basis: Wet Weight

Seq Number: 3120987

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	414	49.9	mg/kg	03.25.20 21.19		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.25.20 17.30

Basis: Wet Weight

Seq Number: 3121009

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.26.20 09.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.26.20 09.06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.26.20 09.06	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.26.20 09.06	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	111	%	70-135	03.26.20 09.06		
o-Terphenyl	84-15-1	117	%	70-135	03.26.20 09.06		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 9 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-009

Date Collected: 03.25.20 11.20

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.43

Basis: Wet Weight

Seq Number: 3120970

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.26.20 01.51	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.26.20 01.51	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.26.20 01.51	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.26.20 01.51	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.26.20 01.51	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.26.20 01.51	U	1
Total BTEX		<0.002	0.002	mg/kg	03.26.20 01.51	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	03.26.20 01.51		
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.26.20 01.51		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 10 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-010

Date Collected: 03.25.20 11.30

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.01

Basis: Wet Weight

Seq Number: 3120987

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	285	49.8	mg/kg	03.25.20 21.26		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.25.20 17.30

Basis: Wet Weight

Seq Number: 3121009

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.26.20 09.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.26.20 09.26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.26.20 09.26	U	1
Total TPH	PHC635	<50	50	mg/kg	03.26.20 09.26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	104	%	70-135	03.26.20 09.26		
o-Terphenyl	84-15-1	109	%	70-135	03.26.20 09.26		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 10 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-010

Date Collected: 03.25.20 11.30

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.43

Basis: Wet Weight

Seq Number: 3120970

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	03.26.20 02.11	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	03.26.20 02.11	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	03.26.20 02.11	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	03.26.20 02.11	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	03.26.20 02.11	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	03.26.20 02.11	U	1
Total BTEX		<0.00198	0.00198	mg/kg	03.26.20 02.11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.26.20 02.11		
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.26.20 02.11		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 11 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-011

Date Collected: 03.25.20 11.40

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.01

Basis: Wet Weight

Seq Number: 3120987

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	396	49.9	mg/kg	03.26.20 08.11		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.25.20 17.30

Basis: Wet Weight

Seq Number: 3121009

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	03.26.20 10.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	03.26.20 10.07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	03.26.20 10.07	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	03.26.20 10.07	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	104	%	70-135	03.26.20 10.07		
o-Terphenyl	84-15-1	109	%	70-135	03.26.20 10.07		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 11 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-011

Date Collected: 03.25.20 11.40

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.43

Basis: Wet Weight

Seq Number: 3120970

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.26.20 03.12	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.26.20 03.12	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.26.20 03.12	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.26.20 03.12	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.26.20 03.12	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.26.20 03.12	U	1
Total BTEX		<0.002	0.002	mg/kg	03.26.20 03.12	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	112	%	70-130	03.26.20 03.12		
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.26.20 03.12		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 12 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-012

Date Collected: 03.25.20 11.50

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.01

Basis: Wet Weight

Seq Number: 3120987

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	629	49.7	mg/kg	03.26.20 08.23		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.25.20 17.30

Basis: Wet Weight

Seq Number: 3121009

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	03.26.20 10.28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	03.26.20 10.28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	03.26.20 10.28	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	03.26.20 10.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	03.26.20 10.28	
o-Terphenyl	84-15-1	108	%	70-135	03.26.20 10.28	



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 12 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-012

Date Collected: 03.25.20 11.50

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.43

Basis: Wet Weight

Seq Number: 3120970

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.26.20 03.33	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.26.20 03.33	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.26.20 03.33	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.26.20 03.33	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.26.20 03.33	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.26.20 03.33	U	1
Total BTEX		<0.002	0.002	mg/kg	03.26.20 03.33	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	03.26.20 03.33		
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.26.20 03.33		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 13 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-013

Date Collected: 03.25.20 12.00

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.01

Basis: Wet Weight

Seq Number: 3120987

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<49.8	49.8	mg/kg	03.26.20 08.28	U	5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.25.20 17.30

Basis: Wet Weight

Seq Number: 3121009

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.26.20 10.48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.26.20 10.48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.26.20 10.48	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.26.20 10.48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	03.26.20 10.48	
o-Terphenyl	84-15-1	104	%	70-135	03.26.20 10.48	



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 13 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-013

Date Collected: 03.25.20 12.00

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.43

Basis: Wet Weight

Seq Number: 3120970

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.26.20 03.53	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.26.20 03.53	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.26.20 03.53	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.26.20 03.53	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.26.20 03.53	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.26.20 03.53	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.26.20 03.53	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.26.20 03.53		
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.26.20 03.53		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 14 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-014

Date Collected: 03.25.20 12.10

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.01

Basis: Wet Weight

Seq Number: 3120987

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	246	50.1	mg/kg	03.25.20 21.53		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.25.20 17.30

Basis: Wet Weight

Seq Number: 3121009

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.26.20 11.11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.26.20 11.11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.26.20 11.11	U	1
Total TPH	PHC635	<50	50	mg/kg	03.26.20 11.11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	102	%	70-135	03.26.20 11.11		
o-Terphenyl	84-15-1	107	%	70-135	03.26.20 11.11		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 14 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-014

Date Collected: 03.25.20 12.10

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.43

Basis: Wet Weight

Seq Number: 3120970

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.26.20 04.14	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.26.20 04.14	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.26.20 04.14	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.26.20 04.14	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.26.20 04.14	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.26.20 04.14	U	1
Total BTEX		<0.002	0.002	mg/kg	03.26.20 04.14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.26.20 04.14		
1,4-Difluorobenzene	540-36-3	112	%	70-130	03.26.20 04.14		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 15 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-015

Date Collected: 03.25.20 12.20

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.01

Basis: Wet Weight

Seq Number: 3120987

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	471	49.8	mg/kg	03.25.20 21.59		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.25.20 17.30

Basis: Wet Weight

Seq Number: 3121009

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	03.26.20 11.32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	03.26.20 11.32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	03.26.20 11.32	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	03.26.20 11.32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	99	%	70-135	03.26.20 11.32		
o-Terphenyl	84-15-1	104	%	70-135	03.26.20 11.32		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 15 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-015

Date Collected: 03.25.20 12.20

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.43

Basis: Wet Weight

Seq Number: 3120970

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.26.20 04.34	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.26.20 04.34	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.26.20 04.34	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.26.20 04.34	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.26.20 04.34	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.26.20 04.34	U	1
Total BTEX		<0.002	0.002	mg/kg	03.26.20 04.34	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	95	%	70-130	03.26.20 04.34		
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.26.20 04.34		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 16 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-016

Date Collected: 03.25.20 12.30

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.01

Basis: Wet Weight

Seq Number: 3120987

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	449	49.8	mg/kg	03.25.20 22.06		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.25.20 17.30

Basis: Wet Weight

Seq Number: 3121009

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	03.26.20 11.52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	03.26.20 11.52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	03.26.20 11.52	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	03.26.20 11.52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	90	%	70-135	03.26.20 11.52		
o-Terphenyl	84-15-1	92	%	70-135	03.26.20 11.52		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 16 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-016

Date Collected: 03.25.20 12.30

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.43

Basis: Wet Weight

Seq Number: 3120970

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.26.20 04.54	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.26.20 04.54	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.26.20 04.54	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.26.20 04.54	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.26.20 04.54	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.26.20 04.54	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.26.20 04.54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.26.20 04.54		
4-Bromofluorobenzene	460-00-4	96	%	70-130	03.26.20 04.54		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 17 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-017

Date Collected: 03.25.20 12.40

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.01

Basis: Wet Weight

Seq Number: 3120987

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	829	49.9	mg/kg	03.25.20 22.13		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.25.20 17.30

Basis: Wet Weight

Seq Number: 3121007

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.26.20 05.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.26.20 05.33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.26.20 05.33	U	1
Total TPH	PHC635	<50	50	mg/kg	03.26.20 05.33	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	101	%	70-135	03.26.20 05.33		
o-Terphenyl	84-15-1	108	%	70-135	03.26.20 05.33		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 17 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-017

Date Collected: 03.25.20 12.40

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.43

Basis: Wet Weight

Seq Number: 3120970

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.26.20 05.15	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.26.20 05.15	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.26.20 05.15	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.26.20 05.15	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.26.20 05.15	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.26.20 05.15	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.26.20 05.15	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.26.20 05.15		
4-Bromofluorobenzene	460-00-4	100	%	70-130	03.26.20 05.15		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 18 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-018

Date Collected: 03.25.20 12.50

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.01

Basis: Wet Weight

Seq Number: 3120987

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	303	50.1	mg/kg	03.25.20 22.19		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.25.20 17.30

Basis: Wet Weight

Seq Number: 3121007

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.26.20 06.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.26.20 06.34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.26.20 06.34	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.26.20 06.34	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	106	%	70-135	03.26.20 06.34		
o-Terphenyl	84-15-1	112	%	70-135	03.26.20 06.34		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 18 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-018

Date Collected: 03.25.20 12.50

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.43

Basis: Wet Weight

Seq Number: 3120970

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.26.20 05.35	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.26.20 05.35	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.26.20 05.35	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.26.20 05.35	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.26.20 05.35	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.26.20 05.35	U	1
Total BTEX		<0.002	0.002	mg/kg	03.26.20 05.35	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	03.26.20 05.35		
4-Bromofluorobenzene	460-00-4	99	%	70-130	03.26.20 05.35		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 19 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-019

Date Collected: 03.25.20 13.00

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.01

Basis: Wet Weight

Seq Number: 3120987

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	126	50.4	mg/kg	03.25.20 22.26		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.25.20 17.30

Basis: Wet Weight

Seq Number: 3121007

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.26.20 06.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.26.20 06.54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.26.20 06.54	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.26.20 06.54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	104	%	70-135	03.26.20 06.54		
o-Terphenyl	84-15-1	110	%	70-135	03.26.20 06.54		



Certificate of Analytical Results 656917

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 19 @2'**

Matrix: Soil

Date Received: 03.25.20 16.05

Lab Sample Id: 656917-019

Date Collected: 03.25.20 13.00

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.43

Basis: Wet Weight

Seq Number: 3120970

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.26.20 05.56	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.26.20 05.56	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.26.20 05.56	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.26.20 05.56	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.26.20 05.56	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.26.20 05.56	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.26.20 05.56	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	112	%	70-130	03.26.20 05.56		
4-Bromofluorobenzene	460-00-4	97	%	70-130	03.26.20 05.56		



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



TRC Solutions, Inc
Pine Springs 2 State SWD

Analytical Method: Chloride by EPA 300

Seq Number: 3120987

MB Sample Id: 7699762-1-BLK

Matrix: Solid

LCS Sample Id: 7699762-1-BKS

Prep Method: E300P

Date Prep: 03.25.20

LCSD Sample Id: 7699762-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	254	102	254	102	90-110	0	20	mg/kg	03.25.20 19:47	

Analytical Method: Chloride by EPA 300

Seq Number: 3120987

Parent Sample Id: 656917-001

Matrix: Soil

MS Sample Id: 656917-001 S

Prep Method: E300P

Date Prep: 03.25.20

MSD Sample Id: 656917-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	150	198	353	103	355	104	90-110	1	20	mg/kg	03.25.20 20:07	

Analytical Method: Chloride by EPA 300

Seq Number: 3120987

Parent Sample Id: 656917-011

Matrix: Soil

MS Sample Id: 656917-011 S

Prep Method: E300P

Date Prep: 03.25.20

MSD Sample Id: 656917-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	396	199	599	102	600	103	90-110	0	20	mg/kg	03.26.20 08:17	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3121007

MB Sample Id: 7699785-1-BLK

Matrix: Solid

LCS Sample Id: 7699785-1-BKS

Prep Method: SW8015P

Date Prep: 03.25.20

LCSD Sample Id: 7699785-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	952	95	931	93	70-135	2	35	mg/kg	03.26.20 04:52	
Diesel Range Organics (DRO)	<50.0	1000	1100	110	1080	108	70-135	2	35	mg/kg	03.26.20 04:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	104		123		120		70-135	%	03.26.20 04:52
o-Terphenyl	114		125		122		70-135	%	03.26.20 04:52

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



TRC Solutions, Inc
Pine Springs 2 State SWD

Analytical Method: TPH By SW8015 Mod

Seq Number: 3121009

MB Sample Id: 7699786-1-BLK

Matrix: Solid

LCS Sample Id: 7699786-1-BKS

Prep Method: SW8015P

Date Prep: 03.25.20

LCSD Sample Id: 7699786-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	982	98	933	93	70-135	5	35	mg/kg	03.26.20 04:52	
Diesel Range Organics (DRO)	<50.0	1000	1120	112	1070	107	70-135	5	35	mg/kg	03.26.20 04:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	99		121		115		70-135	%	03.26.20 04:52
o-Terphenyl	103		124		118		70-135	%	03.26.20 04:52

Analytical Method: TPH By SW8015 Mod

Seq Number: 3121007

Matrix: Solid

MB Sample Id: 7699785-1-BLK

Prep Method: SW8015P

Date Prep: 03.25.20

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	03.26.20 04:32	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3121009

Matrix: Solid

MB Sample Id: 7699786-1-BLK

Prep Method: SW8015P

Date Prep: 03.25.20

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	03.26.20 04:32	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3121007

Matrix: Soil

Parent Sample Id: 656917-017

MS Sample Id: 656917-017 S

Prep Method: SW8015P

Date Prep: 03.25.20

MSD Sample Id: 656917-017 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	999	877	88	916	92	70-135	4	35	mg/kg	03.26.20 05:53	
Diesel Range Organics (DRO)	<50.0	999	990	99	1050	105	70-135	6	35	mg/kg	03.26.20 05:53	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	117		123		70-135	%	03.26.20 05:53
o-Terphenyl	117		128		70-135	%	03.26.20 05:53

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



TRC Solutions, Inc
Pine Springs 2 State SWD

Analytical Method: TPH By SW8015 Mod

Seq Number: 3121009

Parent Sample Id: 656917-001

Matrix: Soil

MS Sample Id: 656917-001 S

Prep Method: SW8015P

Date Prep: 03.25.20

MSD Sample Id: 656917-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.2	1000	970	97	1060	105	70-135	9	35	mg/kg	03.26.20 05:53	
Diesel Range Organics (DRO)	<50.2	1000	1100	110	1210	120	70-135	10	35	mg/kg	03.26.20 05:53	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	117		131		70-135	%	03.26.20 05:53
o-Terphenyl	120		135		70-135	%	03.26.20 05:53

Analytical Method: BTEX by EPA 8021B

Seq Number: 3120970

MB Sample Id: 7699769-1-BLK

Matrix: Solid

LCS Sample Id: 7699769-1-BKS

Prep Method: SW5030B

Date Prep: 03.25.20

LCSD Sample Id: 7699769-1-BSO

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.109	109	0.109	109	70-130	0	35	mg/kg	03.25.20 21:25	
Toluene	<0.00200	0.100	0.103	103	0.103	103	70-130	0	35	mg/kg	03.25.20 21:25	
Ethylbenzene	<0.00200	0.100	0.0967	97	0.0962	96	71-129	1	35	mg/kg	03.25.20 21:25	
m,p-Xylenes	<0.00400	0.200	0.200	100	0.198	99	70-135	1	35	mg/kg	03.25.20 21:25	
o-Xylene	<0.00200	0.100	0.101	101	0.101	101	71-133	0	35	mg/kg	03.25.20 21:25	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		108		109		70-130	%	03.25.20 21:25
4-Bromofluorobenzene	94		91		90		70-130	%	03.25.20 21:25

Analytical Method: BTEX by EPA 8021B

Seq Number: 3120970

Parent Sample Id: 656917-001

Matrix: Soil

MS Sample Id: 656917-001 S

Prep Method: SW5030B

Date Prep: 03.25.20

MSD Sample Id: 656917-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.112	112	0.0947	94	70-130	17	35	mg/kg	03.25.20 22:06	
Toluene	<0.00200	0.100	0.107	107	0.0891	88	70-130	18	35	mg/kg	03.25.20 22:06	
Ethylbenzene	<0.00200	0.100	0.101	101	0.0810	80	71-129	22	35	mg/kg	03.25.20 22:06	
m,p-Xylenes	<0.00401	0.200	0.208	104	0.167	83	70-135	22	35	mg/kg	03.25.20 22:06	
o-Xylene	<0.00200	0.100	0.105	105	0.0842	83	71-133	22	35	mg/kg	03.25.20 22:06	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		108		70-130	%	03.25.20 22:06
4-Bromofluorobenzene	95		97		70-130	%	03.25.20 22:06

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



Chain of Custody

Work Order No: 16516917

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
 Midland, TX (432) 704-5440 El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296 Crashtad, NM (432) 704-5440
 Phoenix, AZ (480) 555-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

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Project Manager:	Jared Steffel	Bill to: (if different)	J.D. McCormick
Company Name:	TRC	Company Name:	Black River Trucking
Address:	10 Deste Dr. STE 150E	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	J.D. McCormick
Phone:	432-238-3603	Email:	Jared, Tania, Ike, Jlongoria@xenco.com

Project Name:	Pine Springs State SWD	Turn Around	☐
Project Number:		Routine	☐
Project Location:		Rush:	24 HRS
Sampler's Name:	Tania Barva	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT		Temp Blank:	Yes ☐ No ☒	Wet Ice:	Yes ☐ No ☒
Temperature (°C):	4.0	Thermometer ID	TNM007		
Received Intact:	Yes ☒ No ☐	Correction Factor:	-0.2		
Cooler Custody Seals:	Yes ☒ No ☐ N/A	Total Containers:	19		
Sample Custody Seals:	Yes ☒ No ☐ N/A				

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	ANALYSIS REQUEST	Preservative Codes
FL-1021	S	03/24/20	1400	2'	1	X	TPH (8015)	MeOH: Me
FL-2021						X	BTEX (8021)	None: NO
FL-3021						X	Chlorides (E300)	HNO3: HN
FL-4021								H2SO4: H2
FL-5021								HCL: HL
FL-6021								NaOH: Na
FL-7021								Zn Acetate+ NaOH: Zn
FL-8021								
FL-9021								
FL-10021								

Total 200.7 / 6010 200.8 / 6020:

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Pb Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn

TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U

1631 / 245.1 / 7470 / 7471 : Hg

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 \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		3/25/20 16:05			



Chain of Custody

Work Order No: 1656917

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
 Midland, TX (432) 704-5440 El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296 Corsabad, NM (432) 704-5440
 Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

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Page 2 of 2

Project Manager:	Jared Stuffle	Bill to: (if different)	J.D. McConick
Company Name:	TRC	Company Name:	Black River Trucking
Address:	10 West Dr. STE 150E	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	J.D. McConick@gmail.com
Phone:	432-238-3003	Email:	Jared, Tania, Ike, jstuffle@xenencolab.com

Project Name:	Pine Springs State Blvd	Turn Around	☐
Project Number:		Route	☐
Project Location:		Rush: 24 HRS	
Sampler's Name:	Tania Barba	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT		Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):		Received Intact:		Thermometer ID			
Cooler Custody Seals:		Yes	No	N/A	Correction Factor:		
Sample Custody Seals:		Yes	No	N/A	Total Containers:		

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Analysis Request	Preservative Codes	Sample Comments
FL-11A 21		S	03/25/20	1140	2'	1	TPH (8015)		
FL-12A 21				1150			BTEX (8021)		
FL-13A 21				1200			Chlorides (8300)		
FL-14A 21				1210					
FL-15A 21				1220					
FL-16A 21				1230					
FL-17A 21				1240					
FL-18A 21				1250					
FL-19A 21				1300					

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 A Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed: TCLP / SPLP 6010- 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U

1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenenco 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 Xenenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		3/25/20 16:05			



Certificate of Analysis Summary 656918

TRC Solutions, Inc, Midland, TX

Project Name: Pine Springs 2 State SWD

Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Wed Mar-25-20 04:05 pm

Report Date: 26-MAR-20

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	656918-001	656918-002	656918-003	656918-004	656918-005	
	<i>Field Id:</i>	NSW- 1	ESW- 1	ESW- 2	WSW- 1	WSW- 2	
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	
	<i>Sampled:</i>	Mar-25-20 13:10	Mar-25-20 13:30	Mar-25-20 13:40	Mar-25-20 13:50	Mar-25-20 14:00	
BTEX by EPA 8021B	<i>Extracted:</i>	Mar-25-20 18:43	Mar-25-20 18:57	Mar-25-20 18:57	Mar-25-20 18:57	Mar-25-20 18:57	
	<i>Analyzed:</i>	Mar-26-20 06:16	Mar-26-20 00:35	Mar-26-20 00:55	Mar-26-20 01:16	Mar-26-20 01:36	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	
m,p-Xylenes		<0.00400 0.00400	<0.00401 0.00401	<0.00401 0.00401	<0.00399 0.00399	<0.00402 0.00402	
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	
Total Xylenes		<0.002 0.002	<0.002 0.002	<0.002 0.002	<0.002 0.002	<0.00201 0.00201	
Total BTEX		<0.002 0.002	<0.002 0.002	<0.002 0.002	<0.002 0.002	<0.00201 0.00201	
Chloride by EPA 300	<i>Extracted:</i>	Mar-25-20 18:01	Mar-26-20 07:36	Mar-26-20 07:36	Mar-26-20 07:36	Mar-26-20 07:36	
	<i>Analyzed:</i>	Mar-25-20 22:32	Mar-26-20 09:02	Mar-26-20 09:19	Mar-26-20 09:25	Mar-26-20 09:31	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Chloride		240 50.1	52.4 49.8	221 49.8	368 50.4	569 50.1	
TPH By SW8015 Mod	<i>Extracted:</i>	Mar-25-20 17:30	Mar-25-20 17:30	Mar-25-20 17:30	Mar-25-20 17:30	Mar-25-20 17:30	
	<i>Analyzed:</i>	Mar-26-20 07:15	Mar-26-20 07:35	Mar-26-20 07:55	Mar-26-20 08:16	Mar-26-20 08:36	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Gasoline Range Hydrocarbons (GRO)		<50.3 50.3	<50.1 50.1	<50.1 50.1	<49.9 49.9	<50.1 50.1	
Diesel Range Organics (DRO)		<50.3 50.3	<50.1 50.1	<50.1 50.1	<49.9 49.9	<50.1 50.1	
Motor Oil Range Hydrocarbons (MRO)		<50.3 50.3	<50.1 50.1	<50.1 50.1	<49.9 49.9	<50.1 50.1	
Total TPH		<50.3 50.3	<50.1 50.1	<50.1 50.1	<49.9 49.9	<50.1 50.1	

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 - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer
Project Manager

Analytical Report 656918

for
TRC Solutions, Inc

Project Manager: Jared Stoffel

Pine Springs 2 State SWD

26-MAR-20

Collected By: Client



**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)

Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)

Xenco-Carlsbad (LELAP): Louisiana (05092)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)

Xenco-Tampa: Florida (E87429), North Carolina (483)



26-MAR-20

Project Manager: **Jared Stoffel**

TRC Solutions, Inc

2057 Commerce

Midland, TX 79703

Reference: XENCO Report No(s): **656918**

Pine Springs 2 State SWD

Project Address:

Jared Stoffel:

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) 656918. 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. 656918 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 'Jessica Kramer'.

Jessica Kramer

Project Manager

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

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

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

**Sample Cross Reference 656918****TRC Solutions, Inc, Midland, TX**

Pine Springs 2 State SWD

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
NSW- 1	S	03-25-20 13:10		656918-001
ESW- 1	S	03-25-20 13:30		656918-002
ESW- 2	S	03-25-20 13:40		656918-003
WSW- 1	S	03-25-20 13:50		656918-004
WSW- 2	S	03-25-20 14:00		656918-005



CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: Pine Springs 2 State SWD

Project ID:

Work Order Number(s): 656918

Report Date: 26-MAR-20

Date Received: 03/25/2020

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3120969 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3120970 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



Certificate of Analytical Results 656918

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **NSW- 1**
Lab Sample Id: 656918-001

Matrix: Soil
Date Collected: 03.25.20 13.10

Date Received: 03.25.20 16.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.01

Basis: Wet Weight

Seq Number: 3120987

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	240	50.1	mg/kg	03.25.20 22.32		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.25.20 17.30

Basis: Wet Weight

Seq Number: 3121007

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	03.26.20 07.15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	03.26.20 07.15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	03.26.20 07.15	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	03.26.20 07.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	03.26.20 07.15	
o-Terphenyl	84-15-1	117	%	70-135	03.26.20 07.15	



Certificate of Analytical Results 656918

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **NSW- 1**
Lab Sample Id: 656918-001

Matrix: Soil
Date Collected: 03.25.20 13.10

Date Received: 03.25.20 16.05

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.43

Basis: Wet Weight

Seq Number: 3120970

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.26.20 06.16	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.26.20 06.16	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.26.20 06.16	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	03.26.20 06.16	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.26.20 06.16	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.26.20 06.16	U	1
Total BTEX		<0.002	0.002	mg/kg	03.26.20 06.16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	03.26.20 06.16		
1,4-Difluorobenzene	540-36-3	108	%	70-130	03.26.20 06.16		



Certificate of Analytical Results 656918

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **ESW- 1**
Lab Sample Id: 656918-002

Matrix: Soil
Date Collected: 03.25.20 13.30

Date Received: 03.25.20 16.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 07.36

Basis: Wet Weight

Seq Number: 3121019

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	52.4	49.8	mg/kg	03.26.20 09.02		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.25.20 17.30

Basis: Wet Weight

Seq Number: 3121007

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	03.26.20 07.35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	03.26.20 07.35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	03.26.20 07.35	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	03.26.20 07.35	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	104	%	70-135	03.26.20 07.35		
o-Terphenyl	84-15-1	112	%	70-135	03.26.20 07.35		



Certificate of Analytical Results 656918

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **ESW- 1**
Lab Sample Id: 656918-002

Matrix: Soil
Date Collected: 03.25.20 13.30

Date Received: 03.25.20 16.05

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.57

Basis: Wet Weight

Seq Number: 3120969

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.26.20 00.35	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.26.20 00.35	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.26.20 00.35	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.26.20 00.35	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.26.20 00.35	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.26.20 00.35	U	1
Total BTEX		<0.002	0.002	mg/kg	03.26.20 00.35	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	03.26.20 00.35		
1,4-Difluorobenzene	540-36-3	117	%	70-130	03.26.20 00.35		



Certificate of Analytical Results 656918

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **ESW- 2**
Lab Sample Id: 656918-003

Matrix: Soil
Date Collected: 03.25.20 13.40

Date Received: 03.25.20 16.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 07.36

Basis: Wet Weight

Seq Number: 3121019

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	221	49.8	mg/kg	03.26.20 09.19		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.25.20 17.30

Basis: Wet Weight

Seq Number: 3121007

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	03.26.20 07.55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	03.26.20 07.55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	03.26.20 07.55	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	03.26.20 07.55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	105	%	70-135	03.26.20 07.55		
o-Terphenyl	84-15-1	112	%	70-135	03.26.20 07.55		



Certificate of Analytical Results 656918

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **ESW- 2**
Lab Sample Id: 656918-003

Matrix: Soil
Date Collected: 03.25.20 13.40

Date Received: 03.25.20 16.05

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.57

Basis: Wet Weight

Seq Number: 3120969

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.26.20 00.55	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.26.20 00.55	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.26.20 00.55	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.26.20 00.55	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.26.20 00.55	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.26.20 00.55	U	1
Total BTEX		<0.002	0.002	mg/kg	03.26.20 00.55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	115	%	70-130	03.26.20 00.55		
4-Bromofluorobenzene	460-00-4	94	%	70-130	03.26.20 00.55		



Certificate of Analytical Results 656918

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **WSW- 1**
Lab Sample Id: 656918-004

Matrix: Soil
Date Collected: 03.25.20 13.50

Date Received: 03.25.20 16.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 07.36

Basis: Wet Weight

Seq Number: 3121019

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	368	50.4	mg/kg	03.26.20 09.25		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.25.20 17.30

Basis: Wet Weight

Seq Number: 3121007

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.26.20 08.16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.26.20 08.16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.26.20 08.16	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.26.20 08.16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	101	%	70-135	03.26.20 08.16		
o-Terphenyl	84-15-1	109	%	70-135	03.26.20 08.16		



Certificate of Analytical Results 656918

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **WSW- 1**
Lab Sample Id: 656918-004

Matrix: Soil
Date Collected: 03.25.20 13.50

Date Received: 03.25.20 16.05

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.57

Basis: Wet Weight

Seq Number: 3120969

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.26.20 01.16	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.26.20 01.16	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.26.20 01.16	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.26.20 01.16	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.26.20 01.16	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.26.20 01.16	U	1
Total BTEX		<0.002	0.002	mg/kg	03.26.20 01.16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	70-130	03.26.20 01.16		
1,4-Difluorobenzene	540-36-3	116	%	70-130	03.26.20 01.16		



Certificate of Analytical Results 656918

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **WSW- 2**
Lab Sample Id: 656918-005

Matrix: Soil
Date Collected: 03.25.20 14.00

Date Received: 03.25.20 16.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 07.36

Basis: Wet Weight

Seq Number: 3121019

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	569	50.1	mg/kg	03.26.20 09.31		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.25.20 17.30

Basis: Wet Weight

Seq Number: 3121007

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	03.26.20 08.36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	03.26.20 08.36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	03.26.20 08.36	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	03.26.20 08.36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	98	%	70-135	03.26.20 08.36		
o-Terphenyl	84-15-1	106	%	70-135	03.26.20 08.36		



Certificate of Analytical Results 656918

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **WSW- 2**
Lab Sample Id: 656918-005

Matrix: Soil
Date Collected: 03.25.20 14.00

Date Received: 03.25.20 16.05

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.25.20 18.57

Basis: Wet Weight

Seq Number: 3120969

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.26.20 01.36	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.26.20 01.36	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.26.20 01.36	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.26.20 01.36	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.26.20 01.36	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.26.20 01.36	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.26.20 01.36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	70-130	03.26.20 01.36		
1,4-Difluorobenzene	540-36-3	117	%	70-130	03.26.20 01.36		



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



TRC Solutions, Inc
Pine Springs 2 State SWD

Analytical Method: Chloride by EPA 300

Seq Number: 3120987

MB Sample Id: 7699762-1-BLK

Matrix: Solid

LCS Sample Id: 7699762-1-BKS

Prep Method: E300P

Date Prep: 03.25.20

LCSD Sample Id: 7699762-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	254	102	254	102	90-110	0	20	mg/kg	03.25.20 19:47	

Analytical Method: Chloride by EPA 300

Seq Number: 3121019

MB Sample Id: 7699763-1-BLK

Matrix: Solid

LCS Sample Id: 7699763-1-BKS

Prep Method: E300P

Date Prep: 03.26.20

LCSD Sample Id: 7699763-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	257	103	246	98	90-110	4	20	mg/kg	03.26.20 08:51	

Analytical Method: Chloride by EPA 300

Seq Number: 3120987

Parent Sample Id: 656917-001

Matrix: Soil

MS Sample Id: 656917-001 S

Prep Method: E300P

Date Prep: 03.25.20

MSD Sample Id: 656917-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	150	198	353	103	355	104	90-110	1	20	mg/kg	03.25.20 20:07	

Analytical Method: Chloride by EPA 300

Seq Number: 3120987

Parent Sample Id: 656917-011

Matrix: Soil

MS Sample Id: 656917-011 S

Prep Method: E300P

Date Prep: 03.25.20

MSD Sample Id: 656917-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	396	199	599	102	600	103	90-110	0	20	mg/kg	03.26.20 08:17	

Analytical Method: Chloride by EPA 300

Seq Number: 3121019

Parent Sample Id: 656884-015

Matrix: Soil

MS Sample Id: 656884-015 S

Prep Method: E300P

Date Prep: 03.26.20

MSD Sample Id: 656884-015 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	12.3	200	216	102	216	102	90-110	0	20	mg/kg	03.26.20 10:27	

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

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



TRC Solutions, Inc
Pine Springs 2 State SWD

Analytical Method: Chloride by EPA 300

Seq Number: 3121019

Parent Sample Id: 656918-002

Matrix: Soil

MS Sample Id: 656918-002 S

Prep Method: E300P

Date Prep: 03.26.20

MSD Sample Id: 656918-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	52.4	200	239	93	240	94	90-110	0	20	mg/kg	03.26.20 09:08	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3121007

MB Sample Id: 7699785-1-BLK

Matrix: Solid

LCS Sample Id: 7699785-1-BKS

Prep Method: SW8015P

Date Prep: 03.25.20

LCSD Sample Id: 7699785-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	952	95	931	93	70-135	2	35	mg/kg	03.26.20 04:52	
Diesel Range Organics (DRO)	<50.0	1000	1100	110	1080	108	70-135	2	35	mg/kg	03.26.20 04:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	104		123		120		70-135	%	03.26.20 04:52
o-Terphenyl	114		125		122		70-135	%	03.26.20 04:52

Analytical Method: TPH By SW8015 Mod

Seq Number: 3121007

Matrix: Solid

MB Sample Id: 7699785-1-BLK

Prep Method: SW8015P

Date Prep: 03.25.20

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	03.26.20 04:32	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3121007

Matrix: Soil

Parent Sample Id: 656917-017

MS Sample Id: 656917-017 S

Prep Method: SW8015P

Date Prep: 03.25.20

MSD Sample Id: 656917-017 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	999	877	88	916	92	70-135	4	35	mg/kg	03.26.20 05:53	
Diesel Range Organics (DRO)	<50.0	999	990	99	1050	105	70-135	6	35	mg/kg	03.26.20 05:53	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	117		123		70-135	%	03.26.20 05:53
o-Terphenyl	117		128		70-135	%	03.26.20 05:53

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



TRC Solutions, Inc
Pine Springs 2 State SWD

Analytical Method: BTEX by EPA 8021B

Seq Number: 3120969

MB Sample Id: 7699718-1-BLK

Matrix: Solid

LCS Sample Id: 7699718-1-BKS

Prep Method: SW5030B

Date Prep: 03.25.20

LCSD Sample Id: 7699718-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.126	126	0.125	125	70-130	1	35	mg/kg	03.25.20 17:47	
Toluene	<0.00200	0.100	0.115	115	0.114	114	70-130	1	35	mg/kg	03.25.20 17:47	
Ethylbenzene	<0.00200	0.100	0.106	106	0.105	105	71-129	1	35	mg/kg	03.25.20 17:47	
m,p-Xylenes	<0.00400	0.200	0.206	103	0.205	103	70-135	0	35	mg/kg	03.25.20 17:47	
o-Xylene	<0.00200	0.100	0.105	105	0.105	105	71-133	0	35	mg/kg	03.25.20 17:47	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	115		110		110		70-130	%	03.25.20 17:47
4-Bromofluorobenzene	91		85		85		70-130	%	03.25.20 17:47

Analytical Method: BTEX by EPA 8021B

Seq Number: 3120970

MB Sample Id: 7699769-1-BLK

Matrix: Solid

LCS Sample Id: 7699769-1-BKS

Prep Method: SW5030B

Date Prep: 03.25.20

LCSD Sample Id: 7699769-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.109	109	0.109	109	70-130	0	35	mg/kg	03.25.20 21:25	
Toluene	<0.00200	0.100	0.103	103	0.103	103	70-130	0	35	mg/kg	03.25.20 21:25	
Ethylbenzene	<0.00200	0.100	0.0967	97	0.0962	96	71-129	1	35	mg/kg	03.25.20 21:25	
m,p-Xylenes	<0.00400	0.200	0.200	100	0.198	99	70-135	1	35	mg/kg	03.25.20 21:25	
o-Xylene	<0.00200	0.100	0.101	101	0.101	101	71-133	0	35	mg/kg	03.25.20 21:25	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		108		109		70-130	%	03.25.20 21:25
4-Bromofluorobenzene	94		91		90		70-130	%	03.25.20 21:25

Analytical Method: BTEX by EPA 8021B

Seq Number: 3120969

Parent Sample Id: 656718-083

Matrix: Soil

MS Sample Id: 656718-083 S

Prep Method: SW5030B

Date Prep: 03.25.20

MSD Sample Id: 656718-083 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.131	130	0.127	127	70-130	3	35	mg/kg	03.25.20 18:27	
Toluene	<0.00202	0.101	0.120	119	0.111	111	70-130	8	35	mg/kg	03.25.20 18:27	
Ethylbenzene	<0.00202	0.101	0.111	110	0.101	101	71-129	9	35	mg/kg	03.25.20 18:27	
m,p-Xylenes	<0.00403	0.202	0.216	107	0.198	99	70-135	9	35	mg/kg	03.25.20 18:27	
o-Xylene	<0.00202	0.101	0.112	111	0.101	101	71-133	10	35	mg/kg	03.25.20 18:27	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		110		70-130	%	03.25.20 18:27
4-Bromofluorobenzene	89		88		70-130	%	03.25.20 18:27

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

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



TRC Solutions, Inc
Pine Springs 2 State SWD

Analytical Method: BTEX by EPA 8021B

Seq Number: 3120970

Parent Sample Id: 656917-001

Matrix: Soil

MS Sample Id: 656917-001 S

Prep Method: SW5030B

Date Prep: 03.25.20

MSD Sample Id: 656917-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.112	112	0.0947	94	70-130	17	35	mg/kg	03.25.20 22:06	
Toluene	<0.00200	0.100	0.107	107	0.0891	88	70-130	18	35	mg/kg	03.25.20 22:06	
Ethylbenzene	<0.00200	0.100	0.101	101	0.0810	80	71-129	22	35	mg/kg	03.25.20 22:06	
m,p-Xylenes	<0.00401	0.200	0.208	104	0.167	83	70-135	22	35	mg/kg	03.25.20 22:06	
o-Xylene	<0.00200	0.100	0.105	105	0.0842	83	71-133	22	35	mg/kg	03.25.20 22:06	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		108		70-130	%	03.25.20 22:06
4-Bromofluorobenzene	95		97		70-130	%	03.25.20 22:06

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



Chain of Custody

Work Order No: 1676918

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
 Midland, TX (432) 704-5440 El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296 Casabad, NM (432) 704-5440
 Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

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Project Manager:	Jared Stofel	Bill to: (if different)	JD Mc Cormick
Company Name:	TRC	Company Name:	
Address:	10 Delta Dr. STE 150	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	JD. mack781@gmail.com
Phone:	432-234-3003	Email:	Jared, Tania, Ike, Jlongoria@gmail.com

Project Name:	Rine Spring 2 State SWD	Turn Around	
Project Number:		Routine	☐
Project Location:		Rush: 24HRS	
Sampler's Name:	Tania Baka	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	4.0			Thermometer ID	711007	
Received Intact:	Yes	No		Correction Factor:	-0.2	
Cooler Custody Seals:	Yes	No	N/A	Total Containers:	5	
Sample Custody Seals:	Yes	No	N/A			

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	ANALYSIS REQUEST	Preservative Codes	Sample Comments
NSW-1	S	03/25/20	1340	-		1	chlorides (E30)		
ESW-1			1330	-		1	BTEX (8021)		
ESW-2			1340	-		1	TPH (8015)		
USW-1			1350	-		1			
USW-2			1400	-		1			

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
 Circle Method(s) and Metal(s) to be analyzed: TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1631 / 245.1 / 7470 / 7471 : Hg

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 \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		3/25/20 16:05			



Certificate of Analysis Summary 657044

TRC Solutions, Inc, Midland, TX

Project Name: Pine Springs 2 State SWD

Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Thu Mar-26-20 04:10 pm

Report Date: 27-MAR-20

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	657044-001	657044-002	657044-003	657044-004	657044-005	
	Field Id:	FL-24@1'	FL-26@1	FL-28@1'	FL-29@1'	FL-38@1'	
	Depth:	1- ft	1- ft	1- ft	1- ft	1- ft	
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	
	Sampled:	Mar-26-20 14:00	Mar-26-20 14:10	Mar-26-20 14:20	Mar-26-20 14:30	Mar-26-20 14:40	
BTEX by EPA 8021B	Extracted:	Mar-27-20 10:00	*** ** *	Mar-26-20 18:00	Mar-26-20 18:00	Mar-26-20 18:00	
	Analyzed:	Mar-27-20 12:50	Mar-27-20 13:10	Mar-27-20 04:22	Mar-27-20 04:42	Mar-27-20 05:03	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	
m,p-Xylenes		<0.00399 0.00399	<0.00399 0.00399	<0.00401 0.00401	<0.00400 0.00400	<0.00404 0.00404	
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	
Total Xylenes		<0.002 0.002	<0.002 0.002	<0.002 0.002	<0.002 0.002	<0.00202 0.00202	
Total BTEX		<0.002 0.002	<0.002 0.002	<0.002 0.002	<0.002 0.002	<0.00202 0.00202	
Chloride by EPA 300	Extracted:	Mar-26-20 18:05	Mar-26-20 18:05	Mar-26-20 18:05	Mar-26-20 20:09	Mar-26-20 20:09	
	Analyzed:	Mar-26-20 22:01	Mar-26-20 22:08	Mar-26-20 22:15	Mar-27-20 09:59	Mar-27-20 10:16	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Chloride		505 49.9	467 49.9	423 50.0	146 49.8	232 49.9	
TPH By SW8015 Mod	Extracted:	*** ** *	*** ** *	*** ** *	*** ** *	*** ** *	
	Analyzed:	Mar-27-20 06:36	Mar-27-20 06:57	Mar-27-20 07:17	Mar-27-20 07:37	Mar-27-20 07:58	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Gasoline Range Hydrocarbons (GRO)		<50.2 50.2	<50.2 50.2	<50.2 50.2	<50.0 50.0	<50.2 50.2	
Diesel Range Organics (DRO)		<50.2 50.2	<50.2 50.2	<50.2 50.2	<50.0 50.0	<50.2 50.2	
Motor Oil Range Hydrocarbons (MRO)		<50.2 50.2	<50.2 50.2	<50.2 50.2	<50.0 50.0	<50.2 50.2	
Total TPH		<50.2 50.2	<50.2 50.2	<50.2 50.2	<50 50	<50.2 50.2	

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 - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Version: 1.9%

Jessica Kramer
Project Manager

Analytical Report 657044

for
TRC Solutions, Inc

Project Manager: Jared Stoffel

Pine Springs 2 State SWD

27-MAR-20

Collected By: Client



**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)

Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)

Xenco-Carlsbad (LELAP): Louisiana (05092)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)

Xenco-Tampa: Florida (E87429), North Carolina (483)



27-MAR-20

Project Manager: **Jared Stoffel**

TRC Solutions, Inc

2057 Commerce

Midland, TX 79703

Reference: XENCO Report No(s): **657044**

Pine Springs 2 State SWD

Project Address:

Jared Stoffel:

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) 657044. 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. 657044 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 'Jessica Kramer'.

Jessica Kramer

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 657044****TRC Solutions, Inc, Midland, TX**

Pine Springs 2 State SWD

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FL-24@1'	S	03-26-20 14:00	1 ft	657044-001
FL-26@1	S	03-26-20 14:10	1 ft	657044-002
FL-28@1'	S	03-26-20 14:20	1 ft	657044-003
FL-29@1'	S	03-26-20 14:30	1 ft	657044-004
FL-38@1'	S	03-26-20 14:40	1 ft	657044-005



CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: Pine Springs 2 State SWD

Project ID:

Work Order Number(s): 657044

Report Date: 27-MAR-20

Date Received: 03/26/2020

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3121157 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3121191 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



Certificate of Analytical Results 657044

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-24@1'**

Matrix: Soil

Date Received: 03.26.20 16.10

Lab Sample Id: 657044-001

Date Collected: 03.26.20 14.00

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 18.05

Basis: Wet Weight

Seq Number: 3121147

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	505	49.9	mg/kg	03.26.20 22.01		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.26.20 16.00

Basis: Wet Weight

Seq Number: 3121138

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.27.20 06.36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.27.20 06.36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.27.20 06.36	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.27.20 06.36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	113	%	70-135	03.27.20 06.36		
o-Terphenyl	84-15-1	123	%	70-135	03.27.20 06.36		



Certificate of Analytical Results 657044

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-24@1'**

Matrix: Soil

Date Received: 03.26.20 16.10

Lab Sample Id: 657044-001

Date Collected: 03.26.20 14.00

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 10.00

Basis: Wet Weight

Seq Number: 3121191

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.27.20 12.50	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.27.20 12.50	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.27.20 12.50	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.27.20 12.50	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.27.20 12.50	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.27.20 12.50	U	1
Total BTEX		<0.002	0.002	mg/kg	03.27.20 12.50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	70-130	03.27.20 12.50		
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.27.20 12.50		



Certificate of Analytical Results 657044

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-26@1**

Matrix: Soil

Date Received: 03.26.20 16.10

Lab Sample Id: 657044-002

Date Collected: 03.26.20 14.10

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 18.05

Basis: Wet Weight

Seq Number: 3121147

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	467	49.9	mg/kg	03.26.20 22.08		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.26.20 16.00

Basis: Wet Weight

Seq Number: 3121138

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.27.20 06.57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.27.20 06.57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.27.20 06.57	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.27.20 06.57	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	111	%	70-135	03.27.20 06.57		
o-Terphenyl	84-15-1	122	%	70-135	03.27.20 06.57		



Certificate of Analytical Results 657044

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-26@1**

Matrix: Soil

Date Received: 03.26.20 16.10

Lab Sample Id: 657044-002

Date Collected: 03.26.20 14.10

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 11.44

Basis: Wet Weight

Seq Number: 3121191

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.27.20 13.10	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.27.20 13.10	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.27.20 13.10	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.27.20 13.10	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.27.20 13.10	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.27.20 13.10	U	1
Total BTEX		<0.002	0.002	mg/kg	03.27.20 13.10	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	03.27.20 13.10		
1,4-Difluorobenzene	540-36-3	113	%	70-130	03.27.20 13.10		



Certificate of Analytical Results 657044

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-28@1'**

Matrix: Soil

Date Received: 03.26.20 16.10

Lab Sample Id: 657044-003

Date Collected: 03.26.20 14.20

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 18.05

Basis: Wet Weight

Seq Number: 3121147

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	423	50.0	mg/kg	03.26.20 22.15		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.26.20 16.00

Basis: Wet Weight

Seq Number: 3121138

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.27.20 07.17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.27.20 07.17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.27.20 07.17	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.27.20 07.17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	127	%	70-135	03.27.20 07.17		
o-Terphenyl	84-15-1	135	%	70-135	03.27.20 07.17		



Certificate of Analytical Results 657044

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-28@1'**

Matrix: Soil

Date Received: 03.26.20 16.10

Lab Sample Id: 657044-003

Date Collected: 03.26.20 14.20

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 18.00

Basis: Wet Weight

Seq Number: 3121157

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.27.20 04.22	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.27.20 04.22	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.27.20 04.22	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.27.20 04.22	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.27.20 04.22	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.27.20 04.22	U	1
Total BTEX		<0.002	0.002	mg/kg	03.27.20 04.22	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	112	%	70-130	03.27.20 04.22		
4-Bromofluorobenzene	460-00-4	102	%	70-130	03.27.20 04.22		



Certificate of Analytical Results 657044

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-29@1'**

Matrix: Soil

Date Received: 03.26.20 16.10

Lab Sample Id: 657044-004

Date Collected: 03.26.20 14.30

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 20.09

Basis: Wet Weight

Seq Number: 3121152

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	146	49.8	mg/kg	03.27.20 09.59		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.26.20 16.00

Basis: Wet Weight

Seq Number: 3121138

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.27.20 07.37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.27.20 07.37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.27.20 07.37	U	1
Total TPH	PHC635	<50	50	mg/kg	03.27.20 07.37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	114	%	70-135	03.27.20 07.37		
o-Terphenyl	84-15-1	122	%	70-135	03.27.20 07.37		



Certificate of Analytical Results 657044

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-29@1'**

Matrix: Soil

Date Received: 03.26.20 16.10

Lab Sample Id: 657044-004

Date Collected: 03.26.20 14.30

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 18.00

Basis: Wet Weight

Seq Number: 3121157

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.27.20 04.42	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.27.20 04.42	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.27.20 04.42	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	03.27.20 04.42	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.27.20 04.42	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.27.20 04.42	U	1
Total BTEX		<0.002	0.002	mg/kg	03.27.20 04.42	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	112	%	70-130	03.27.20 04.42		
4-Bromofluorobenzene	460-00-4	99	%	70-130	03.27.20 04.42		



Certificate of Analytical Results 657044

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-38@1'**

Matrix: Soil

Date Received: 03.26.20 16.10

Lab Sample Id: 657044-005

Date Collected: 03.26.20 14.40

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 20.09

Basis: Wet Weight

Seq Number: 3121152

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	232	49.9	mg/kg	03.27.20 10.16		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.26.20 16.00

Basis: Wet Weight

Seq Number: 3121138

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.27.20 07.58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.27.20 07.58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.27.20 07.58	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.27.20 07.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	122	%	70-135	03.27.20 07.58	
o-Terphenyl	84-15-1	129	%	70-135	03.27.20 07.58	



Certificate of Analytical Results 657044

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-38@1'**

Matrix: Soil

Date Received: 03.26.20 16.10

Lab Sample Id: 657044-005

Date Collected: 03.26.20 14.40

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.26.20 18.00

Basis: Wet Weight

Seq Number: 3121157

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.27.20 05.03	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.27.20 05.03	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.27.20 05.03	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	03.27.20 05.03	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.27.20 05.03	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	03.27.20 05.03	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.27.20 05.03	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	03.27.20 05.03		
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.27.20 05.03		



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



TRC Solutions, Inc
Pine Springs 2 State SWD

Analytical Method: Chloride by EPA 300

Seq Number: 3121147

MB Sample Id: 7699896-1-BLK

Matrix: Solid

LCS Sample Id: 7699896-1-BKS

Prep Method: E300P

Date Prep: 03.26.20

LCSD Sample Id: 7699896-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	100	100	100	101	101	90-110	1	20	mg/kg	03.26.20 19:22	

Analytical Method: Chloride by EPA 300

Seq Number: 3121152

MB Sample Id: 7699897-1-BLK

Matrix: Solid

LCS Sample Id: 7699897-1-BKS

Prep Method: E300P

Date Prep: 03.26.20

LCSD Sample Id: 7699897-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	265	106	266	106	90-110	0	20	mg/kg	03.27.20 09:48	

Analytical Method: Chloride by EPA 300

Seq Number: 3121147

Parent Sample Id: 657040-001

Matrix: Soil

MS Sample Id: 657040-001 S

Prep Method: E300P

Date Prep: 03.26.20

MSD Sample Id: 657040-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<9.98	200	217	109	216	108	90-110	0	20	mg/kg	03.26.20 19:42	

Analytical Method: Chloride by EPA 300

Seq Number: 3121147

Parent Sample Id: 657040-011

Matrix: Soil

MS Sample Id: 657040-011 S

Prep Method: E300P

Date Prep: 03.26.20

MSD Sample Id: 657040-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<9.98	200	212	106	211	106	90-110	0	20	mg/kg	03.26.20 20:55	

Analytical Method: Chloride by EPA 300

Seq Number: 3121152

Parent Sample Id: 657044-004

Matrix: Soil

MS Sample Id: 657044-004 S

Prep Method: E300P

Date Prep: 03.26.20

MSD Sample Id: 657044-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	146	200	327	91	337	96	90-110	3	20	mg/kg	03.27.20 10:05	

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. = $\text{Log}(\text{Sample Duplicate}) - \text{Log}(\text{Original Sample})$

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



TRC Solutions, Inc
Pine Springs 2 State SWD

Analytical Method: TPH By SW8015 Mod

Seq Number: 3121138

MB Sample Id: 7699848-1-BLK

Matrix: Solid

LCS Sample Id: 7699848-1-BKS

Prep Method: SW8015P

Date Prep: 03.26.20

LCSD Sample Id: 7699848-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	956	96	951	95	70-135	1	35	mg/kg	03.27.20 00:51	
Diesel Range Organics (DRO)	<50.0	1000	1130	113	1110	111	70-135	2	35	mg/kg	03.27.20 00:51	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		121		124		70-135	%	03.27.20 00:51
o-Terphenyl	118		129		127		70-135	%	03.27.20 00:51

Analytical Method: TPH By SW8015 Mod

Seq Number: 3121138

Matrix: Solid

MB Sample Id: 7699848-1-BLK

Prep Method: SW8015P

Date Prep: 03.26.20

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	03.27.20 00:31	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3121138

Matrix: Soil

Parent Sample Id: 656942-014

MS Sample Id: 656942-014 S

Prep Method: SW8015P

Date Prep: 03.26.20

MSD Sample Id: 656942-014 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	998	998	100	984	98	70-135	1	35	mg/kg	03.27.20 01:52	
Diesel Range Organics (DRO)	<49.9	998	1170	117	1150	115	70-135	2	35	mg/kg	03.27.20 01:52	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	129		129		70-135	%	03.27.20 01:52
o-Terphenyl	132		131		70-135	%	03.27.20 01:52

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. = $\text{Log}(\text{Sample Duplicate}) - \text{Log}(\text{Original Sample})$

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



TRC Solutions, Inc
Pine Springs 2 State SWD

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121157

MB Sample Id: 7699887-1-BLK

Matrix: Solid

LCS Sample Id: 7699887-1-BKS

Prep Method: SW5030B

Date Prep: 03.26.20

LCSD Sample Id: 7699887-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.108	108	0.106	106	70-130	2	35	mg/kg	03.26.20 21:13	
Toluene	<0.00200	0.100	0.102	102	0.101	101	70-130	1	35	mg/kg	03.26.20 21:13	
Ethylbenzene	<0.00200	0.100	0.0957	96	0.0945	95	71-129	1	35	mg/kg	03.26.20 21:13	
m,p-Xylenes	<0.00400	0.200	0.197	99	0.194	97	70-135	2	35	mg/kg	03.26.20 21:13	
o-Xylene	<0.00200	0.100	0.100	100	0.0994	99	71-133	1	35	mg/kg	03.26.20 21:13	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	112		109		109		70-130	%	03.26.20 21:13
4-Bromofluorobenzene	95		91		94		70-130	%	03.26.20 21:13

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121191

MB Sample Id: 7699889-1-BLK

Matrix: Solid

LCS Sample Id: 7699889-1-BKS

Prep Method: SW5030B

Date Prep: 03.27.20

LCSD Sample Id: 7699889-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.110	110	0.115	115	70-130	4	35	mg/kg	03.27.20 10:48	
Toluene	<0.00200	0.100	0.105	105	0.111	111	70-130	6	35	mg/kg	03.27.20 10:48	
Ethylbenzene	<0.00200	0.100	0.0995	100	0.105	105	71-129	5	35	mg/kg	03.27.20 10:48	
m,p-Xylenes	<0.00400	0.200	0.206	103	0.217	109	70-135	5	35	mg/kg	03.27.20 10:48	
o-Xylene	<0.00200	0.100	0.102	102	0.108	108	71-133	6	35	mg/kg	03.27.20 10:48	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		109		108		70-130	%	03.27.20 10:48
4-Bromofluorobenzene	94		92		94		70-130	%	03.27.20 10:48

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121157

Parent Sample Id: 656968-007

Matrix: Soil

MS Sample Id: 656968-007 S

Prep Method: SW5030B

Date Prep: 03.26.20

MSD Sample Id: 656968-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.108	107	0.110	111	70-130	2	35	mg/kg	03.26.20 21:54	
Toluene	<0.00202	0.101	0.102	101	0.104	105	70-130	2	35	mg/kg	03.26.20 21:54	
Ethylbenzene	<0.00202	0.101	0.0962	95	0.0972	98	71-129	1	35	mg/kg	03.26.20 21:54	
m,p-Xylenes	<0.00404	0.202	0.197	98	0.201	102	70-135	2	35	mg/kg	03.26.20 21:54	
o-Xylene	<0.00202	0.101	0.0988	98	0.102	103	71-133	3	35	mg/kg	03.26.20 21:54	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		108		70-130	%	03.26.20 21:54
4-Bromofluorobenzene	94		92		70-130	%	03.26.20 21:54

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



TRC Solutions, Inc
Pine Springs 2 State SWD

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121191

Parent Sample Id: 657040-001

Matrix: Soil

MS Sample Id: 657040-001 S

Prep Method: SW5030B

Date Prep: 03.27.20

MSD Sample Id: 657040-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.129	129	0.120	120	70-130	7	35	mg/kg	03.27.20 11:28	
Toluene	<0.00200	0.0998	0.124	124	0.114	114	70-130	8	35	mg/kg	03.27.20 11:28	
Ethylbenzene	<0.00200	0.0998	0.116	116	0.106	106	71-129	9	35	mg/kg	03.27.20 11:28	
m,p-Xylenes	<0.00399	0.200	0.240	120	0.219	110	70-135	9	35	mg/kg	03.27.20 11:28	
o-Xylene	<0.00200	0.0998	0.120	120	0.109	109	71-133	10	35	mg/kg	03.27.20 11:28	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		108		70-130	%	03.27.20 11:28
4-Bromofluorobenzene	93		93		70-130	%	03.27.20 11:28

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



Chain of Custody

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432) 704-5440 EL Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296 Crasabad, NM (432) 704-5440
Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

Work Order No: 657-65704

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Page 1 of 1

Project Manager: Jared Stoffel		Bill to: (if different)		JD McCormick	
Company Name: TRC		Company Name:		Black River Trucking	
Address: 10 Deste A. STE 150E		Address:		Frankie Cocoba@Idad.com	
City, State ZIP: Midland, TX 79705		City, State ZIP:		JD.mack701@gmail.com	
Phone: 432-238-3003		Email:		Jared.Tania@xenco.com	

Project Name: Pine Springs 2 State SWD		Turn Around		Pres. Code	
Project Number:		Routine ☐			
Project Location		Rush: 24hrs			
Sampler's Name: Tania Babu		Due Date:			
PO #:		Quote #:			

SAMPLE RECEIPT		Temp Blank: 2.8		Wet Ice: ☒ Yes ☐ No	
Temperature (°C):		Received Intact: ☒ Yes ☐ No		Thermometer ID: TNN007	
Cooler Custody Seals: Yes ☒ No ☐ N/A		Correction Factor: -0.2			
Sample Custody Seals: Yes ☒ No ☐ N/A		Total Containers: 5			

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Pres. Code	ANALYSIS REQUEST																Preservative Codes	Sample Comments
FL-24Q11		S	03/26/20	1400	1'	1		Chlorides (E300)																MeOH: Me	
FL-26Q11				1410				(BTEX (B021)																None: NO	
FL-28Q11				1420				(SI08) HCL																HNO3: HN	
FL-29Q11				1430																				H2SO4: H2	
FL-30Q11				1440																				HCL: HL	
																								NaOH: Na	
																								Zn Acetate: NaOH: Zn	
																								TAT starts the day received by the lab, if received by 4:00pm	

Total 200.7 / 6010 200.8 / 6020:		8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn	
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti 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 \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
				3/26/20 16:10

Revised Date 02/26/19 Rev. 2019.



Certificate of Analysis Summary 657199

TRC Solutions, Inc, Midland, TX

Project Name: Pine Springs 2 State SWD

Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Fri Mar-27-20 04:05 pm

Report Date: 31-MAR-20

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	657199-001	657199-002	657199-003	657199-004	657199-005	657199-006
	Field Id:	FL-12 @2.5'	FL-17 @2.5'	FL-20 @ 2'	FL-21 @2'	FL-22 @2'	FL-23 @1.5'
	Depth:	2.5- ft	2.5- ft	2- ft	2- ft	2- ft	1.5- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Mar-27-20 10:20	Mar-27-20 10:30	Mar-27-20 10:40	Mar-27-20 10:50	Mar-27-20 11:00	Mar-27-20 11:10
BTEX by EPA 8021B	Extracted:	Mar-27-20 20:13	Mar-27-20 20:13	Mar-27-20 20:13	Mar-27-20 20:13	Mar-27-20 20:13	Mar-27-20 20:13
	Analyzed:	Mar-27-20 22:42	Mar-27-20 23:02	Mar-27-20 23:22	Mar-27-20 23:43	Mar-28-20 00:03	Mar-28-20 00:24
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200
m,p-Xylenes		<0.00399 0.00399	<0.00399 0.00399	<0.00398 0.00398	<0.00397 0.00397	<0.00398 0.00398	<0.00401 0.00401
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200
Total Xylenes		<0.002 0.002	<0.002 0.002	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199	<0.002 0.002
Total BTEX		<0.002 0.002	<0.002 0.002	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199	<0.002 0.002
Chloride by EPA 300	Extracted:	Mar-27-20 17:01	Mar-27-20 17:01	Mar-27-20 17:01	Mar-27-20 17:01	Mar-27-20 17:01	Mar-27-20 17:01
	Analyzed:	Mar-27-20 19:34	Mar-27-20 19:40	Mar-27-20 20:00	Mar-27-20 20:05	Mar-27-20 20:11	Mar-27-20 20:28
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		132 49.6	371 49.7	103 49.9	213 49.8	171 49.9	362 49.8
TPH by SW8015 Mod	Extracted:	Mar-27-20 18:00	Mar-27-20 18:00	Mar-27-20 18:00	Mar-27-20 18:00	Mar-27-20 18:00	Mar-27-20 18:00
	Analyzed:	Mar-28-20 09:52	Mar-30-20 12:32	Mar-28-20 11:13	Mar-28-20 11:34	Mar-30-20 12:32	Mar-28-20 12:14
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<49.8 49.8	<49.9 49.9	<49.9 49.9	<50.1 50.1	<50.0 50.0
Diesel Range Organics (DRO)		<49.9 49.9	<49.8 49.8	<49.9 49.9	<49.9 49.9	<50.1 50.1	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<49.8 49.8	<49.9 49.9	<49.9 49.9	<50.1 50.1	<50.0 50.0
Total TPH		<49.9 49.9	<49.8 49.8	<49.9 49.9	<49.9 49.9	<50.1 50.1	<50 50

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Version: 1.9%

Jessica Kramer
Project Manager



Certificate of Analysis Summary 657199

TRC Solutions, Inc, Midland, TX

Project Name: Pine Springs 2 State SWD

Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Fri Mar-27-20 04:05 pm

Report Date: 31-MAR-20

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	657199-007	657199-008	657199-009	657199-010	657199-011	657199-012
	Field Id:	FL-25 @2'	FL-27 @2'	FL-30 @2'	FL-31 @2'	FL-32 @2'	FL-33 @1'
	Depth:	2- ft	2- ft	2- ft	2- ft	2- ft	1- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Mar-27-20 11:20	Mar-27-20 11:30	Mar-27-20 11:40	Mar-27-20 11:50	Mar-27-20 12:00	Mar-27-20 12:10
BTEX by EPA 8021B	Extracted:	Mar-27-20 20:13	Mar-27-20 20:13	Mar-27-20 20:13	Mar-27-20 20:13	Mar-27-20 20:13	Mar-27-20 20:13
	Analyzed:	Mar-28-20 00:44	Mar-28-20 01:04	Mar-28-20 01:25	Mar-28-20 01:45	Mar-28-20 02:46	Mar-28-20 03:07
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00399 0.00399	<0.00398 0.00398	<0.00402 0.00402	<0.00398 0.00398	<0.00399 0.00399	<0.00401 0.00401
o-Xylene		<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.002 0.002	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.002 0.002	<0.002 0.002
Total BTEX		<0.002 0.002	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.002 0.002	<0.002 0.002
Chloride by EPA 300	Extracted:	Mar-27-20 17:01	Mar-27-20 17:01	Mar-27-20 17:01	Mar-27-20 17:01	Mar-27-20 17:01	Mar-27-20 17:01
	Analyzed:	Mar-27-20 20:34	Mar-27-20 20:39	Mar-27-20 20:45	Mar-27-20 20:51	Mar-27-20 20:56	Mar-27-20 21:02
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		82.9 49.9	166 49.6	241 50.1	58.9 50.2	58.2 50.3	202 50.4
TPH by SW8015 Mod	Extracted:	Mar-27-20 18:00	Mar-27-20 18:00	Mar-27-20 18:00	Mar-27-20 18:00	Mar-27-20 18:00	Mar-27-20 18:00
	Analyzed:	Mar-28-20 12:35	Mar-28-20 12:55	Mar-28-20 13:16	Mar-28-20 13:36	Mar-28-20 14:16	Mar-28-20 14:37
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.1 50.1	<50.2 50.2	<50.0 50.0	<50.2 50.2	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<50.1 50.1	<50.2 50.2	<50.0 50.0	<50.2 50.2	<50.0 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1	<50.2 50.2	<50.0 50.0	<50.2 50.2	<50.0 50.0	<49.9 49.9
Total TPH		<50.1 50.1	<50.2 50.2	<50 50	<50.2 50.2	<50 50	<49.9 49.9

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

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Version: 1.0%

Jessica Kramer
Project Manager



Certificate of Analysis Summary 657199

TRC Solutions, Inc, Midland, TX

Project Name: Pine Springs 2 State SWD

Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Fri Mar-27-20 04:05 pm

Report Date: 31-MAR-20

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	657199-013	657199-014	657199-015	657199-016	657199-017	657199-018
	Field Id:	FL-34 @1'	FL-35 @3'	FL-36 @3'	FL-37 @1.5'	FL-39 @1'	FL-42 @1'
	Depth:	1- ft	3- ft	3- ft	1.5- ft	1- ft	1- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Mar-27-20 12:20	Mar-27-20 12:30	Mar-27-20 12:40	Mar-27-20 12:50	Mar-27-20 13:00	Mar-27-20 13:10
BTEX by EPA 8021B	Extracted:	Mar-27-20 20:13	Mar-27-20 20:13	Mar-27-20 20:13	Mar-27-20 20:13	Mar-27-20 20:13	Mar-27-20 20:13
	Analyzed:	Mar-28-20 03:27	Mar-28-20 03:48	Mar-28-20 04:08	Mar-28-20 04:28	Mar-28-20 04:49	Mar-28-20 05:09
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00396 0.00396	<0.00401 0.00401	<0.00400 0.00400	<0.00396 0.00396	<0.00400 0.00400	<0.00399 0.00399
o-Xylene		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00198 0.00198	<0.002 0.002	<0.002 0.002	<0.00198 0.00198	<0.002 0.002	<0.002 0.002
Total BTEX		<0.00198 0.00198	<0.002 0.002	<0.002 0.002	<0.00198 0.00198	<0.002 0.002	<0.002 0.002
Chloride by EPA 300	Extracted:	Mar-27-20 17:01	Mar-27-20 19:25	Mar-27-20 19:25	Mar-27-20 19:25	Mar-27-20 19:25	Mar-27-20 19:25
	Analyzed:	Mar-27-20 21:08	Mar-27-20 21:42	Mar-27-20 21:59	Mar-27-20 22:04	Mar-27-20 22:10	Mar-27-20 22:16
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		530 50.1	110 X 49.4	90.0 49.8	136 49.6	212 49.9	289 49.8
TPH by SW8015 Mod	Extracted:	Mar-27-20 18:00	Mar-27-20 18:00	Mar-27-20 18:00	Mar-27-20 18:00	Mar-27-20 18:00	Mar-27-20 18:00
	Analyzed:	Mar-30-20 12:52	Mar-28-20 15:18	Mar-28-20 15:38	Mar-28-20 15:58	Mar-30-20 12:52	Mar-30-20 13:13
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.1 50.1	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.2 50.2	<49.9 49.9
Diesel Range Organics (DRO)		<50.1 50.1	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.2 50.2	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.2 50.2	<49.9 49.9
Total TPH		<50.1 50.1	<50 50	<50 50	<50 50	<50.2 50.2	<49.9 49.9

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

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Version: 1.9%

Jessica Kramer
Project Manager



Certificate of Analysis Summary 657199

TRC Solutions, Inc, Midland, TX

Project Name: Pine Springs 2 State SWD

Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Fri Mar-27-20 04:05 pm

Report Date: 31-MAR-20

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	657199-019					
	Field Id:	FL-43 @ 1'					
	Depth:	1- ft					
	Matrix:	SOIL					
	Sampled:	Mar-27-20 13:20					
BTEX by EPA 8021B	Extracted:	Mar-27-20 20:13					
	Analyzed:	Mar-28-20 05:30					
	Units/RL:	mg/kg RL					
Benzene		<0.00201 0.00201					
Toluene		<0.00201 0.00201					
Ethylbenzene		<0.00201 0.00201					
m,p-Xylenes		<0.00402 0.00402					
o-Xylene		<0.00201 0.00201					
Total Xylenes		<0.00201 0.00201					
Total BTEX		<0.00201 0.00201					
Chloride by EPA 300	Extracted:	Mar-27-20 19:25					
	Analyzed:	Mar-27-20 22:33					
	Units/RL:	mg/kg RL					
Chloride		172 49.8					
TPH by SW8015 Mod	Extracted:	Mar-27-20 18:00					
	Analyzed:	Mar-30-20 13:13					
	Units/RL:	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<50.3 50.3					
Diesel Range Organics (DRO)		<50.3 50.3					
Motor Oil Range Hydrocarbons (MRO)		<50.3 50.3					
Total TPH		<50.3 50.3					

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Version: 1.0%

Jessica Kramer
Project Manager

Analytical Report 657199

for
TRC Solutions, Inc

Project Manager: Jared Stoffel

Pine Springs 2 State SWD

31-MAR-20

Collected By: Client



**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)

Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)

Xenco-Carlsbad (LELAP): Louisiana (05092)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)

Xenco-Tampa: Florida (E87429), North Carolina (483)



31-MAR-20

Project Manager: **Jared Stoffel**

TRC Solutions, Inc

2057 Commerce

Midland, TX 79703

Reference: XENCO Report No(s): **657199**

Pine Springs 2 State SWD

Project Address:

Jared Stoffel:

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) 657199. 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. 657199 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 'Jessica Kramer'.

Jessica Kramer

Project Manager

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

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Sample Cross Reference 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FL-12 @2.5'	S	03-27-20 10:20	2.5 ft	657199-001
FL-17 @2.5'	S	03-27-20 10:30	2.5 ft	657199-002
FL-20 @ 2'	S	03-27-20 10:40	2 ft	657199-003
FL-21 @2'	S	03-27-20 10:50	2 ft	657199-004
FL-22 @2'	S	03-27-20 11:00	2 ft	657199-005
FL-23 @1.5'	S	03-27-20 11:10	1.5 ft	657199-006
FL-25 @2'	S	03-27-20 11:20	2 ft	657199-007
FL-27 @2'	S	03-27-20 11:30	2 ft	657199-008
FL-30 @2'	S	03-27-20 11:40	2 ft	657199-009
FL-31 @2'	S	03-27-20 11:50	2 ft	657199-010
FL-32 @2'	S	03-27-20 12:00	2 ft	657199-011
FL-33 @1'	S	03-27-20 12:10	1 ft	657199-012
FL-34 @1'	S	03-27-20 12:20	1 ft	657199-013
FL-35 @3'	S	03-27-20 12:30	3 ft	657199-014
FL-36 @3'	S	03-27-20 12:40	3 ft	657199-015
FL-37 @1.5'	S	03-27-20 12:50	1.5 ft	657199-016
FL-39 @1'	S	03-27-20 13:00	1 ft	657199-017
FL-42 @1'	S	03-27-20 13:10	1 ft	657199-018
FL-43 @ 1'	S	03-27-20 13:20	1 ft	657199-019

**CASE NARRATIVE****Client Name: TRC Solutions, Inc****Project Name: Pine Springs 2 State SWD**

Project ID:
Work Order Number(s): 657199

Report Date: 31-MAR-20
Date Received: 03/27/2020

Sample receipt non conformances and comments:

V1.001 Revision - (client email) Corrected sample names. JK 03/31/20

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3121280 TPH by SW8015 Mod

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

Samples affected are: 657199-009,657199-014,657199-012,657199-010.

Batch: LBA-3121289 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3121328 Chloride by EPA 300

Lab Sample ID 657199-014 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: 657199-014, -015, -016, -017, -018, -019.

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



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-12 @2.5'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-001

Date Collected: 03.27.20 10.20

Sample Depth: 2.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 17.01

Basis: Wet Weight

Seq Number: 3121325

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	132	49.6	mg/kg	03.27.20 19.34		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.27.20 18.00

Basis: Wet Weight

Seq Number: 3121280

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.28.20 09.52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.28.20 09.52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.28.20 09.52	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.28.20 09.52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	110	%	70-135	03.28.20 09.52		
o-Terphenyl	84-15-1	116	%	70-135	03.28.20 09.52		



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-12 @2.5'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-001

Date Collected: 03.27.20 10.20

Sample Depth: 2.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 20.13

Basis: Wet Weight

Seq Number: 3121289

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.27.20 22.42	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.27.20 22.42	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.27.20 22.42	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.27.20 22.42	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.27.20 22.42	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.27.20 22.42	U	1
Total BTEX		<0.002	0.002	mg/kg	03.27.20 22.42	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	99	%	70-130	03.27.20 22.42		
1,4-Difluorobenzene	540-36-3	109	%	70-130	03.27.20 22.42		



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-17 @2.5'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-002

Date Collected: 03.27.20 10.30

Sample Depth: 2.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 17.01

Basis: Wet Weight

Seq Number: 3121325

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	371	49.7	mg/kg	03.27.20 19.40		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.27.20 18.00

Basis: Wet Weight

Seq Number: 3121280

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	03.30.20 12.32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	03.30.20 12.32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	03.30.20 12.32	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	03.30.20 12.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	03.30.20 12.32	
o-Terphenyl	84-15-1	97	%	70-135	03.30.20 12.32	



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-17 @2.5'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-002

Date Collected: 03.27.20 10.30

Sample Depth: 2.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 20.13

Basis: Wet Weight

Seq Number: 3121289

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.27.20 23.02	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.27.20 23.02	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.27.20 23.02	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.27.20 23.02	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.27.20 23.02	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.27.20 23.02	U	1
Total BTEX		<0.002	0.002	mg/kg	03.27.20 23.02	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	03.27.20 23.02		
1,4-Difluorobenzene	540-36-3	110	%	70-130	03.27.20 23.02		



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-20 @ 2'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-003

Date Collected: 03.27.20 10.40

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 17.01

Basis: Wet Weight

Seq Number: 3121325

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	103	49.9	mg/kg	03.27.20 20.00		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.27.20 18.00

Basis: Wet Weight

Seq Number: 3121280

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.28.20 11.13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.28.20 11.13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.28.20 11.13	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.28.20 11.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	123	%	70-135	03.28.20 11.13	
o-Terphenyl	84-15-1	130	%	70-135	03.28.20 11.13	



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-20 @ 2'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-003

Date Collected: 03.27.20 10.40

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 20.13

Basis: Wet Weight

Seq Number: 3121289

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.27.20 23.22	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.27.20 23.22	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.27.20 23.22	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.27.20 23.22	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.27.20 23.22	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.27.20 23.22	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.27.20 23.22	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.27.20 23.22		
1,4-Difluorobenzene	540-36-3	110	%	70-130	03.27.20 23.22		



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-21 @2'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-004

Date Collected: 03.27.20 10.50

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 17.01

Basis: Wet Weight

Seq Number: 3121325

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	213	49.8	mg/kg	03.27.20 20.05		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.27.20 18.00

Basis: Wet Weight

Seq Number: 3121280

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.28.20 11.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.28.20 11.34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.28.20 11.34	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.28.20 11.34	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	104	%	70-135	03.28.20 11.34		
o-Terphenyl	84-15-1	112	%	70-135	03.28.20 11.34		



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-21 @2'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-004

Date Collected: 03.27.20 10.50

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 20.13

Basis: Wet Weight

Seq Number: 3121289

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	03.27.20 23.43	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	03.27.20 23.43	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	03.27.20 23.43	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	03.27.20 23.43	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	03.27.20 23.43	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	03.27.20 23.43	U	1
Total BTEX		<0.00198	0.00198	mg/kg	03.27.20 23.43	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.27.20 23.43		
4-Bromofluorobenzene	460-00-4	99	%	70-130	03.27.20 23.43		



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-22 @2'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-005

Date Collected: 03.27.20 11.00

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 17.01

Basis: Wet Weight

Seq Number: 3121325

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	171	49.9	mg/kg	03.27.20 20.11		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.27.20 18.00

Basis: Wet Weight

Seq Number: 3121280

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	03.30.20 12.32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	03.30.20 12.32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	03.30.20 12.32	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	03.30.20 12.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	03.30.20 12.32	
o-Terphenyl	84-15-1	95	%	70-135	03.30.20 12.32	



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-22 @2'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-005

Date Collected: 03.27.20 11.00

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 20.13

Basis: Wet Weight

Seq Number: 3121289

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.28.20 00.03	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.28.20 00.03	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.28.20 00.03	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.28.20 00.03	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.28.20 00.03	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.28.20 00.03	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.28.20 00.03	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.28.20 00.03		
1,4-Difluorobenzene	540-36-3	112	%	70-130	03.28.20 00.03		



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-23 @1.5'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-006

Date Collected: 03.27.20 11.10

Sample Depth: 1.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 17.01

Basis: Wet Weight

Seq Number: 3121325

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	362	49.8	mg/kg	03.27.20 20.28		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.27.20 18.00

Basis: Wet Weight

Seq Number: 3121280

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.28.20 12.14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.28.20 12.14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.28.20 12.14	U	1
Total TPH	PHC635	<50	50	mg/kg	03.28.20 12.14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	121	%	70-135	03.28.20 12.14		
o-Terphenyl	84-15-1	119	%	70-135	03.28.20 12.14		



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-23 @1.5'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-006

Date Collected: 03.27.20 11.10

Sample Depth: 1.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 20.13

Basis: Wet Weight

Seq Number: 3121289

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.28.20 00.24	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.28.20 00.24	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.28.20 00.24	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.28.20 00.24	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.28.20 00.24	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.28.20 00.24	U	1
Total BTEX		<0.002	0.002	mg/kg	03.28.20 00.24	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	03.28.20 00.24		
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.28.20 00.24		



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-25 @2'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-007

Date Collected: 03.27.20 11.20

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 17.01

Basis: Wet Weight

Seq Number: 3121325

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	82.9	49.9	mg/kg	03.27.20 20.34		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.27.20 18.00

Basis: Wet Weight

Seq Number: 3121280

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	03.28.20 12.35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	03.28.20 12.35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	03.28.20 12.35	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	03.28.20 12.35	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	124	%	70-135	03.28.20 12.35		
o-Terphenyl	84-15-1	133	%	70-135	03.28.20 12.35		



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-25 @2'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-007

Date Collected: 03.27.20 11.20

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 20.13

Basis: Wet Weight

Seq Number: 3121289

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.28.20 00.44	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.28.20 00.44	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.28.20 00.44	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.28.20 00.44	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.28.20 00.44	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.28.20 00.44	U	1
Total BTEX		<0.002	0.002	mg/kg	03.28.20 00.44	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	03.28.20 00.44		
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.28.20 00.44		



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-27 @2'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-008

Date Collected: 03.27.20 11.30

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 17.01

Basis: Wet Weight

Seq Number: 3121325

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	166	49.6	mg/kg	03.27.20 20.39		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.27.20 18.00

Basis: Wet Weight

Seq Number: 3121280

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.28.20 12.55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.28.20 12.55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.28.20 12.55	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.28.20 12.55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	115	%	70-135	03.28.20 12.55		
o-Terphenyl	84-15-1	122	%	70-135	03.28.20 12.55		



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-27 @2'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-008

Date Collected: 03.27.20 11.30

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 20.13

Basis: Wet Weight

Seq Number: 3121289

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.28.20 01.04	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.28.20 01.04	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.28.20 01.04	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.28.20 01.04	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.28.20 01.04	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.28.20 01.04	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.28.20 01.04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.28.20 01.04		
4-Bromofluorobenzene	460-00-4	97	%	70-130	03.28.20 01.04		



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-30 @2'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-009

Date Collected: 03.27.20 11.40

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 17.01

Basis: Wet Weight

Seq Number: 3121325

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	241	50.1	mg/kg	03.27.20 20.45		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.27.20 18.00

Basis: Wet Weight

Seq Number: 3121280

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.28.20 13.16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.28.20 13.16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.28.20 13.16	U	1
Total TPH	PHC635	<50	50	mg/kg	03.28.20 13.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	127	%	70-135	03.28.20 13.16	
o-Terphenyl	84-15-1	142	%	70-135	03.28.20 13.16	**



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-30 @2'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-009

Date Collected: 03.27.20 11.40

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 20.13

Basis: Wet Weight

Seq Number: 3121289

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.28.20 01.25	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.28.20 01.25	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.28.20 01.25	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.28.20 01.25	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.28.20 01.25	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.28.20 01.25	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.28.20 01.25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	03.28.20 01.25		
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.28.20 01.25		



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-31 @2'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-010

Date Collected: 03.27.20 11.50

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 17.01

Basis: Wet Weight

Seq Number: 3121325

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	58.9	50.2	mg/kg	03.27.20 20.51		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.27.20 18.00

Basis: Wet Weight

Seq Number: 3121280

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.28.20 13.36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.28.20 13.36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.28.20 13.36	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.28.20 13.36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	128	%	70-135	03.28.20 13.36		
o-Terphenyl	84-15-1	137	%	70-135	03.28.20 13.36	**	



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-31 @2'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-010

Date Collected: 03.27.20 11.50

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 20.13

Basis: Wet Weight

Seq Number: 3121289

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.28.20 01.45	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.28.20 01.45	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.28.20 01.45	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.28.20 01.45	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.28.20 01.45	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.28.20 01.45	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.28.20 01.45	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.28.20 01.45		
4-Bromofluorobenzene	460-00-4	99	%	70-130	03.28.20 01.45		



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-32 @2'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-011

Date Collected: 03.27.20 12.00

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 17.01

Basis: Wet Weight

Seq Number: 3121325

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	58.2	50.3	mg/kg	03.27.20 20.56		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.27.20 18.00

Basis: Wet Weight

Seq Number: 3121280

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.28.20 14.16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.28.20 14.16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.28.20 14.16	U	1
Total TPH	PHC635	<50	50	mg/kg	03.28.20 14.16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	119	%	70-135	03.28.20 14.16		
o-Terphenyl	84-15-1	128	%	70-135	03.28.20 14.16		



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-32 @2'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-011

Date Collected: 03.27.20 12.00

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 20.13

Basis: Wet Weight

Seq Number: 3121289

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.28.20 02.46	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.28.20 02.46	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.28.20 02.46	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.28.20 02.46	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.28.20 02.46	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.28.20 02.46	U	1
Total BTEX		<0.002	0.002	mg/kg	03.28.20 02.46	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	03.28.20 02.46		
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.28.20 02.46		



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-33 @1'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-012

Date Collected: 03.27.20 12.10

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 17.01

Basis: Wet Weight

Seq Number: 3121325

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	202	50.4	mg/kg	03.27.20 21.02		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.27.20 18.00

Basis: Wet Weight

Seq Number: 3121280

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.28.20 14.37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.28.20 14.37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.28.20 14.37	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.28.20 14.37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	134	%	70-135	03.28.20 14.37		
o-Terphenyl	84-15-1	142	%	70-135	03.28.20 14.37	**	



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-33 @1'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-012

Date Collected: 03.27.20 12.10

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 20.13

Basis: Wet Weight

Seq Number: 3121289

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.28.20 03.07	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.28.20 03.07	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.28.20 03.07	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.28.20 03.07	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.28.20 03.07	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.28.20 03.07	U	1
Total BTEX		<0.002	0.002	mg/kg	03.28.20 03.07	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	112	%	70-130	03.28.20 03.07		
4-Bromofluorobenzene	460-00-4	96	%	70-130	03.28.20 03.07		



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-34 @1'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-013

Date Collected: 03.27.20 12.20

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 17.01

Basis: Wet Weight

Seq Number: 3121325

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	530	50.1	mg/kg	03.27.20 21.08		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.27.20 18.00

Basis: Wet Weight

Seq Number: 3121280

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	03.30.20 12.52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	03.30.20 12.52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	03.30.20 12.52	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	03.30.20 12.52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	124	%	70-135	03.30.20 12.52		
o-Terphenyl	84-15-1	132	%	70-135	03.30.20 12.52		



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-34 @1'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-013

Date Collected: 03.27.20 12.20

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 20.13

Basis: Wet Weight

Seq Number: 3121289

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	03.28.20 03.27	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	03.28.20 03.27	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	03.28.20 03.27	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	03.28.20 03.27	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	03.28.20 03.27	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	03.28.20 03.27	U	1
Total BTEX		<0.00198	0.00198	mg/kg	03.28.20 03.27	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.28.20 03.27		
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.28.20 03.27		



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-35 @3'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-014

Date Collected: 03.27.20 12.30

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 19.25

Basis: Wet Weight

Seq Number: 3121328

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	110	49.4	mg/kg	03.27.20 21.42	X	5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.27.20 18.00

Basis: Wet Weight

Seq Number: 3121280

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.28.20 15.18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.28.20 15.18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.28.20 15.18	U	1
Total TPH	PHC635	<50	50	mg/kg	03.28.20 15.18	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	130	%	70-135	03.28.20 15.18		
o-Terphenyl	84-15-1	138	%	70-135	03.28.20 15.18	**	



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-35 @3'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-014

Date Collected: 03.27.20 12.30

Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 20.13

Basis: Wet Weight

Seq Number: 3121289

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.28.20 03.48	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.28.20 03.48	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.28.20 03.48	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.28.20 03.48	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.28.20 03.48	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.28.20 03.48	U	1
Total BTEX		<0.002	0.002	mg/kg	03.28.20 03.48	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.28.20 03.48		
1,4-Difluorobenzene	540-36-3	110	%	70-130	03.28.20 03.48		



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-36 @3'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-015

Date Collected: 03.27.20 12.40

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 19.25

Basis: Wet Weight

Seq Number: 3121328

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	90.0	49.8	mg/kg	03.27.20 21.59		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.27.20 18.00

Basis: Wet Weight

Seq Number: 3121280

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.28.20 15.38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.28.20 15.38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.28.20 15.38	U	1
Total TPH	PHC635	<50	50	mg/kg	03.28.20 15.38	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	119	%	70-135	03.28.20 15.38		
o-Terphenyl	84-15-1	125	%	70-135	03.28.20 15.38		



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-36 @3'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-015

Date Collected: 03.27.20 12.40

Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 20.13

Basis: Wet Weight

Seq Number: 3121289

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.28.20 04.08	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.28.20 04.08	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.28.20 04.08	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	03.28.20 04.08	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.28.20 04.08	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.28.20 04.08	U	1
Total BTEX		<0.002	0.002	mg/kg	03.28.20 04.08	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.28.20 04.08		
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.28.20 04.08		



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-37 @1.5'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-016

Date Collected: 03.27.20 12.50

Sample Depth: 1.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 19.25

Basis: Wet Weight

Seq Number: 3121328

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	136	49.6	mg/kg	03.27.20 22.04		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.27.20 18.00

Basis: Wet Weight

Seq Number: 3121280

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.28.20 15.58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.28.20 15.58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.28.20 15.58	U	1
Total TPH	PHC635	<50	50	mg/kg	03.28.20 15.58	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	103	%	70-135	03.28.20 15.58		
o-Terphenyl	84-15-1	110	%	70-135	03.28.20 15.58		



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-37 @1.5'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-016

Date Collected: 03.27.20 12.50

Sample Depth: 1.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 20.13

Basis: Wet Weight

Seq Number: 3121289

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	03.28.20 04.28	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	03.28.20 04.28	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	03.28.20 04.28	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	03.28.20 04.28	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	03.28.20 04.28	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	03.28.20 04.28	U	1
Total BTEX		<0.00198	0.00198	mg/kg	03.28.20 04.28	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	03.28.20 04.28		
1,4-Difluorobenzene	540-36-3	112	%	70-130	03.28.20 04.28		



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-39 @1'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-017

Date Collected: 03.27.20 13.00

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 19.25

Basis: Wet Weight

Seq Number: 3121328

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	212	49.9	mg/kg	03.27.20 22.10		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.27.20 18.00

Basis: Wet Weight

Seq Number: 3121280

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.30.20 12.52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.30.20 12.52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.30.20 12.52	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.30.20 12.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	123	%	70-135	03.30.20 12.52	
o-Terphenyl	84-15-1	134	%	70-135	03.30.20 12.52	



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-39 @1'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-017

Date Collected: 03.27.20 13.00

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 20.13

Basis: Wet Weight

Seq Number: 3121289

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.28.20 04.49	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.28.20 04.49	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.28.20 04.49	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	03.28.20 04.49	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.28.20 04.49	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.28.20 04.49	U	1
Total BTEX		<0.002	0.002	mg/kg	03.28.20 04.49	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	03.28.20 04.49		
4-Bromofluorobenzene	460-00-4	93	%	70-130	03.28.20 04.49		



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-42 @1'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-018

Date Collected: 03.27.20 13.10

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 19.25

Basis: Wet Weight

Seq Number: 3121328

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	289	49.8	mg/kg	03.27.20 22.16		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.27.20 18.00

Basis: Wet Weight

Seq Number: 3121280

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.30.20 13.13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.30.20 13.13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.30.20 13.13	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.30.20 13.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	122	%	70-135	03.30.20 13.13	
o-Terphenyl	84-15-1	129	%	70-135	03.30.20 13.13	



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-42 @1'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-018

Date Collected: 03.27.20 13.10

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 20.13

Basis: Wet Weight

Seq Number: 3121289

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.28.20 05.09	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.28.20 05.09	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.28.20 05.09	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.28.20 05.09	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.28.20 05.09	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	03.28.20 05.09	U	1
Total BTEX		<0.002	0.002	mg/kg	03.28.20 05.09	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	95	%	70-130	03.28.20 05.09		
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.28.20 05.09		



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-43 @ 1'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-019

Date Collected: 03.27.20 13.20

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 19.25

Basis: Wet Weight

Seq Number: 3121328

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	172	49.8	mg/kg	03.27.20 22.33		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.27.20 18.00

Basis: Wet Weight

Seq Number: 3121280

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	03.30.20 13.13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	03.30.20 13.13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	03.30.20 13.13	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	03.30.20 13.13	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	123	%	70-135	03.30.20 13.13		
o-Terphenyl	84-15-1	133	%	70-135	03.30.20 13.13		



Certificate of Analytical Results 657199

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-43 @ 1'**

Matrix: Soil

Date Received: 03.27.20 16.05

Lab Sample Id: 657199-019

Date Collected: 03.27.20 13.20

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.27.20 20.13

Basis: Wet Weight

Seq Number: 3121289

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.28.20 05.30	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.28.20 05.30	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.28.20 05.30	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.28.20 05.30	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.28.20 05.30	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.28.20 05.30	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.28.20 05.30	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	101	%	70-130	03.28.20 05.30		
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.28.20 05.30		



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



TRC Solutions, Inc
Pine Springs 2 State SWD

Analytical Method: Chloride by EPA 300

Seq Number: 3121325

MB Sample Id: 7699959-1-BLK

Matrix: Solid

LCS Sample Id: 7699959-1-BKS

Prep Method: E300P

Date Prep: 03.27.20

LCSD Sample Id: 7699959-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	265	106	268	107	90-110	1	20	mg/kg	03.27.20 18:10	

Analytical Method: Chloride by EPA 300

Seq Number: 3121328

MB Sample Id: 7699960-1-BLK

Matrix: Solid

LCS Sample Id: 7699960-1-BKS

Prep Method: E300P

Date Prep: 03.27.20

LCSD Sample Id: 7699960-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	265	106	266	106	90-110	0	20	mg/kg	03.27.20 21:30	

Analytical Method: Chloride by EPA 300

Seq Number: 3121325

Parent Sample Id: 657168-003

Matrix: Soil

MS Sample Id: 657168-003 S

Prep Method: E300P

Date Prep: 03.27.20

MSD Sample Id: 657168-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	797	200	1000	102	994	98	90-110	1	20	mg/kg	03.27.20 18:29	

Analytical Method: Chloride by EPA 300

Seq Number: 3121325

Parent Sample Id: 657199-002

Matrix: Soil

MS Sample Id: 657199-002 S

Prep Method: E300P

Date Prep: 03.27.20

MSD Sample Id: 657199-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	371	199	579	105	576	103	90-110	1	20	mg/kg	03.27.20 19:48	

Analytical Method: Chloride by EPA 300

Seq Number: 3121328

Parent Sample Id: 657196-005

Matrix: Soil

MS Sample Id: 657196-005 S

Prep Method: E300P

Date Prep: 03.27.20

MSD Sample Id: 657196-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	18.9	198	267	125	271	126	90-110	1	20	mg/kg	03.27.20 23:07	X

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

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



TRC Solutions, Inc
Pine Springs 2 State SWD

Analytical Method: Chloride by EPA 300

Seq Number: 3121328

Parent Sample Id: 657199-014

Matrix: Soil

MS Sample Id: 657199-014 S

Prep Method: E300P

Date Prep: 03.27.20

MSD Sample Id: 657199-014 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	110	202	246	67	249	69	90-110	1	20	mg/kg	03.27.20 21:47	X

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121280

MB Sample Id: 7700020-1-BLK

Matrix: Solid

LCS Sample Id: 7700020-1-BKS

Prep Method: SW8015P

Date Prep: 03.27.20

LCSD Sample Id: 7700020-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	878	88	828	83	70-135	6	35	mg/kg	03.28.20 09:11	
Diesel Range Organics (DRO)	<50.0	1000	833	83	779	78	70-135	7	35	mg/kg	03.28.20 09:11	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	119		101		96		70-135	%	03.28.20 09:11
o-Terphenyl	130		101		96		70-135	%	03.28.20 09:11

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121280

Matrix: Solid

MB Sample Id: 7700020-1-BLK

Prep Method: SW8015P

Date Prep: 03.27.20

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	03.28.20 08:51	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121280

Matrix: Soil

Parent Sample Id: 657199-001

MS Sample Id: 657199-001 S

Prep Method: SW8015P

Date Prep: 03.27.20

MSD Sample Id: 657199-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.8	995	871	88	853	85	70-135	2	35	mg/kg	03.30.20 12:11	
Diesel Range Organics (DRO)	<49.8	995	864	87	826	83	70-135	4	35	mg/kg	03.30.20 12:11	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	103		101		70-135	%	03.30.20 12:11
o-Terphenyl	101		103		70-135	%	03.30.20 12:11

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



TRC Solutions, Inc
Pine Springs 2 State SWD

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121289

MB Sample Id: 7699956-1-BLK

Matrix: Solid

LCS Sample Id: 7699956-1-BKS

Prep Method: SW5030B

Date Prep: 03.27.20

LCSD Sample Id: 7699956-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.115	115	0.112	112	70-130	3	35	mg/kg	03.27.20 21:00	
Toluene	<0.00200	0.100	0.110	110	0.106	106	70-130	4	35	mg/kg	03.27.20 21:00	
Ethylbenzene	<0.00200	0.100	0.103	103	0.0991	99	71-129	4	35	mg/kg	03.27.20 21:00	
m,p-Xylenes	<0.00400	0.200	0.212	106	0.204	102	70-135	4	35	mg/kg	03.27.20 21:00	
o-Xylene	<0.00200	0.100	0.108	108	0.104	104	71-133	4	35	mg/kg	03.27.20 21:00	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		109		109		70-130	%	03.27.20 21:00
4-Bromofluorobenzene	96		93		93		70-130	%	03.27.20 21:00

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121289

Parent Sample Id: 657199-001

Matrix: Soil

MS Sample Id: 657199-001 S

Prep Method: SW5030B

Date Prep: 03.27.20

MSD Sample Id: 657199-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.110	110	0.106	106	70-130	4	35	mg/kg	03.27.20 21:40	
Toluene	<0.00200	0.100	0.105	105	0.0999	100	70-130	5	35	mg/kg	03.27.20 21:40	
Ethylbenzene	<0.00200	0.100	0.0991	99	0.0925	93	71-129	7	35	mg/kg	03.27.20 21:40	
m,p-Xylenes	<0.00400	0.200	0.203	102	0.190	95	70-135	7	35	mg/kg	03.27.20 21:40	
o-Xylene	<0.00200	0.100	0.104	104	0.0973	97	71-133	7	35	mg/kg	03.27.20 21:40	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		109		70-130	%	03.27.20 21:40
4-Bromofluorobenzene	93		94		70-130	%	03.27.20 21:40

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



Chain of Custody

Work Order No: 457199

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
 Midland, TX (432) 704-5440 El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296 Crystal, NM (432) 704-5440
 Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

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Page 1 of 2

Project Manager:	Jared Stoffel	Bill to: (if different)	J.D. McCormick
Company Name:	TRC	Company Name:	Black River Trucking
Address:	10 Delta Dr. STE 150E	Address:	Frankiecocoba@icloud.com
City, State ZIP:	Midland, TX 79705	City, State ZIP:	J.D. mack@icloud.com
Phone:	432-238-3003	Email:	Jared, Tania, Ike, Jlongoria@egmail.com

Project Name:	Fire Springs 2 State SWD	Turn Around	
Project Number:		Routine	☐
Project Location		Rush:	24hrs
Sampler's Name:	Tania Babu	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	4.0			Thermometer ID	4NMD07	
Received Intact:	Yes	No		Correction Factor:	-0.3	
Cooler Custody Seals:	Yes	No	N/A	Total Containers:	19	
Sample Custody Seals:	Yes	No	N/A			

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	ANALYSIS REQUEST	Preservative Codes	Sample Comments
FL-12@2.5'		S	03/24/20	1020	2.5'	1	TPH (0015)	MeOH: Me	
FL-17@2.5'				1030	2.5'		BTEX (0021)	None: NO	
FL-20@2'				1040	2'		Chlorides (E300)	HNO3: HN	
FL-21@2'				1050	2'			H2SO4: H2	
FL-22@2'				1100	2'			HCL: HL	
FL-23@1.5'				1110	1.5'			NaOH: Na	
FL-25@2'				1120	2'			Zn Acetate+ NaOH: Zn	
FL-27@2'				1130	2'				
FL-30@2'				1140	2'				
FL-31@2'				1150	2'				

Total 200.7 / 6010 200.8 / 6020:
 Circle Method(s) and Metal(s) to be analyzed

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
 TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1631 / 245.1 / 7470 / 7471 : Hg

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		3/27/20 16:05			2
					4
					6



Chain of Custody

Work Order No: 1657199

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
 Midland, TX (432) 704-5440 El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296
 Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

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Page 2 of 2

Project Manager:	Jared Stoffel	Bill to: (if different)	JD McCormick
Company Name:	TRC	Company Name:	Black River Tracing
Address:	10 Deste Dr. STE 150E	Address:	Frankie Caccaba@Tracing.com
City, State ZIP:	Midland, TX 79705	City, State ZIP:	JD.McCormick@egmail.com
Phone:	432-238-3003	Email:	Jared.Stoffel@tracing.com

Project Name:	Pine Springs 2 State Road	Turn Around	
Project Number:		Routine	☐
Project Location:		Rush:	24 HRS
Sampler's Name:	Tamir Babu	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT	Temp Blank:	Yes	No	Well Rec:	Yes	No
Temperature (°C):						
Received Intact:	Yes	No		Thermometer ID		
Cooler Custody Seals:	Yes	No	N/A	Correction Factor:		
Sample Custody Seals:	Yes	No	N/A	Total Containers:		

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	ANALYSIS REQUEST	Preservative Codes	Sample Comments
FL-3202		S	03/21/20	1200	2'	1	TPH (8015)		
FL-3301				1210	1'	X	BTEX (8021)		
FL-3401				1220	1'	X	Chlorides (E300)		
FL-3503				1230	3'				
FL-3603				1240	3'				
FL-3701				1250	1.5'				
FL-3901				1300	1'				
FL-4201				1310	1'				
FL-4301				1320	1'				

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
 Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
 1631 / 245.1 / 7470 / 7471 : Hg

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		3/27/20 16:05			



Certificate of Analysis Summary 657333

TRC Solutions, Inc, Midland, TX

Project Name: Pine Springs 2 State SWD

Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Mon Mar-30-20 04:20 pm

Report Date: 31-MAR-20

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	657333-001	657333-002	657333-003	657333-004	657333-005	657333-006
	Field Id:	FL- 40 @ 2'	FL- 41 @ 2'	FL- 44 @1.5'	FL- 45 @1.5'	FL- 46 @ 2'	FL- 47 @1'
	Depth:	2- ft	2- ft	1.5- ft	1.5- ft	2- ft	1- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Mar-30-20 13:00	Mar-30-20 13:10	Mar-30-20 13:20	Mar-30-20 13:30	Mar-30-20 13:40	Mar-30-20 13:50
BTEX by EPA 8021B	Extracted:	Mar-30-20 18:40	Mar-30-20 18:40	Mar-30-20 18:40	Mar-30-20 18:40	Mar-30-20 18:40	Mar-30-20 18:40
	Analyzed:	Mar-30-20 23:57	Mar-31-20 00:18	Mar-31-20 00:38	Mar-31-20 00:59	Mar-31-20 01:19	Mar-31-20 01:39
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199
Toluene		<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199
Ethylbenzene		<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199
m,p-Xylenes		<0.00401 0.00401	<0.00398 0.00398	<0.00403 0.00403	<0.00399 0.00399	<0.00402 0.00402	<0.00398 0.00398
o-Xylene		<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199
Xylenes, Total		<0.002 0.002	<0.00199 0.00199	<0.00202 0.00202	<0.002 0.002	<0.00201 0.00201	<0.00199 0.00199
Total BTEX		<0.002 0.002	<0.00199 0.00199	<0.00202 0.00202	<0.002 0.002	<0.00201 0.00201	<0.00199 0.00199
Chloride by EPA 300	Extracted:	Mar-30-20 18:00	Mar-30-20 18:00	Mar-30-20 18:00	Mar-30-20 18:00	Mar-30-20 18:00	Mar-30-20 18:00
	Analyzed:	Mar-30-20 20:41	Mar-31-20 07:48	Mar-30-20 21:01	Mar-31-20 07:54	Mar-30-20 21:08	Mar-30-20 21:28
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		289 49.8	270 49.9	280 50.4	98.4 50.1	368 49.6	375 49.7
TPH by SW8015 Mod	Extracted:	Mar-30-20 17:30	Mar-30-20 17:30	Mar-30-20 17:30	Mar-30-20 17:30	Mar-30-20 17:30	Mar-30-20 17:30
	Analyzed:	Mar-31-20 03:20	Mar-31-20 04:21	Mar-31-20 04:41	Mar-31-20 05:01	Mar-31-20 05:21	Mar-31-20 05:42
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.2 50.2	<50.0 50.0	<50.3 50.3	<50.2 50.2	<50.0 50.0	<50.2 50.2
Diesel Range Organics (DRO)		<50.2 50.2	<50.0 50.0	<50.3 50.3	<50.2 50.2	<50.0 50.0	<50.2 50.2
Motor Oil Range Hydrocarbons (MRO)		<50.2 50.2	<50.0 50.0	<50.3 50.3	<50.2 50.2	<50.0 50.0	<50.2 50.2
Total TPH		<50.2 50.2	<50 50	<50.3 50.3	<50.2 50.2	<50 50	<50.2 50.2

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Version: 1.9%

Jessica Kramer
Project Manager



Certificate of Analysis Summary 657333

TRC Solutions, Inc, Midland, TX

Project Name: Pine Springs 2 State SWD

Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Mon Mar-30-20 04:20 pm

Report Date: 31-MAR-20

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	657333-007	657333-008	657333-009	657333-010	657333-011	657333-012
	Field Id:	FL- 48 @1'	FL- 49 @ 2'	FL- 50 @3'	FL- 51 @3'	FL- 52 @3'	FL- 53 @3'
	Depth:	1- ft	2- ft	3- ft	3- ft	3- ft	3- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Mar-30-20 14:00	Mar-30-20 14:10	Mar-30-20 14:20	Mar-30-20 14:30	Mar-30-20 14:40	Mar-30-20 14:50
BTEX by EPA 8021B	Extracted:	Mar-30-20 18:40	Mar-30-20 18:40	Mar-30-20 18:40	Mar-30-20 18:40	Mar-30-20 18:40	Mar-30-20 18:40
	Analyzed:	Mar-31-20 02:00	Mar-31-20 02:20	Mar-31-20 02:41	Mar-31-20 03:01	Mar-31-20 04:23	Mar-31-20 04:43
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202
Toluene		<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202
Ethylbenzene		<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202
m,p-Xylenes		<0.00401 0.00401	<0.00398 0.00398	<0.00401 0.00401	<0.00397 0.00397	<0.00399 0.00399	<0.00403 0.00403
o-Xylene		<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202
Xylenes, Total		<0.002 0.002	<0.00199 0.00199	<0.002 0.002	<0.00198 0.00198	<0.002 0.002	<0.00202 0.00202
Total BTEX		<0.002 0.002	<0.00199 0.00199	<0.002 0.002	<0.00198 0.00198	<0.002 0.002	<0.00202 0.00202
Chloride by EPA 300	Extracted:	Mar-30-20 18:00	Mar-30-20 18:00	Mar-30-20 18:00	Mar-30-20 18:00	Mar-30-20 18:00	Mar-30-20 18:00
	Analyzed:	Mar-30-20 21:34	Mar-30-20 21:41	Mar-30-20 21:47	Mar-30-20 21:54	Mar-30-20 22:01	Mar-30-20 22:20
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		401 49.6	169 49.6	227 50.1	382 50.4	372 49.8	452 50.1
TPH by SW8015 Mod	Extracted:	Mar-30-20 17:30	Mar-30-20 17:30	Mar-30-20 17:30	Mar-30-20 17:30	Mar-30-20 17:30	Mar-30-20 17:30
	Analyzed:	Mar-31-20 06:02	Mar-31-20 06:22	Mar-31-20 06:43	Mar-31-20 07:03	Mar-31-20 07:43	Mar-31-20 08:03
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<50.2 50.2	<49.8 49.8	<50.1 50.1	<50.0 50.0	<50.2 50.2
Diesel Range Organics (DRO)		<49.8 49.8	<50.2 50.2	<49.8 49.8	<50.1 50.1	<50.0 50.0	<50.2 50.2
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	<50.2 50.2	<49.8 49.8	<50.1 50.1	<50.0 50.0	<50.2 50.2
Total TPH		<49.8 49.8	<50.2 50.2	<49.8 49.8	<50.1 50.1	<50 50	<50.2 50.2

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

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Jessica Kramer
Project Manager



Certificate of Analysis Summary 657333

TRC Solutions, Inc, Midland, TX

Project Name: Pine Springs 2 State SWD

Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Mon Mar-30-20 04:20 pm

Report Date: 31-MAR-20

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	657333-013	657333-014	657333-015	657333-016		
	<i>Field Id:</i>	FL- 54 @3'	FL- 55 @3'	FL- 56 @3'	FL- 57@ 3'		
	<i>Depth:</i>	3- ft	3- ft	3- ft	3- ft		
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL		
	<i>Sampled:</i>	Mar-30-20 15:00	Mar-30-20 15:10	Mar-30-20 15:20	Mar-30-20 15:30		
BTEX by EPA 8021B	<i>Extracted:</i>	Mar-30-20 18:40	Mar-30-20 18:40	Mar-30-20 18:40	Mar-30-20 18:40		
	<i>Analyzed:</i>	Mar-31-20 05:03	Mar-31-20 05:24	Mar-31-20 05:44	Mar-31-20 06:05		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		<0.00201 0.00201	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200		
Toluene		<0.00201 0.00201	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200		
Ethylbenzene		<0.00201 0.00201	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200		
m,p-Xylenes		<0.00402 0.00402	<0.00403 0.00403	<0.00402 0.00402	<0.00399 0.00399		
o-Xylene		<0.00201 0.00201	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200		
Xylenes, Total		<0.00201 0.00201	<0.00202 0.00202	<0.00201 0.00201	<0.002 0.002		
Total BTEX		<0.00201 0.00201	<0.00202 0.00202	<0.00201 0.00201	<0.002 0.002		
Chloride by EPA 300	<i>Extracted:</i>	Mar-30-20 18:00	Mar-30-20 18:00	Mar-30-20 18:00	Mar-30-20 18:00		
	<i>Analyzed:</i>	Mar-30-20 22:27	Mar-30-20 22:47	Mar-30-20 22:53	Mar-30-20 23:00		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		146 50.4	163 49.8	662 49.9	219 49.9		
TPH by SW8015 Mod	<i>Extracted:</i>	Mar-30-20 17:30	Mar-30-20 17:30	Mar-30-20 17:30	Mar-30-20 17:30		
	<i>Analyzed:</i>	Mar-31-20 08:24	Mar-31-20 08:44	Mar-31-20 09:05	Mar-31-20 09:25		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9		
Diesel Range Organics (DRO)		<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9		
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9		
Total TPH		<49.9 49.9	<50 50	<50 50	<49.9 49.9		

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

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Jessica Kramer
Project Manager

Analytical Report 657333

for
TRC Solutions, Inc

Project Manager: Jared Stoffel

Pine Springs 2 State SWD

31-MAR-20

Collected By: Client



**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)

Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)

Xenco-Carlsbad (LELAP): Louisiana (05092)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)

Xenco-Tampa: Florida (E87429), North Carolina (483)



31-MAR-20

Project Manager: **Jared Stoffel**

TRC Solutions, Inc

2057 Commerce

Midland, TX 79703

Reference: XENCO Report No(s): **657333**

Pine Springs 2 State SWD

Project Address:

Jared Stoffel:

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) 657333. 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. 657333 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 'Jessica Kramer'.

Jessica Kramer

Project Manager

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

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Sample Cross Reference 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FL- 40 @ 2'	S	03-30-20 13:00	2 ft	657333-001
FL- 41 @ 2'	S	03-30-20 13:10	2 ft	657333-002
FL- 44 @1.5'	S	03-30-20 13:20	1.5 ft	657333-003
FL- 45 @1.5'	S	03-30-20 13:30	1.5 ft	657333-004
FL- 46 @ 2'	S	03-30-20 13:40	2 ft	657333-005
FL- 47 @1'	S	03-30-20 13:50	1 ft	657333-006
FL- 48 @1'	S	03-30-20 14:00	1 ft	657333-007
FL- 49 @ 2'	S	03-30-20 14:10	2 ft	657333-008
FL- 50 @3'	S	03-30-20 14:20	3 ft	657333-009
FL- 51 @3'	S	03-30-20 14:30	3 ft	657333-010
FL- 52 @3'	S	03-30-20 14:40	3 ft	657333-011
FL- 53 @3'	S	03-30-20 14:50	3 ft	657333-012
FL- 54 @3'	S	03-30-20 15:00	3 ft	657333-013
FL- 55 @3'	S	03-30-20 15:10	3 ft	657333-014
FL- 56 @3'	S	03-30-20 15:20	3 ft	657333-015
FL- 57@ 3'	S	03-30-20 15:30	3 ft	657333-016



CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: Pine Springs 2 State SWD

Project ID:

Work Order Number(s): 657333

Report Date: 31-MAR-20

Date Received: 03/30/2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3121413 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 40 @ 2'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-001

Date Collected: 03.30.20 13.00

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.00

Basis: Wet Weight

Seq Number: 3121420

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	289	49.8	mg/kg	03.30.20 20.41		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.30.20 17.30

Basis: Wet Weight

Seq Number: 3121470

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.31.20 03.20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.31.20 03.20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.31.20 03.20	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.31.20 03.20	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	105	%	70-135	03.31.20 03.20		
o-Terphenyl	84-15-1	109	%	70-135	03.31.20 03.20		



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 40 @ 2'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-001

Date Collected: 03.30.20 13.00

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.40

Basis: Wet Weight

Seq Number: 3121413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.30.20 23.57	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.30.20 23.57	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.30.20 23.57	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.30.20 23.57	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.30.20 23.57	U	1
Xylenes, Total	1330-20-7	<0.002	0.002	mg/kg	03.30.20 23.57	U	1
Total BTEX		<0.002	0.002	mg/kg	03.30.20 23.57	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	116	%	70-130	03.30.20 23.57		
4-Bromofluorobenzene	460-00-4	92	%	70-130	03.30.20 23.57		



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 41 @ 2'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-002

Date Collected: 03.30.20 13.10

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.00

Basis: Wet Weight

Seq Number: 3121420

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	270	49.9	mg/kg	03.31.20 07.48		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.30.20 17.30

Basis: Wet Weight

Seq Number: 3121470

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.31.20 04.21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.31.20 04.21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.31.20 04.21	U	1
Total TPH	PHC635	<50	50	mg/kg	03.31.20 04.21	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	117	%	70-135	03.31.20 04.21		
o-Terphenyl	84-15-1	123	%	70-135	03.31.20 04.21		



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 41 @ 2'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-002

Date Collected: 03.30.20 13.10

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.40

Basis: Wet Weight

Seq Number: 3121413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.31.20 00.18	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.31.20 00.18	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.31.20 00.18	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.31.20 00.18	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.31.20 00.18	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	03.31.20 00.18	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.31.20 00.18	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	116	%	70-130	03.31.20 00.18		
4-Bromofluorobenzene	460-00-4	93	%	70-130	03.31.20 00.18		



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 44 @1.5'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-003

Date Collected: 03.30.20 13.20

Sample Depth: 1.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.00

Basis: Wet Weight

Seq Number: 3121420

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	280	50.4	mg/kg	03.30.20 21.01		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.30.20 17.30

Basis: Wet Weight

Seq Number: 3121470

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	03.31.20 04.41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	03.31.20 04.41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	03.31.20 04.41	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	03.31.20 04.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	03.31.20 04.41	
o-Terphenyl	84-15-1	105	%	70-135	03.31.20 04.41	



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 44 @1.5'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-003

Date Collected: 03.30.20 13.20

Sample Depth: 1.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.40

Basis: Wet Weight

Seq Number: 3121413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.31.20 00.38	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.31.20 00.38	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.31.20 00.38	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	03.31.20 00.38	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.31.20 00.38	U	1
Xylenes, Total	1330-20-7	<0.00202	0.00202	mg/kg	03.31.20 00.38	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.31.20 00.38	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	93	%	70-130	03.31.20 00.38		
1,4-Difluorobenzene	540-36-3	115	%	70-130	03.31.20 00.38		



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 45 @1.5'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-004

Date Collected: 03.30.20 13.30

Sample Depth: 1.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.00

Basis: Wet Weight

Seq Number: 3121420

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	98.4	50.1	mg/kg	03.31.20 07.54		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.30.20 17.30

Basis: Wet Weight

Seq Number: 3121470

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.31.20 05.01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.31.20 05.01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.31.20 05.01	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.31.20 05.01	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	101	%	70-135	03.31.20 05.01		
o-Terphenyl	84-15-1	106	%	70-135	03.31.20 05.01		



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 45 @1.5'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-004

Date Collected: 03.30.20 13.30

Sample Depth: 1.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.40

Basis: Wet Weight

Seq Number: 3121413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.31.20 00.59	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.31.20 00.59	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.31.20 00.59	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.31.20 00.59	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.31.20 00.59	U	1
Xylenes, Total	1330-20-7	<0.002	0.002	mg/kg	03.31.20 00.59	U	1
Total BTEX		<0.002	0.002	mg/kg	03.31.20 00.59	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	92	%	70-130	03.31.20 00.59		
1,4-Difluorobenzene	540-36-3	115	%	70-130	03.31.20 00.59		



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 46 @ 2'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-005

Date Collected: 03.30.20 13.40

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.00

Basis: Wet Weight

Seq Number: 3121420

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	368	49.6	mg/kg	03.30.20 21.08		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.30.20 17.30

Basis: Wet Weight

Seq Number: 3121470

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.31.20 05.21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.31.20 05.21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.31.20 05.21	U	1
Total TPH	PHC635	<50	50	mg/kg	03.31.20 05.21	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	104	%	70-135	03.31.20 05.21		
o-Terphenyl	84-15-1	108	%	70-135	03.31.20 05.21		



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 46 @ 2'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-005

Date Collected: 03.30.20 13.40

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.40

Basis: Wet Weight

Seq Number: 3121413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.31.20 01.19	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.31.20 01.19	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.31.20 01.19	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.31.20 01.19	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.31.20 01.19	U	1
Xylenes, Total	1330-20-7	<0.00201	0.00201	mg/kg	03.31.20 01.19	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.31.20 01.19	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	91	%	70-130	03.31.20 01.19		
1,4-Difluorobenzene	540-36-3	115	%	70-130	03.31.20 01.19		



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 47 @1'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-006

Date Collected: 03.30.20 13.50

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.00

Basis: Wet Weight

Seq Number: 3121420

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	375	49.7	mg/kg	03.30.20 21.28		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.30.20 17.30

Basis: Wet Weight

Seq Number: 3121470

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.31.20 05.42	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.31.20 05.42	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.31.20 05.42	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.31.20 05.42	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	108	%	70-135	03.31.20 05.42		
o-Terphenyl	84-15-1	113	%	70-135	03.31.20 05.42		



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 47 @1'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-006

Date Collected: 03.30.20 13.50

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.40

Basis: Wet Weight

Seq Number: 3121413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.31.20 01.39	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.31.20 01.39	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.31.20 01.39	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.31.20 01.39	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.31.20 01.39	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	03.31.20 01.39	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.31.20 01.39	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	92	%	70-130	03.31.20 01.39		
1,4-Difluorobenzene	540-36-3	115	%	70-130	03.31.20 01.39		



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 48 @1'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-007

Date Collected: 03.30.20 14.00

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.00

Basis: Wet Weight

Seq Number: 3121420

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	401	49.6	mg/kg	03.30.20 21.34		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.30.20 17.30

Basis: Wet Weight

Seq Number: 3121470

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	03.31.20 06.02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	03.31.20 06.02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	03.31.20 06.02	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	03.31.20 06.02	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	105	%	70-135	03.31.20 06.02		
o-Terphenyl	84-15-1	109	%	70-135	03.31.20 06.02		



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 48 @1'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-007

Date Collected: 03.30.20 14.00

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.40

Basis: Wet Weight

Seq Number: 3121413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.31.20 02.00	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.31.20 02.00	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.31.20 02.00	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.31.20 02.00	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.31.20 02.00	U	1
Xylenes, Total	1330-20-7	<0.002	0.002	mg/kg	03.31.20 02.00	U	1
Total BTEX		<0.002	0.002	mg/kg	03.31.20 02.00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	93	%	70-130	03.31.20 02.00		
1,4-Difluorobenzene	540-36-3	116	%	70-130	03.31.20 02.00		



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 49 @ 2'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-008

Date Collected: 03.30.20 14.10

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.00

Basis: Wet Weight

Seq Number: 3121420

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	169	49.6	mg/kg	03.30.20 21.41		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.30.20 17.30

Basis: Wet Weight

Seq Number: 3121470

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.31.20 06.22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.31.20 06.22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.31.20 06.22	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.31.20 06.22	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	106	%	70-135	03.31.20 06.22		
o-Terphenyl	84-15-1	109	%	70-135	03.31.20 06.22		



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 49 @ 2'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-008

Date Collected: 03.30.20 14.10

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.40

Basis: Wet Weight

Seq Number: 3121413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.31.20 02.20	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.31.20 02.20	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.31.20 02.20	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.31.20 02.20	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.31.20 02.20	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	03.31.20 02.20	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.31.20 02.20	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	70-130	03.31.20 02.20		
1,4-Difluorobenzene	540-36-3	117	%	70-130	03.31.20 02.20		



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 50 @3'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-009

Date Collected: 03.30.20 14.20

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.00

Basis: Wet Weight

Seq Number: 3121420

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	227	50.1	mg/kg	03.30.20 21.47		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.30.20 17.30

Basis: Wet Weight

Seq Number: 3121470

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	03.31.20 06.43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	03.31.20 06.43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	03.31.20 06.43	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	03.31.20 06.43	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	102	%	70-135	03.31.20 06.43		
o-Terphenyl	84-15-1	108	%	70-135	03.31.20 06.43		



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 50 @3'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-009

Date Collected: 03.30.20 14.20

Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.40

Basis: Wet Weight

Seq Number: 3121413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.31.20 02.41	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.31.20 02.41	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.31.20 02.41	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.31.20 02.41	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.31.20 02.41	U	1
Xylenes, Total	1330-20-7	<0.002	0.002	mg/kg	03.31.20 02.41	U	1
Total BTEX		<0.002	0.002	mg/kg	03.31.20 02.41	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	03.31.20 02.41		
1,4-Difluorobenzene	540-36-3	117	%	70-130	03.31.20 02.41		



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 51 @3'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-010

Date Collected: 03.30.20 14.30

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.00

Basis: Wet Weight

Seq Number: 3121420

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	382	50.4	mg/kg	03.30.20 21.54		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.30.20 17.30

Basis: Wet Weight

Seq Number: 3121470

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	03.31.20 07.03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	03.31.20 07.03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	03.31.20 07.03	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	03.31.20 07.03	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	103	%	70-135	03.31.20 07.03		
o-Terphenyl	84-15-1	107	%	70-135	03.31.20 07.03		



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 51 @3'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-010

Date Collected: 03.30.20 14.30

Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.40

Basis: Wet Weight

Seq Number: 3121413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	03.31.20 03.01	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	03.31.20 03.01	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	03.31.20 03.01	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	03.31.20 03.01	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	03.31.20 03.01	U	1
Xylenes, Total	1330-20-7	<0.00198	0.00198	mg/kg	03.31.20 03.01	U	1
Total BTEX		<0.00198	0.00198	mg/kg	03.31.20 03.01	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	115	%	70-130	03.31.20 03.01		
4-Bromofluorobenzene	460-00-4	95	%	70-130	03.31.20 03.01		



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 52 @3'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-011

Date Collected: 03.30.20 14.40

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.00

Basis: Wet Weight

Seq Number: 3121420

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	372	49.8	mg/kg	03.30.20 22.01		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.30.20 17.30

Basis: Wet Weight

Seq Number: 3121470

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.31.20 07.43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.31.20 07.43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.31.20 07.43	U	1
Total TPH	PHC635	<50	50	mg/kg	03.31.20 07.43	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	104	%	70-135	03.31.20 07.43		
o-Terphenyl	84-15-1	110	%	70-135	03.31.20 07.43		



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 52 @3'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-011

Date Collected: 03.30.20 14.40

Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.40

Basis: Wet Weight

Seq Number: 3121413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.31.20 04.23	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.31.20 04.23	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.31.20 04.23	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.31.20 04.23	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.31.20 04.23	U	1
Xylenes, Total	1330-20-7	<0.002	0.002	mg/kg	03.31.20 04.23	U	1
Total BTEX		<0.002	0.002	mg/kg	03.31.20 04.23	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	93	%	70-130	03.31.20 04.23		
1,4-Difluorobenzene	540-36-3	116	%	70-130	03.31.20 04.23		



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 53 @3'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-012

Date Collected: 03.30.20 14.50

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.00

Basis: Wet Weight

Seq Number: 3121420

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	452	50.1	mg/kg	03.30.20 22.20		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.30.20 17.30

Basis: Wet Weight

Seq Number: 3121470

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	03.31.20 08.03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	03.31.20 08.03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	03.31.20 08.03	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	03.31.20 08.03	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	101	%	70-135	03.31.20 08.03		
o-Terphenyl	84-15-1	105	%	70-135	03.31.20 08.03		



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 53 @3'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-012

Date Collected: 03.30.20 14.50

Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.40

Basis: Wet Weight

Seq Number: 3121413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.31.20 04.43	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.31.20 04.43	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.31.20 04.43	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	03.31.20 04.43	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.31.20 04.43	U	1
Xylenes, Total	1330-20-7	<0.00202	0.00202	mg/kg	03.31.20 04.43	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.31.20 04.43	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	115	%	70-130	03.31.20 04.43		
4-Bromofluorobenzene	460-00-4	93	%	70-130	03.31.20 04.43		



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 54 @3'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-013

Date Collected: 03.30.20 15.00

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.00

Basis: Wet Weight

Seq Number: 3121420

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	146	50.4	mg/kg	03.30.20 22.27		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.30.20 17.30

Basis: Wet Weight

Seq Number: 3121470

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.31.20 08.24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.31.20 08.24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.31.20 08.24	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.31.20 08.24	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	100	%	70-135	03.31.20 08.24		
o-Terphenyl	84-15-1	105	%	70-135	03.31.20 08.24		



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 54 @3'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-013

Date Collected: 03.30.20 15.00

Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.40

Basis: Wet Weight

Seq Number: 3121413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.31.20 05.03	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.31.20 05.03	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.31.20 05.03	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.31.20 05.03	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.31.20 05.03	U	1
Xylenes, Total	1330-20-7	<0.00201	0.00201	mg/kg	03.31.20 05.03	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.31.20 05.03	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	03.31.20 05.03		
1,4-Difluorobenzene	540-36-3	116	%	70-130	03.31.20 05.03		



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 55 @3'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-014

Date Collected: 03.30.20 15.10

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.00

Basis: Wet Weight

Seq Number: 3121420

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	163	49.8	mg/kg	03.30.20 22.47		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.30.20 17.30

Basis: Wet Weight

Seq Number: 3121470

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.31.20 08.44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.31.20 08.44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.31.20 08.44	U	1
Total TPH	PHC635	<50	50	mg/kg	03.31.20 08.44	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	97	%	70-135	03.31.20 08.44		
o-Terphenyl	84-15-1	101	%	70-135	03.31.20 08.44		



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 55 @3'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-014

Date Collected: 03.30.20 15.10

Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.40

Basis: Wet Weight

Seq Number: 3121413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.31.20 05.24	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.31.20 05.24	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.31.20 05.24	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	03.31.20 05.24	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.31.20 05.24	U	1
Xylenes, Total	1330-20-7	<0.00202	0.00202	mg/kg	03.31.20 05.24	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.31.20 05.24	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	70-130	03.31.20 05.24		
1,4-Difluorobenzene	540-36-3	115	%	70-130	03.31.20 05.24		



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 56 @3'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-015

Date Collected: 03.30.20 15.20

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.00

Basis: Wet Weight

Seq Number: 3121420

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	662	49.9	mg/kg	03.30.20 22.53		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.30.20 17.30

Basis: Wet Weight

Seq Number: 3121470

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.31.20 09.05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.31.20 09.05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.31.20 09.05	U	1
Total TPH	PHC635	<50	50	mg/kg	03.31.20 09.05	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	94	%	70-135	03.31.20 09.05		
o-Terphenyl	84-15-1	97	%	70-135	03.31.20 09.05		



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 56 @3'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-015

Date Collected: 03.30.20 15.20

Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.40

Basis: Wet Weight

Seq Number: 3121413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.31.20 05.44	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.31.20 05.44	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.31.20 05.44	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.31.20 05.44	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.31.20 05.44	U	1
Xylenes, Total	1330-20-7	<0.00201	0.00201	mg/kg	03.31.20 05.44	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.31.20 05.44	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	116	%	70-130	03.31.20 05.44		
4-Bromofluorobenzene	460-00-4	95	%	70-130	03.31.20 05.44		



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 57@ 3'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-016

Date Collected: 03.30.20 15.30

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.00

Basis: Wet Weight

Seq Number: 3121420

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	219	49.9	mg/kg	03.30.20 23.00		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.30.20 17.30

Basis: Wet Weight

Seq Number: 3121470

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.31.20 09.25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.31.20 09.25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.31.20 09.25	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.31.20 09.25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	106	%	70-135	03.31.20 09.25		
o-Terphenyl	84-15-1	112	%	70-135	03.31.20 09.25		



Certificate of Analytical Results 657333

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL- 57@ 3'**

Matrix: Soil

Date Received: 03.30.20 16.20

Lab Sample Id: 657333-016

Date Collected: 03.30.20 15.30

Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.30.20 18.40

Basis: Wet Weight

Seq Number: 3121413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.31.20 06.05	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.31.20 06.05	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.31.20 06.05	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.31.20 06.05	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.31.20 06.05	U	1
Xylenes, Total	1330-20-7	<0.002	0.002	mg/kg	03.31.20 06.05	U	1
Total BTEX		<0.002	0.002	mg/kg	03.31.20 06.05	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	116	%	70-130	03.31.20 06.05		
4-Bromofluorobenzene	460-00-4	94	%	70-130	03.31.20 06.05		



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



TRC Solutions, Inc
Pine Springs 2 State SWD

Analytical Method: Chloride by EPA 300

Seq Number: 3121420

MB Sample Id: 7700117-1-BLK

Matrix: Solid

LCS Sample Id: 7700117-1-BKS

Prep Method: E300P

Date Prep: 03.30.20

LCSD Sample Id: 7700117-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	263	105	264	106	90-110	0	20	mg/kg	03.30.20 20:28	

Analytical Method: Chloride by EPA 300

Seq Number: 3121420

Parent Sample Id: 657333-001

Matrix: Soil

MS Sample Id: 657333-001 S

Prep Method: E300P

Date Prep: 03.30.20

MSD Sample Id: 657333-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	289	199	485	98	497	105	90-110	2	20	mg/kg	03.30.20 20:48	

Analytical Method: Chloride by EPA 300

Seq Number: 3121420

Parent Sample Id: 657333-011

Matrix: Soil

MS Sample Id: 657333-011 S

Prep Method: E300P

Date Prep: 03.30.20

MSD Sample Id: 657333-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	372	200	572	100	574	102	90-110	0	20	mg/kg	03.30.20 22:07	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121470

MB Sample Id: 7700149-1-BLK

Matrix: Solid

LCS Sample Id: 7700149-1-BKS

Prep Method: SW8015P

Date Prep: 03.30.20

LCSD Sample Id: 7700149-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	886	89	938	94	70-135	6	35	mg/kg	03.31.20 02:40	
Diesel Range Organics (DRO)	<50.0	1000	838	84	882	88	70-135	5	35	mg/kg	03.31.20 02:40	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	89		116		123		70-135	%	03.31.20 02:40
o-Terphenyl	94		102		109		70-135	%	03.31.20 02:40

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121470

Matrix: Solid

MB Sample Id: 7700149-1-BLK

Prep Method: SW8015P

Date Prep: 03.30.20

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	03.31.20 02:19	

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



TRC Solutions, Inc
Pine Springs 2 State SWD

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121470

Parent Sample Id: 657333-001

Matrix: Soil

MS Sample Id: 657333-001 S

Prep Method: SW8015P

Date Prep: 03.30.20

MSD Sample Id: 657333-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.8	996	1050	105	1120	112	70-135	6	35	mg/kg	03.31.20 03:40	
Diesel Range Organics (DRO)	<49.8	996	1220	122	1310	131	70-135	7	35	mg/kg	03.31.20 03:40	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	117		118		70-135	%	03.31.20 03:40
o-Terphenyl	119		120		70-135	%	03.31.20 03:40

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121413

MB Sample Id: 7700096-1-BLK

Matrix: Solid

LCS Sample Id: 7700096-1-BKS

Prep Method: SW5030B

Date Prep: 03.30.20

LCSD Sample Id: 7700096-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.122	122	0.121	121	70-130	1	35	mg/kg	03.30.20 21:55	
Toluene	<0.00200	0.100	0.120	120	0.119	119	70-130	1	35	mg/kg	03.30.20 21:55	
Ethylbenzene	<0.00200	0.100	0.111	111	0.111	111	71-129	0	35	mg/kg	03.30.20 21:55	
m,p-Xylenes	<0.00400	0.200	0.215	108	0.216	108	70-135	0	35	mg/kg	03.30.20 21:55	
o-Xylene	<0.00200	0.100	0.110	110	0.111	111	71-133	1	35	mg/kg	03.30.20 21:55	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	116		110		109		70-130	%	03.30.20 21:55
4-Bromofluorobenzene	90		85		84		70-130	%	03.30.20 21:55

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121413

Parent Sample Id: 657333-001

Matrix: Soil

MS Sample Id: 657333-001 S

Prep Method: SW5030B

Date Prep: 03.30.20

MSD Sample Id: 657333-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.114	114	0.110	111	70-130	4	35	mg/kg	03.30.20 22:36	
Toluene	<0.00200	0.100	0.103	103	0.0989	100	70-130	4	35	mg/kg	03.30.20 22:36	
Ethylbenzene	<0.00200	0.100	0.0956	96	0.0916	93	71-129	4	35	mg/kg	03.30.20 22:36	
m,p-Xylenes	<0.00401	0.200	0.185	93	0.178	90	70-135	4	35	mg/kg	03.30.20 22:36	
o-Xylene	<0.00200	0.100	0.0949	95	0.0905	91	71-133	5	35	mg/kg	03.30.20 22:36	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		111		70-130	%	03.30.20 22:36
4-Bromofluorobenzene	90		88		70-130	%	03.30.20 22:36

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



Chain of Custody

Work Order No: 1657333

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
 Midland, TX (432) 704-5440 El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296
 Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000 West Palm Beach, FL (561) 889-6701

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Page 1 of 2

Project Manager: <u>Nicired Stoffel</u>		Bill to: (if different) <u>JD McCormick</u>	
Company Name: <u>TRC</u>		Company Name: <u>Black River Trucking</u>	
Address: <u>10 Delta Dr. STE 150E</u>		Address: <u>Francie Cocobuc Ickad.com</u>	
City, State ZIP: <u>Midland, TX 79705</u>		City, State ZIP: <u>JD Muck 78102@gmail.com</u>	
Phone: <u>432-238-3003</u>		Email: <u>Nicired, Tania, Ike, Jlongoria@jregmail.com</u>	
Project Name: <u>Pine Springs 2 State SWD</u>		Turn Around	
Project Number:		Pres. Code	
Project Location:		Routine ☐	
Sampler's Name: <u>Tania Babu</u>		Rush: <u>24hrs</u>	
PO #:		Due Date:	
Quote #:		ANALYSIS REQUEST	

SAMPLE RECEIPT		Temp Blank: <u>3.8</u>		Wet Ice: <u>Yes</u>		Thermometer ID: <u>FNIM007</u>		Correction Factor: <u>-0.2</u>		Total Containers: <u>16</u>	
Temperature (°C):		Received Intact: <u>Yes</u>		Cooler Custody Seals: <u>Yes</u>		Sample Custody Seals: <u>Yes</u>		N/A		N/A	

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (8015)	Chlorides (8015)	BTEX (8021)	MeOH: Me	None: NO	HNO3: HN	H2SO4: H2	HCL: HL	NaOH: Na	Zn Acetate+ NaOH: Zn	TAT starts the day received by the lab, if received by 4:00pm	Sample Comments
FL-400 2'		S	03/30/20	1300	2'		X	X	X									
FL-410 2'				1310	2'													
FL-440 1.5'				1320	1.5'													
FL-450 1.5'				1330	1.5'													
FL-460 2'				1340	2'													
FL-470 1'				1350	1'													
FL-480 1'				1400	1'													
FL-490 2'				1410	2'													
FL-500 3'				1420	3'													
FL-510 3'				1430	3'													

Total 200.7 / 6010 200.8 / 6020:

Circle Method(s) and Metal(s) to be analyzed

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn

TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U

1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenoco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenoco 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 Xenoco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenoco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		3/30/20 16:30			2
					4
					6



Chain of Custody

Work Order No: 1057333

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
 Midland, TX (432) 704-5440 El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296 Crashtad, NM (432) 704-5440
 Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000 West Palm Beach, FL (561) 589-6701

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Page 2 of 2

Project Manager:	Jared Stoffel	Bill to: (if different)	JD McCormick
Company Name:	TRC	Company Name:	Black River Trucking
Address:	10 Destad Dr. STE 150E	Address:	Ranbectra@Tcland.com
City, State ZIP:	Midland, TX 79705	City, State ZIP:	116, JD. Mack 79100@gmail.com
Phone:	432-230-3003	Email:	Jared.Tanica@xenco.com

Program: ☐ UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐ State of Project:	
Reporting Level: ☐ Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	Deliverables: EDD ☐ ADAPT ☐ Other:

Project Name:	Pine Springs 2 State SWD	Turn Around	☐	Pres. Code	
Project Number:		Routine	☐		
Project Location:		Rush: 24 HRS			
Sample's Name:	Tanica Babu	Due Date:			
PO #:		Quote #:			

SAMPLE RECEIPT				Thermometer ID				ANALYSIS REQUEST																Preservative Codes	
Temperature (°C):		Temp Blank:	Yes	No	Wet:	Yes	No																	MeOH: Me	
Received Intact:	Yes	No	Yes	No	Correction Factor:																			None: NO	
Cooler Custody Seals:	Yes	No	Yes	No	Total Containers:																			HNO3: HN	
Sample Custody Seals:	Yes	No	Yes	No																				H2SO4: H2	
																								HCL: HL	
																								NaOH: Na	
																								Zn Acetate+ NaOH: Zn	
																								TAT starts the day received by the lab, if received by 4:00pm	
																								Sample Comments	

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed	TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U		1631 / 245.1 / 7470 / 7471 : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		3/3/20 16:20			

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 03.30.2020 04.20.00 PM

Work Order #: 657333

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.8
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6 *Custody Seals Signed and dated?	Yes
#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:



Elizabeth McClellan

Date: 03.30.2020

Checklist reviewed by:



Jessica Kramer

Date: 03.31.2020



Certificate of Analysis Summary 657453

TRC Solutions, Inc, Midland, TX

Project Name: Pine Springs 2 State SWD

Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Tue Mar-31-20 03:56 pm

Report Date: 02-APR-20

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	657453-001	657453-002	657453-003			
	<i>Field Id:</i>	WSW-3	ESW-3	NSW-2			
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL			
	<i>Sampled:</i>	Mar-31-20 10:00	Mar-31-20 10:10	Mar-31-20 10:20			
BTEX by EPA 8021B	<i>Extracted:</i>	Mar-31-20 17:21	Mar-31-20 17:21	Mar-31-20 17:21			
	<i>Analyzed:</i>	Mar-31-20 22:44	Mar-31-20 23:05	Mar-31-20 23:25			
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			
Benzene		<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198			
Toluene		<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198			
Ethylbenzene		<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198			
m,p-Xylenes		<0.00398 0.00398	<0.00398 0.00398	<0.00397 0.00397			
o-Xylene		<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198			
Xylenes, Total		<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198			
Total BTEX		<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198			
Chloride by EPA 300	<i>Extracted:</i>	Mar-31-20 19:18	Mar-31-20 19:18	Mar-31-20 19:18			
	<i>Analyzed:</i>	Apr-01-20 09:16	Apr-01-20 09:33	Apr-01-20 09:38			
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			
Chloride		174 49.9	175 49.9	173 49.7			
TPH by SW8015 Mod	<i>Extracted:</i>	Mar-31-20 17:50	Mar-31-20 17:50	Mar-31-20 17:50			
	<i>Analyzed:</i>	Apr-01-20 18:28	Apr-01-20 14:43	Apr-01-20 15:04			
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<50.2 50.2	<49.9 49.9			
Diesel Range Organics (DRO)		<49.9 49.9	<50.2 50.2	<49.9 49.9			
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<50.2 50.2	<49.9 49.9			
Total TPH		<49.9 49.9	<50.2 50.2	<49.9 49.9			

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 - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Version: 1.0%

Jessica Kramer
Project Manager

Analytical Report 657453

**for
TRC Solutions, Inc**

Project Manager: Jared Stoffel

Pine Springs 2 State SWD

02-APR-20

Collected By: Client



**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)

Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)

Xenco-Carlsbad (LELAP): Louisiana (05092)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)

Xenco-Tampa: Florida (E87429), North Carolina (483)



02-APR-20

Project Manager: **Jared Stoffel**

TRC Solutions, Inc

2057 Commerce

Midland, TX 79703

Reference: XENCO Report No(s): **657453**

Pine Springs 2 State SWD

Project Address:

Jared Stoffel:

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) 657453. 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. 657453 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 'Jessica Kramer'.

Jessica Kramer

Project Manager

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

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

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

**Sample Cross Reference 657453****TRC Solutions, Inc, Midland, TX**

Pine Springs 2 State SWD

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
WSW-3	S	03-31-20 10:00		657453-001
ESW-3	S	03-31-20 10:10		657453-002
NSW-2	S	03-31-20 10:20		657453-003



CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: Pine Springs 2 State SWD

Project ID:

Work Order Number(s): 657453

Report Date: 02-APR-20

Date Received: 03/31/2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3121565 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



Certificate of Analytical Results 657453

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **WSW-3**
Lab Sample Id: 657453-001

Matrix: Soil
Date Collected: 03.31.20 10.00

Date Received: 03.31.20 15.56

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.20 19.18

Basis: Wet Weight

Seq Number: 3121597

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	174	49.9	mg/kg	04.01.20 09.16		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.31.20 17.50

Basis: Wet Weight

Seq Number: 3121659

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.01.20 18.28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	04.01.20 18.28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.01.20 18.28	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.01.20 18.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	04.01.20 18.28	
o-Terphenyl	84-15-1	110	%	70-135	04.01.20 18.28	



Certificate of Analytical Results 657453

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **WSW-3**
Lab Sample Id: 657453-001

Matrix: Soil
Date Collected: 03.31.20 10.00

Date Received: 03.31.20 15.56

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.20 17.21

Basis: Wet Weight

Seq Number: 3121565

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.31.20 22.44	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.31.20 22.44	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.31.20 22.44	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.31.20 22.44	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.31.20 22.44	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	03.31.20 22.44	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.31.20 22.44	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	70-130	03.31.20 22.44		
1,4-Difluorobenzene	540-36-3	117	%	70-130	03.31.20 22.44		



Certificate of Analytical Results 657453

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **ESW-3**
Lab Sample Id: 657453-002

Matrix: Soil
Date Collected: 03.31.20 10.10

Date Received: 03.31.20 15.56

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121597

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Date Prep: 03.31.20 19.18

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	175	49.9	mg/kg	04.01.20 09.33		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121659

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Date Prep: 03.31.20 17.50

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.01.20 14.43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	04.01.20 14.43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	04.01.20 14.43	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	04.01.20 14.43	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	97	%	70-135	04.01.20 14.43		
o-Terphenyl	84-15-1	97	%	70-135	04.01.20 14.43		



Certificate of Analytical Results 657453

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **ESW-3**
Lab Sample Id: 657453-002

Matrix: Soil
Date Collected: 03.31.20 10.10

Date Received: 03.31.20 15.56

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.20 17.21

Basis: Wet Weight

Seq Number: 3121565

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.31.20 23.05	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.31.20 23.05	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.31.20 23.05	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.31.20 23.05	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.31.20 23.05	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	03.31.20 23.05	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.31.20 23.05	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	117	%	70-130	03.31.20 23.05		
4-Bromofluorobenzene	460-00-4	94	%	70-130	03.31.20 23.05		



Certificate of Analytical Results 657453

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **NSW-2**
Lab Sample Id: 657453-003

Matrix: Soil
Date Collected: 03.31.20 10.20

Date Received: 03.31.20 15.56

Analytical Method: Chloride by EPA 300

Tech: MAB

Analyst: MAB

Seq Number: 3121597

Date Prep: 03.31.20 19.18

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	173	49.7	mg/kg	04.01.20 09.38		5

Analytical Method: TPH by SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3121659

Date Prep: 03.31.20 17.50

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.01.20 15.04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	04.01.20 15.04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.01.20 15.04	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.01.20 15.04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	102	%	70-135	04.01.20 15.04		
o-Terphenyl	84-15-1	101	%	70-135	04.01.20 15.04		



Certificate of Analytical Results 657453

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **NSW-2**
Lab Sample Id: 657453-003

Matrix: Soil
Date Collected: 03.31.20 10.20

Date Received: 03.31.20 15.56

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.20 17.21

Basis: Wet Weight

Seq Number: 3121565

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	03.31.20 23.25	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	03.31.20 23.25	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	03.31.20 23.25	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	03.31.20 23.25	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	03.31.20 23.25	U	1
Xylenes, Total	1330-20-7	<0.00198	0.00198	mg/kg	03.31.20 23.25	U	1
Total BTEX		<0.00198	0.00198	mg/kg	03.31.20 23.25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	03.31.20 23.25		
1,4-Difluorobenzene	540-36-3	117	%	70-130	03.31.20 23.25		



Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

****** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

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



TRC Solutions, Inc
Pine Springs 2 State SWD

Analytical Method: Chloride by EPA 300

Seq Number: 3121597

MB Sample Id: 7700191-1-BLK

Matrix: Solid

LCS Sample Id: 7700191-1-BKS

Prep Method: E300P

Date Prep: 03.31.20

LCSD Sample Id: 7700191-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	267	107	266	107	90-110	0	20	mg/kg	04.01.20 09:05	

Analytical Method: Chloride by EPA 300

Seq Number: 3121597

Parent Sample Id: 657453-001

Matrix: Soil

MS Sample Id: 657453-001 S

Prep Method: E300P

Date Prep: 03.31.20

MSD Sample Id: 657453-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	174	202	359	92	373	99	90-110	4	20	mg/kg	04.01.20 09:21	

Analytical Method: Chloride by EPA 300

Seq Number: 3121597

Parent Sample Id: 657454-011

Matrix: Soil

MS Sample Id: 657454-011 S

Prep Method: E300P

Date Prep: 03.31.20

MSD Sample Id: 657454-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	312	201	512	100	520	103	90-110	2	20	mg/kg	04.01.20 11:02	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121659

MB Sample Id: 7700187-1-BLK

Matrix: Solid

LCS Sample Id: 7700187-1-BKS

Prep Method: SW8015P

Date Prep: 03.31.20

LCSD Sample Id: 7700187-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1030	103	934	93	70-135	10	35	mg/kg	04.01.20 12:41	
Diesel Range Organics (DRO)	<50.0	1000	1110	111	999	100	70-135	11	35	mg/kg	04.01.20 12:41	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	88		113		100		70-135	%	04.01.20 12:41
o-Terphenyl	89		103		92		70-135	%	04.01.20 12:41

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121659

Matrix: Solid

MB Sample Id: 7700187-1-BLK

Prep Method: SW8015P

Date Prep: 03.31.20

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	04.01.20 12:20	

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



TRC Solutions, Inc
Pine Springs 2 State SWD

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121659

Parent Sample Id: 657447-001

Matrix: Soil

MS Sample Id: 657447-001 S

Prep Method: SW8015P

Date Prep: 03.31.20

MSD Sample Id: 657447-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	931	93	944	94	70-135	1	35	mg/kg	04.01.20 13:42	
Diesel Range Organics (DRO)	<50.0	1000	967	97	989	99	70-135	2	35	mg/kg	04.01.20 13:42	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	114		117		70-135	%	04.01.20 13:42
o-Terphenyl	104		106		70-135	%	04.01.20 13:42

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121565

MB Sample Id: 7700192-1-BLK

Matrix: Solid

LCS Sample Id: 7700192-1-BKS

Prep Method: SW5030B

Date Prep: 03.31.20

LCSD Sample Id: 7700192-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.121	121	0.124	124	70-130	2	35	mg/kg	03.31.20 20:42	
Toluene	<0.00200	0.100	0.118	118	0.113	113	70-130	4	35	mg/kg	03.31.20 20:42	
Ethylbenzene	<0.00200	0.100	0.109	109	0.106	106	71-129	3	35	mg/kg	03.31.20 20:42	
m,p-Xylenes	<0.00400	0.200	0.212	106	0.206	103	70-135	3	35	mg/kg	03.31.20 20:42	
o-Xylene	<0.00200	0.100	0.109	109	0.105	105	71-133	4	35	mg/kg	03.31.20 20:42	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	115		110		109		70-130	%	03.31.20 20:42
4-Bromofluorobenzene	93		86		86		70-130	%	03.31.20 20:42

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121565

Parent Sample Id: 657453-001

Matrix: Soil

MS Sample Id: 657453-001 S

Prep Method: SW5030B

Date Prep: 03.31.20

MSD Sample Id: 657453-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.108	109	0.103	104	70-130	5	35	mg/kg	03.31.20 21:23	
Toluene	<0.00199	0.0994	0.100	101	0.0941	95	70-130	6	35	mg/kg	03.31.20 21:23	
Ethylbenzene	<0.00199	0.0994	0.0943	95	0.0871	88	71-129	8	35	mg/kg	03.31.20 21:23	
m,p-Xylenes	<0.00398	0.199	0.185	93	0.170	85	70-135	8	35	mg/kg	03.31.20 21:23	
o-Xylene	<0.00199	0.0994	0.0949	95	0.0876	88	71-133	8	35	mg/kg	03.31.20 21:23	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		111		70-130	%	03.31.20 21:23
4-Bromofluorobenzene	91		91		70-130	%	03.31.20 21:23

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



Chain of Custody

Work Order No:

157453

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
 Midland, TX (432) 704-5440 EL Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296
 Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

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Page

of

Project Manager:	Jared Stoffel	Bill to: (if different)	JD McFormick
Company Name:	TRC	Company Name:	Black River Trucking
Address:	10 Deste Dr. STE 150E	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	JD McFormick, Frankie Rodriguez
Phone:	432-238-3003	Email:	Jared Stoffel, Tania Babu, Longoria,

Project Name:	Fire Springs 2 State SOD	Turn Around	☐
Project Number:		Routine	☐
Project Location:		Rush:	24 HRS
Sampler's Name:	Tania Babu	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT	Temperature (°C):	Temp Blank:	Thermometer ID	Wet Ice:	
	Received In tact:	Yes ☒ No ☐			
	Cooler Custody Seals:	Yes ☒ No ☐ N/A	Correction Factor:	-0.2	
	Sample Custody Seals:	Yes ☒ No ☐ N/A	Total Containers:	3	

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	ANALYSIS REQUEST	Preservative Codes	Sample Comments
MSU-3		S	03/31/20	1000	-	1	Chlorides (E300)	MeOH: Me	
ESU-3				1010	-	1	TPH (8015)	None: NO	
NSU-2				1020	-	1	BTEX (8021)	HNO3: HN	
								H2SO4: H2	
								HCL: HL	
								NaOH: Na	
								Zn Acetate+ NaOH: Zn	
								TAT starts the day received by the lab, if received by 4:00pm	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
 Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1631 / 245.1 / 7470 / 7471 : Hg

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 \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		3/31/20 15510			2
					4
					6

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 03.31.2020 03.56.00 PM

Work Order #: 657453

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.2
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6 *Custody Seals Signed and dated?	Yes
#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:



Elizabeth McClellan

Date: 03.31.2020

Checklist reviewed by:



Jessica Kramer

Date: 04.01.2020



Certificate of Analysis Summary 657454

TRC Solutions, Inc, Midland, TX

Project Name: Pine Springs 2 State SWD

Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Tue Mar-31-20 03:56 pm

Report Date: 02-APR-20

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	657454-001	657454-002	657454-003	657454-004	657454-005	657454-006
	<i>Field Id:</i>	FL-56 @3.25'	FL-58 @3'	FL-59 @3'	FL-60 @3'	FL-61 @3'	FL-62 @3'
	<i>Depth:</i>	3.25- ft	3-	3-	3-	3-	3-
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Mar-31-20 10:30	Mar-31-20 10:40	Mar-31-20 10:50	Mar-31-20 11:00	Mar-31-20 11:10	Mar-31-20 11:20
BTEX by EPA 8021B	<i>Extracted:</i>	Mar-31-20 17:21	Mar-31-20 17:21	Mar-31-20 17:21	Mar-31-20 17:21	Mar-31-20 17:21	Mar-31-20 17:21
	<i>Analyzed:</i>	Mar-31-20 23:45	Apr-01-20 00:06	Apr-01-20 00:26	Apr-01-20 00:46	Apr-01-20 01:07	Apr-01-20 01:27
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198
Toluene		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198
Ethylbenzene		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198
m,p-Xylenes		<0.00400 0.00400	<0.00398 0.00398	<0.00398 0.00398	<0.00397 0.00397	<0.00395 0.00395	<0.00396 0.00396
o-Xylene		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198
Xylenes, Total		<0.002 0.002	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198
Total BTEX		<0.002 0.002	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198
Chloride by EPA 300	<i>Extracted:</i>	Mar-31-20 19:18	Mar-31-20 19:18	Mar-31-20 19:18	Mar-31-20 19:18	Mar-31-20 19:18	Mar-31-20 19:18
	<i>Analyzed:</i>	Apr-01-20 09:44	Apr-01-20 09:49	Apr-01-20 10:06	Apr-01-20 10:12	Apr-01-20 10:17	Apr-01-20 10:23
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		150 49.6	248 49.9	242 49.8	167 50.1	243 50.3	128 49.7
TPH by SW8015 Mod	<i>Extracted:</i>	Mar-31-20 17:50	Mar-31-20 17:50	Mar-31-20 17:50	Mar-31-20 17:50	Mar-31-20 17:50	Mar-31-20 17:50
	<i>Analyzed:</i>	Apr-01-20 15:24	Apr-01-20 15:45	Apr-01-20 16:05	Apr-01-20 16:25	Apr-01-20 16:46	Apr-01-20 17:06
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.3 50.3	<50.1 50.1	<50.3 50.3	<50.0 50.0	<50.2 50.2	<50.1 50.1
Diesel Range Organics (DRO)		<50.3 50.3	<50.1 50.1	<50.3 50.3	<50.0 50.0	<50.2 50.2	<50.1 50.1
Motor Oil Range Hydrocarbons (MRO)		<50.3 50.3	<50.1 50.1	<50.3 50.3	<50.0 50.0	<50.2 50.2	<50.1 50.1
Total TPH		<50.3 50.3	<50.1 50.1	<50.3 50.3	<50 50	<50.2 50.2	<50.1 50.1

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

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Version: 1.9%

Jessica Kramer
Project Manager



Certificate of Analysis Summary 657454

TRC Solutions, Inc, Midland, TX

Project Name: Pine Springs 2 State SWD

Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Tue Mar-31-20 03:56 pm

Report Date: 02-APR-20

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	657454-007	657454-008	657454-009	657454-010	657454-011	
	Field Id:	FL-63 @3'	FL-64 @3'	FL-65 @1.5'	FL-67 @1.5'	FL-68 @3'	
	Depth:	3-	3-	1.5-	1.5-	3-	
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	
	Sampled:	Mar-31-20 11:30	Mar-31-20 11:40	Mar-31-20 11:50	Mar-31-20 12:00	Mar-31-20 12:10	
BTEX by EPA 8021B	Extracted:	Mar-31-20 17:21	Mar-31-20 17:21	Mar-31-20 17:21	Mar-31-20 17:21	Mar-31-20 17:21	
	Analyzed:	Apr-01-20 01:48	Apr-01-20 03:09	Apr-01-20 03:30	Apr-01-20 03:50	Apr-01-20 04:10	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Benzene		<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00201 0.00201	<0.00201 0.00201	
Toluene		<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00201 0.00201	<0.00201 0.00201	
Ethylbenzene		<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00201 0.00201	<0.00201 0.00201	
m,p-Xylenes		<0.00398 0.00398	<0.00400 0.00400	<0.00396 0.00396	<0.00402 0.00402	<0.00401 0.00401	
o-Xylene		<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00201 0.00201	<0.00201 0.00201	
Xylenes, Total		<0.00199 0.00199	<0.002 0.002	<0.00198 0.00198	<0.00201 0.00201	<0.00201 0.00201	
Total BTEX		<0.00199 0.00199	<0.002 0.002	<0.00198 0.00198	<0.00201 0.00201	<0.00201 0.00201	
Chloride by EPA 300	Extracted:	Mar-31-20 19:18	Mar-31-20 19:18	Mar-31-20 19:18	Mar-31-20 19:18	Mar-31-20 19:18	
	Analyzed:	Apr-01-20 10:28	Apr-01-20 10:34	Apr-01-20 10:39	Apr-01-20 10:51	Apr-01-20 10:57	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Chloride		591 49.9	230 49.6	188 49.6	91.2 50.1	312 50.3	
TPH by SW8015 Mod	Extracted:	Mar-31-20 17:50	Mar-31-20 17:50	Apr-01-20 11:57	Apr-01-20 11:57	Apr-01-20 11:57	
	Analyzed:	Apr-01-20 17:47	Apr-01-20 18:08	Apr-01-20 23:58	Apr-02-20 00:59	Apr-02-20 01:20	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Gasoline Range Hydrocarbons (GRO)		<50.2 50.2	<50.3 50.3	<50.2 50.2	<50.1 50.1	<50.2 50.2	
Diesel Range Organics (DRO)		<50.2 50.2	<50.3 50.3	<50.2 50.2	<50.1 50.1	<50.2 50.2	
Motor Oil Range Hydrocarbons (MRO)		<50.2 50.2	<50.3 50.3	<50.2 50.2	<50.1 50.1	<50.2 50.2	
Total TPH		<50.2 50.2	<50.3 50.3	<50.2 50.2	<50.1 50.1	<50.2 50.2	

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

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Version: 1.9%

Jessica Kramer
Project Manager

Analytical Report 657454

for
TRC Solutions, Inc

Project Manager: Jared Stoffel

Pine Springs 2 State SWD

02-APR-20

Collected By: Client



**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)

Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)

Xenco-Carlsbad (LELAP): Louisiana (05092)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)

Xenco-Tampa: Florida (E87429), North Carolina (483)



02-APR-20

Project Manager: **Jared Stoffel**

TRC Solutions, Inc

2057 Commerce

Midland, TX 79703

Reference: XENCO Report No(s): **657454**

Pine Springs 2 State SWD

Project Address:

Jared Stoffel:

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) 657454. 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. 657454 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 'Jessica Kramer'.

Jessica Kramer

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 657454****TRC Solutions, Inc, Midland, TX**

Pine Springs 2 State SWD

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FL-56 @3.25'	S	03-31-20 10:30	3.25 ft	657454-001
FL-58 @3'	S	03-31-20 10:40	3	657454-002
FL-59 @3'	S	03-31-20 10:50	3	657454-003
FL-60 @3'	S	03-31-20 11:00	3	657454-004
FL-61 @3'	S	03-31-20 11:10	3	657454-005
FL-62 @3'	S	03-31-20 11:20	3	657454-006
FL-63 @3'	S	03-31-20 11:30	3	657454-007
FL-64 @3'	S	03-31-20 11:40	3	657454-008
FL-65 @1.5'	S	03-31-20 11:50	1.5	657454-009
FL-67 @1.5'	S	03-31-20 12:00	1.5	657454-010
FL-68 @3'	S	03-31-20 12:10	3	657454-011



CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: Pine Springs 2 State SWD

Project ID:

Work Order Number(s): 657454

Report Date: 02-APR-20

Date Received: 03/31/2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3121565 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



Certificate of Analytical Results 657454

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-56 @3.25'**

Matrix: Soil

Date Received: 03.31.20 15.56

Lab Sample Id: 657454-001

Date Collected: 03.31.20 10.30

Sample Depth: 3.25 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.20 19.18

Basis: Wet Weight

Seq Number: 3121597

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	150	49.6	mg/kg	04.01.20 09.44		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.31.20 17.50

Basis: Wet Weight

Seq Number: 3121659

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	04.01.20 15.24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	04.01.20 15.24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	04.01.20 15.24	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	04.01.20 15.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	04.01.20 15.24	
o-Terphenyl	84-15-1	101	%	70-135	04.01.20 15.24	



Certificate of Analytical Results 657454

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-56 @3.25'**

Matrix: Soil

Date Received: 03.31.20 15.56

Lab Sample Id: 657454-001

Date Collected: 03.31.20 10.30

Sample Depth: 3.25 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.20 17.21

Basis: Wet Weight

Seq Number: 3121565

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.31.20 23.45	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.31.20 23.45	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.31.20 23.45	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	03.31.20 23.45	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.31.20 23.45	U	1
Xylenes, Total	1330-20-7	<0.002	0.002	mg/kg	03.31.20 23.45	U	1
Total BTEX		<0.002	0.002	mg/kg	03.31.20 23.45	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	03.31.20 23.45		
1,4-Difluorobenzene	540-36-3	117	%	70-130	03.31.20 23.45		



Certificate of Analytical Results 657454

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-58 @3'**

Matrix: Soil

Date Received: 03.31.20 15.56

Lab Sample Id: 657454-002

Date Collected: 03.31.20 10.40

Sample Depth: 3

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.20 19.18

Basis: Wet Weight

Seq Number: 3121597

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	248	49.9	mg/kg	04.01.20 09.49		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.31.20 17.50

Basis: Wet Weight

Seq Number: 3121659

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	04.01.20 15.45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	04.01.20 15.45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	04.01.20 15.45	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	04.01.20 15.45	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	102	%	70-135	04.01.20 15.45		
o-Terphenyl	84-15-1	101	%	70-135	04.01.20 15.45		



Certificate of Analytical Results 657454

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-58 @3'**

Matrix: Soil

Date Received: 03.31.20 15.56

Lab Sample Id: 657454-002

Date Collected: 03.31.20 10.40

Sample Depth: 3

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.20 17.21

Basis: Wet Weight

Seq Number: 3121565

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.01.20 00.06	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.01.20 00.06	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.01.20 00.06	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.01.20 00.06	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.01.20 00.06	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	04.01.20 00.06	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.01.20 00.06	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	92	%	70-130	04.01.20 00.06		
1,4-Difluorobenzene	540-36-3	113	%	70-130	04.01.20 00.06		



Certificate of Analytical Results 657454

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-59 @3'**

Matrix: Soil

Date Received: 03.31.20 15.56

Lab Sample Id: 657454-003

Date Collected: 03.31.20 10.50

Sample Depth: 3

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.20 19.18

Basis: Wet Weight

Seq Number: 3121597

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	242	49.8	mg/kg	04.01.20 10.06		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.31.20 17.50

Basis: Wet Weight

Seq Number: 3121659

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	04.01.20 16.05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	04.01.20 16.05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	04.01.20 16.05	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	04.01.20 16.05	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	99	%	70-135	04.01.20 16.05		
o-Terphenyl	84-15-1	99	%	70-135	04.01.20 16.05		



Certificate of Analytical Results 657454

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-59 @3'**

Matrix: Soil

Date Received: 03.31.20 15.56

Lab Sample Id: 657454-003

Date Collected: 03.31.20 10.50

Sample Depth: 3

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.20 17.21

Basis: Wet Weight

Seq Number: 3121565

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.01.20 00.26	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.01.20 00.26	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.01.20 00.26	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.01.20 00.26	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.01.20 00.26	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	04.01.20 00.26	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.01.20 00.26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	92	%	70-130	04.01.20 00.26		
1,4-Difluorobenzene	540-36-3	115	%	70-130	04.01.20 00.26		



Certificate of Analytical Results 657454

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-60 @3'**

Matrix: Soil

Date Received: 03.31.20 15.56

Lab Sample Id: 657454-004

Date Collected: 03.31.20 11.00

Sample Depth: 3

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.20 19.18

Basis: Wet Weight

Seq Number: 3121597

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	167	50.1	mg/kg	04.01.20 10.12		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.31.20 17.50

Basis: Wet Weight

Seq Number: 3121659

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.01.20 16.25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.01.20 16.25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.01.20 16.25	U	1
Total TPH	PHC635	<50	50	mg/kg	04.01.20 16.25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	99	%	70-135	04.01.20 16.25		
o-Terphenyl	84-15-1	98	%	70-135	04.01.20 16.25		



Certificate of Analytical Results 657454

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-60 @3'**

Matrix: Soil

Date Received: 03.31.20 15.56

Lab Sample Id: 657454-004

Date Collected: 03.31.20 11.00

Sample Depth: 3

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.20 17.21

Basis: Wet Weight

Seq Number: 3121565

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	04.01.20 00.46	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	04.01.20 00.46	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	04.01.20 00.46	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	04.01.20 00.46	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	04.01.20 00.46	U	1
Xylenes, Total	1330-20-7	<0.00198	0.00198	mg/kg	04.01.20 00.46	U	1
Total BTEX		<0.00198	0.00198	mg/kg	04.01.20 00.46	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	92	%	70-130	04.01.20 00.46		
1,4-Difluorobenzene	540-36-3	115	%	70-130	04.01.20 00.46		



Certificate of Analytical Results 657454

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-61 @3'**

Matrix: Soil

Date Received: 03.31.20 15.56

Lab Sample Id: 657454-005

Date Collected: 03.31.20 11.10

Sample Depth: 3

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.20 19.18

Basis: Wet Weight

Seq Number: 3121597

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	243	50.3	mg/kg	04.01.20 10.17		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.31.20 17.50

Basis: Wet Weight

Seq Number: 3121659

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.01.20 16.46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	04.01.20 16.46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	04.01.20 16.46	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	04.01.20 16.46	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	100	%	70-135	04.01.20 16.46		
o-Terphenyl	84-15-1	99	%	70-135	04.01.20 16.46		



Certificate of Analytical Results 657454

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-61 @3'**

Matrix: Soil

Date Received: 03.31.20 15.56

Lab Sample Id: 657454-005

Date Collected: 03.31.20 11.10

Sample Depth: 3

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.20 17.21

Basis: Wet Weight

Seq Number: 3121565

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	04.01.20 01.07	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	04.01.20 01.07	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	04.01.20 01.07	U	1
m,p-Xylenes	179601-23-1	<0.00395	0.00395	mg/kg	04.01.20 01.07	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	04.01.20 01.07	U	1
Xylenes, Total	1330-20-7	<0.00198	0.00198	mg/kg	04.01.20 01.07	U	1
Total BTEX		<0.00198	0.00198	mg/kg	04.01.20 01.07	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	115	%	70-130	04.01.20 01.07		
4-Bromofluorobenzene	460-00-4	92	%	70-130	04.01.20 01.07		



Certificate of Analytical Results 657454

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-62 @3'**

Matrix: Soil

Date Received: 03.31.20 15.56

Lab Sample Id: 657454-006

Date Collected: 03.31.20 11.20

Sample Depth: 3

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.20 19.18

Basis: Wet Weight

Seq Number: 3121597

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	128	49.7	mg/kg	04.01.20 10.23		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.31.20 17.50

Basis: Wet Weight

Seq Number: 3121659

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	04.01.20 17.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	04.01.20 17.06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	04.01.20 17.06	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	04.01.20 17.06	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	104	%	70-135	04.01.20 17.06		
o-Terphenyl	84-15-1	103	%	70-135	04.01.20 17.06		



Certificate of Analytical Results 657454

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-62 @3'**

Matrix: Soil

Date Received: 03.31.20 15.56

Lab Sample Id: 657454-006

Date Collected: 03.31.20 11.20

Sample Depth: 3

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.20 17.21

Basis: Wet Weight

Seq Number: 3121565

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	04.01.20 01.27	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	04.01.20 01.27	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	04.01.20 01.27	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	04.01.20 01.27	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	04.01.20 01.27	U	1
Xylenes, Total	1330-20-7	<0.00198	0.00198	mg/kg	04.01.20 01.27	U	1
Total BTEX		<0.00198	0.00198	mg/kg	04.01.20 01.27	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	114	%	70-130	04.01.20 01.27		
4-Bromofluorobenzene	460-00-4	91	%	70-130	04.01.20 01.27		



Certificate of Analytical Results 657454

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-63 @3'**

Matrix: Soil

Date Received: 03.31.20 15.56

Lab Sample Id: 657454-007

Date Collected: 03.31.20 11.30

Sample Depth: 3

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.20 19.18

Basis: Wet Weight

Seq Number: 3121597

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	591	49.9	mg/kg	04.01.20 10.28		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.31.20 17.50

Basis: Wet Weight

Seq Number: 3121659

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.01.20 17.47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	04.01.20 17.47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	04.01.20 17.47	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	04.01.20 17.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	04.01.20 17.47	
o-Terphenyl	84-15-1	99	%	70-135	04.01.20 17.47	



Certificate of Analytical Results 657454

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-63 @3'**

Matrix: Soil

Date Received: 03.31.20 15.56

Lab Sample Id: 657454-007

Date Collected: 03.31.20 11.30

Sample Depth: 3

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.20 17.21

Basis: Wet Weight

Seq Number: 3121565

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.01.20 01.48	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.01.20 01.48	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.01.20 01.48	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.01.20 01.48	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.01.20 01.48	U	1
Xylenes, Total	1330-20-7	<0.00199	0.00199	mg/kg	04.01.20 01.48	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.01.20 01.48	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	117	%	70-130	04.01.20 01.48		
4-Bromofluorobenzene	460-00-4	93	%	70-130	04.01.20 01.48		



Certificate of Analytical Results 657454

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-64 @3'**

Matrix: Soil

Date Received: 03.31.20 15.56

Lab Sample Id: 657454-008

Date Collected: 03.31.20 11.40

Sample Depth: 3

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.20 19.18

Basis: Wet Weight

Seq Number: 3121597

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	230	49.6	mg/kg	04.01.20 10.34		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 03.31.20 17.50

Basis: Wet Weight

Seq Number: 3121659

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	04.01.20 18.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	04.01.20 18.08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	04.01.20 18.08	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	04.01.20 18.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	04.01.20 18.08	
o-Terphenyl	84-15-1	98	%	70-135	04.01.20 18.08	



Certificate of Analytical Results 657454

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-64 @3'**

Matrix: Soil

Date Received: 03.31.20 15.56

Lab Sample Id: 657454-008

Date Collected: 03.31.20 11.40

Sample Depth: 3

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.20 17.21

Basis: Wet Weight

Seq Number: 3121565

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.01.20 03.09	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.01.20 03.09	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.01.20 03.09	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	04.01.20 03.09	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.01.20 03.09	U	1
Xylenes, Total	1330-20-7	<0.002	0.002	mg/kg	04.01.20 03.09	U	1
Total BTEX		<0.002	0.002	mg/kg	04.01.20 03.09	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	93	%	70-130	04.01.20 03.09		
1,4-Difluorobenzene	540-36-3	116	%	70-130	04.01.20 03.09		



Certificate of Analytical Results 657454

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-65 @1.5'**

Matrix: Soil

Date Received: 03.31.20 15.56

Lab Sample Id: 657454-009

Date Collected: 03.31.20 11.50

Sample Depth: 1.5

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.20 19.18

Basis: Wet Weight

Seq Number: 3121597

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	188	49.6	mg/kg	04.01.20 10.39		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.01.20 11.57

Basis: Wet Weight

Seq Number: 3121687

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.01.20 23.58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	04.01.20 23.58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	04.01.20 23.58	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	04.01.20 23.58	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	97	%	70-135	04.01.20 23.58		
o-Terphenyl	84-15-1	103	%	70-135	04.01.20 23.58		



Certificate of Analytical Results 657454

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-65 @1.5'**

Matrix: Soil

Date Received: 03.31.20 15.56

Lab Sample Id: 657454-009

Date Collected: 03.31.20 11.50

Sample Depth: 1.5

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.20 17.21

Basis: Wet Weight

Seq Number: 3121565

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	04.01.20 03.30	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	04.01.20 03.30	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	04.01.20 03.30	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	04.01.20 03.30	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	04.01.20 03.30	U	1
Xylenes, Total	1330-20-7	<0.00198	0.00198	mg/kg	04.01.20 03.30	U	1
Total BTEX		<0.00198	0.00198	mg/kg	04.01.20 03.30	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	70-130	04.01.20 03.30		
1,4-Difluorobenzene	540-36-3	116	%	70-130	04.01.20 03.30		



Certificate of Analytical Results 657454

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-67 @1.5'**

Matrix: Soil

Date Received: 03.31.20 15.56

Lab Sample Id: 657454-010

Date Collected: 03.31.20 12.00

Sample Depth: 1.5

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.20 19.18

Basis: Wet Weight

Seq Number: 3121597

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	91.2	50.1	mg/kg	04.01.20 10.51		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.01.20 11.57

Basis: Wet Weight

Seq Number: 3121687

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	04.02.20 00.59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	04.02.20 00.59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	04.02.20 00.59	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	04.02.20 00.59	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	97	%	70-135	04.02.20 00.59		
o-Terphenyl	84-15-1	103	%	70-135	04.02.20 00.59		



Certificate of Analytical Results 657454

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-67 @1.5'**

Matrix: Soil

Date Received: 03.31.20 15.56

Lab Sample Id: 657454-010

Date Collected: 03.31.20 12.00

Sample Depth: 1.5

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.20 17.21

Basis: Wet Weight

Seq Number: 3121565

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	04.01.20 03.50	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	04.01.20 03.50	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	04.01.20 03.50	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	04.01.20 03.50	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	04.01.20 03.50	U	1
Xylenes, Total	1330-20-7	<0.00201	0.00201	mg/kg	04.01.20 03.50	U	1
Total BTEX		<0.00201	0.00201	mg/kg	04.01.20 03.50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	70-130	04.01.20 03.50		
1,4-Difluorobenzene	540-36-3	113	%	70-130	04.01.20 03.50		



Certificate of Analytical Results 657454

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-68 @3'**

Matrix: Soil

Date Received: 03.31.20 15.56

Lab Sample Id: 657454-011

Date Collected: 03.31.20 12.10

Sample Depth: 3

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.20 19.18

Basis: Wet Weight

Seq Number: 3121597

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	312	50.3	mg/kg	04.01.20 10.57		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.01.20 11.57

Basis: Wet Weight

Seq Number: 3121687

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.02.20 01.20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	04.02.20 01.20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	04.02.20 01.20	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	04.02.20 01.20	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	102	%	70-135	04.02.20 01.20		
o-Terphenyl	84-15-1	108	%	70-135	04.02.20 01.20		



Certificate of Analytical Results 657454

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-68 @3'**

Matrix: Soil

Date Received: 03.31.20 15.56

Lab Sample Id: 657454-011

Date Collected: 03.31.20 12.10

Sample Depth: 3

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 03.31.20 17.21

Basis: Wet Weight

Seq Number: 3121565

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	04.01.20 04.10	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	04.01.20 04.10	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	04.01.20 04.10	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	04.01.20 04.10	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	04.01.20 04.10	U	1
Xylenes, Total	1330-20-7	<0.00201	0.00201	mg/kg	04.01.20 04.10	U	1
Total BTEX		<0.00201	0.00201	mg/kg	04.01.20 04.10	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	70-130	04.01.20 04.10		
1,4-Difluorobenzene	540-36-3	115	%	70-130	04.01.20 04.10		



Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

****** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

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



TRC Solutions, Inc
Pine Springs 2 State SWD

Analytical Method: Chloride by EPA 300

Seq Number: 3121597

MB Sample Id: 7700191-1-BLK

Matrix: Solid

LCS Sample Id: 7700191-1-BKS

Prep Method: E300P

Date Prep: 03.31.20

LCSD Sample Id: 7700191-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	267	107	266	107	90-110	0	20	mg/kg	04.01.20 09:05	

Analytical Method: Chloride by EPA 300

Seq Number: 3121597

Parent Sample Id: 657453-001

Matrix: Soil

MS Sample Id: 657453-001 S

Prep Method: E300P

Date Prep: 03.31.20

MSD Sample Id: 657453-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	174	202	359	92	373	99	90-110	4	20	mg/kg	04.01.20 09:21	

Analytical Method: Chloride by EPA 300

Seq Number: 3121597

Parent Sample Id: 657454-011

Matrix: Soil

MS Sample Id: 657454-011 S

Prep Method: E300P

Date Prep: 03.31.20

MSD Sample Id: 657454-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	312	201	512	100	520	103	90-110	2	20	mg/kg	04.01.20 11:02	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121659

MB Sample Id: 7700187-1-BLK

Matrix: Solid

LCS Sample Id: 7700187-1-BKS

Prep Method: SW8015P

Date Prep: 03.31.20

LCSD Sample Id: 7700187-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1030	103	934	93	70-135	10	35	mg/kg	04.01.20 12:41	
Diesel Range Organics (DRO)	<50.0	1000	1110	111	999	100	70-135	11	35	mg/kg	04.01.20 12:41	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	88		113		100		70-135	%	04.01.20 12:41
o-Terphenyl	89		103		92		70-135	%	04.01.20 12:41

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



TRC Solutions, Inc
Pine Springs 2 State SWD

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121687

MB Sample Id: 770257-1-BLK

Matrix: Solid

LCS Sample Id: 770257-1-BKS

Prep Method: SW8015P

Date Prep: 04.01.20

LCSD Sample Id: 770257-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1150	115	1130	113	70-135	2	35	mg/kg	04.01.20 23:18	
Diesel Range Organics (DRO)	<50.0	1000	1220	122	1260	126	70-135	3	35	mg/kg	04.01.20 23:18	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	94		134		129		70-135	%	04.01.20 23:18
o-Terphenyl	100		131		126		70-135	%	04.01.20 23:18

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121659

Matrix: Solid

MB Sample Id: 7700187-1-BLK

Prep Method: SW8015P

Date Prep: 03.31.20

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	04.01.20 12:20	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121687

Matrix: Solid

MB Sample Id: 770257-1-BLK

Prep Method: SW8015P

Date Prep: 04.01.20

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	04.01.20 22:57	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121659

Matrix: Soil

Parent Sample Id: 657447-001

MS Sample Id: 657447-001 S

Prep Method: SW8015P

Date Prep: 03.31.20

MSD Sample Id: 657447-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	931	93	944	94	70-135	1	35	mg/kg	04.01.20 13:42	
Diesel Range Organics (DRO)	<50.0	1000	967	97	989	99	70-135	2	35	mg/kg	04.01.20 13:42	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	114		117		70-135	%	04.01.20 13:42
o-Terphenyl	104		106		70-135	%	04.01.20 13:42

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



TRC Solutions, Inc
Pine Springs 2 State SWD

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121687

Parent Sample Id: 657454-009

Matrix: Soil

MS Sample Id: 657454-009 S

Prep Method: SW8015P

Date Prep: 04.01.20

MSD Sample Id: 657454-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.1	1000	1020	102	902	91	70-135	12	35	mg/kg	04.02.20 00:19	
Diesel Range Organics (DRO)	<50.1	1000	1170	117	1040	104	70-135	12	35	mg/kg	04.02.20 00:19	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	123		116		70-135	%	04.02.20 00:19
o-Terphenyl	126		116		70-135	%	04.02.20 00:19

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121565

MB Sample Id: 7700192-1-BLK

Matrix: Solid

LCS Sample Id: 7700192-1-BKS

Prep Method: SW5030B

Date Prep: 03.31.20

LCSD Sample Id: 7700192-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.121	121	0.124	124	70-130	2	35	mg/kg	03.31.20 20:42	
Toluene	<0.00200	0.100	0.118	118	0.113	113	70-130	4	35	mg/kg	03.31.20 20:42	
Ethylbenzene	<0.00200	0.100	0.109	109	0.106	106	71-129	3	35	mg/kg	03.31.20 20:42	
m,p-Xylenes	<0.00400	0.200	0.212	106	0.206	103	70-135	3	35	mg/kg	03.31.20 20:42	
o-Xylene	<0.00200	0.100	0.109	109	0.105	105	71-133	4	35	mg/kg	03.31.20 20:42	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	115		110		109		70-130	%	03.31.20 20:42
4-Bromofluorobenzene	93		86		86		70-130	%	03.31.20 20:42

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121565

Parent Sample Id: 657453-001

Matrix: Soil

MS Sample Id: 657453-001 S

Prep Method: SW5030B

Date Prep: 03.31.20

MSD Sample Id: 657453-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.108	109	0.103	104	70-130	5	35	mg/kg	03.31.20 21:23	
Toluene	<0.00199	0.0994	0.100	101	0.0941	95	70-130	6	35	mg/kg	03.31.20 21:23	
Ethylbenzene	<0.00199	0.0994	0.0943	95	0.0871	88	71-129	8	35	mg/kg	03.31.20 21:23	
m,p-Xylenes	<0.00398	0.199	0.185	93	0.170	85	70-135	8	35	mg/kg	03.31.20 21:23	
o-Xylene	<0.00199	0.0994	0.0949	95	0.0876	88	71-133	8	35	mg/kg	03.31.20 21:23	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		111		70-130	%	03.31.20 21:23
4-Bromofluorobenzene	91		91		70-130	%	03.31.20 21:23

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



Chain of Custody

Work Order No: 657454

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432) 704-5440 El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296 Cashead, NM (432) 704-5440
Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 622-2000 West Palm Beach, FL (561) 689-6767

Page 4 of 4

Project Manager:	Jared Stoffel	Bill to: (if different)	JD McCormick
Company Name:	TKC	Company Name:	Black River Trucking
Address:	10 Westa Dr. STE 150E	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	432-238-3003	Email:	jared.tk@tkc.com, jd.joe@tkc.com, frankie

Work Order Comments	
Program:	UST/PST ☐ PRP ☐ Brownfields ☐ RCC ☐ Superfund ☐
State of Project:	
Reporting Level II	☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables:	EDD ☐ ADAPT ☐ Other: ☐

[illegible]

Total 200.7 / 6010 200.8 6020:	
<i>Circle Method(s) and Metal(s) to be analyzed</i>	
8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn	1631 / 245.1 / 7470 / 7471 : Hg
TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	
Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenoco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenoco 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 Xenoco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenoco, but not analyzed. These terms will be enforced unless previously negotiated.	

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		3/8/20 1530			

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 03.31.2020 03.56.00 PM

Work Order #: 657454

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.2
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6 *Custody Seals Signed and dated?	Yes
#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:



Elizabeth McClellan

Date: 03.31.2020

Checklist reviewed by:



Jessica Kramer

Date: 04.01.2020



Certificate of Analysis Summary 657636

TRC Solutions, Inc, Midland, TX

Project Name: Pine Springs 2 State SWD

Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Wed Apr-01-20 04:10 pm

Report Date: 02-APR-20

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	657636-001	657636-002	657636-003	657636-004	657636-005	657636-006
	Field Id:	FL-66 @ 3'	FL-69 @ 2.5'	FL-70 @ 2.5'	FL-71 @ 3'	FL-72 @ 3"	FL-73 @ 3"
	Depth:	3- ft	2.5- ft	2.5- ft	3- ft	3- ft	3- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Apr-01-20 10:00	Apr-01-20 10:10	Apr-01-20 10:20	Apr-01-20 10:30	Apr-01-20 10:40	Apr-01-20 10:50
BTEX by EPA 8021B	Extracted:	Apr-01-20 17:00	Apr-01-20 17:00	Apr-01-20 17:00	Apr-01-20 17:00	Apr-01-20 17:00	Apr-01-20 17:00
	Analyzed:	Apr-01-20 22:40	Apr-01-20 23:00	Apr-01-20 23:21	Apr-01-20 23:41	Apr-02-20 00:01	Apr-02-20 00:22
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00201 0.00201	<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200
Toluene		<0.00201 0.00201	<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200
Ethylbenzene		<0.00201 0.00201	<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200
m,p-Xylenes		<0.00402 0.00402	<0.00403 0.00403	<0.00398 0.00398	<0.00398 0.00398	<0.00398 0.00398	<0.00399 0.00399
o-Xylene		<0.00201 0.00201	<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200
Total Xylenes		<0.00201 0.00201	<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.002 0.002
Total BTEX		<0.00201 0.00201	<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.002 0.002
Chloride by EPA 300	Extracted:	Apr-01-20 18:27	Apr-01-20 18:27	Apr-01-20 18:27	Apr-01-20 18:27	Apr-01-20 18:27	Apr-01-20 18:27
	Analyzed:	Apr-01-20 19:35	Apr-01-20 19:52	Apr-01-20 19:58	Apr-01-20 20:03	Apr-01-20 20:09	Apr-01-20 20:14
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		335 49.9	67.7 50.4	329 50.2	454 49.9	63.9 49.6	108 49.8
TPH By SW8015 Mod	Extracted:	Apr-02-20 09:00	Apr-02-20 09:00	Apr-02-20 09:00	Apr-02-20 09:00	Apr-02-20 09:00	Apr-02-20 09:00
	Analyzed:	Apr-02-20 10:08	Apr-02-20 12:34	Apr-02-20 12:55	Apr-02-20 13:15	Apr-02-20 13:36	Apr-02-20 13:56
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.1 50.1	<49.9 49.9	<49.8 49.8	<50.1 50.1	<50.3 50.3
Diesel Range Organics (DRO)		<50.0 50.0	<50.1 50.1	<49.9 49.9	<49.8 49.8	<50.1 50.1	<50.3 50.3
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.1 50.1	<49.9 49.9	<49.8 49.8	<50.1 50.1	<50.3 50.3
Total TPH		<50 50	<50.1 50.1	<49.9 49.9	<49.8 49.8	<50.1 50.1	<50.3 50.3

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 - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer
Project Manager



Certificate of Analysis Summary 657636

TRC Solutions, Inc, Midland, TX

Project Name: Pine Springs 2 State SWD

Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Wed Apr-01-20 04:10 pm

Report Date: 02-APR-20

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	657636-007	657636-008	657636-009	657636-010	657636-011	657636-012
	Field Id:	FL-74 @ 3"	FL-75 @ 3"	FL-76 @ 3"	FL-77 @ 3"	FL-78 @ 3"	FL-79 @ 3"
	Depth:	3- ft	3- ft	3- ft	3- ft	3- ft	3- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Apr-01-20 11:00	Apr-01-20 11:10	Apr-01-20 11:20	Apr-01-20 11:30	Apr-01-20 11:40	Apr-01-20 11:50
BTEX by EPA 8021B	Extracted:	Apr-01-20 17:00	Apr-01-20 17:00	Apr-01-20 17:00	Apr-01-20 17:00	Apr-01-20 17:00	Apr-01-20 17:00
	Analyzed:	Apr-02-20 01:43	Apr-02-20 02:04	Apr-02-20 02:24	Apr-02-20 02:44	Apr-02-20 03:05	Apr-02-20 03:25
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199	<0.00202 0.00202	<0.00199 0.00199
Toluene		<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199	<0.00202 0.00202	<0.00199 0.00199
Ethylbenzene		<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199	<0.00202 0.00202	<0.00199 0.00199
m,p-Xylenes		<0.00404 0.00404	<0.00404 0.00404	<0.00404 0.00404	<0.00398 0.00398	<0.00404 0.00404	<0.00398 0.00398
o-Xylene		<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199	<0.00202 0.00202	<0.00199 0.00199
Total Xylenes		<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199	<0.00202 0.00202	<0.00199 0.00199
Total BTEX		<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199	<0.00202 0.00202	<0.00199 0.00199
Chloride by EPA 300	Extracted:	Apr-01-20 18:27	Apr-01-20 18:27	Apr-01-20 18:27	Apr-01-20 18:27	Apr-01-20 18:27	Apr-01-20 18:27
	Analyzed:	Apr-01-20 20:20	Apr-01-20 20:37	Apr-01-20 20:42	Apr-01-20 20:59	Apr-01-20 21:04	Apr-01-20 21:10
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		371 X 50.0	322 49.9	109 49.7	71.4 49.8	69.6 50.0	62.9 50.1
TPH By SW8015 Mod	Extracted:	Apr-02-20 09:00	Apr-02-20 09:00	Apr-02-20 09:00	Apr-02-20 09:00	Apr-02-20 09:00	Apr-02-20 09:00
	Analyzed:	Apr-02-20 14:16	Apr-02-20 14:37	Apr-02-20 14:57	Apr-02-20 15:18	Apr-02-20 15:59	Apr-02-20 16:19
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.1 50.1	<50.1 50.1	<50.1 50.1	<50.1 50.1	<50.0 50.0	<50.1 50.1
Diesel Range Organics (DRO)		<50.1 50.1	<50.1 50.1	<50.1 50.1	<50.1 50.1	<50.0 50.0	<50.1 50.1
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1	<50.1 50.1	<50.1 50.1	<50.1 50.1	<50.0 50.0	<50.1 50.1
Total TPH		<50.1 50.1	<50.1 50.1	<50.1 50.1	<50.1 50.1	<50 50	<50.1 50.1

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 - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer
Project Manager



Certificate of Analysis Summary 657636

TRC Solutions, Inc, Midland, TX

Project Name: Pine Springs 2 State SWD

Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Wed Apr-01-20 04:10 pm

Report Date: 02-APR-20

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	657636-013	657636-014				
	Field Id:	FL-80 @ 3"	FL-81 @ 3"				
	Depth:	3- ft	3- ft				
	Matrix:	SOIL	SOIL				
	Sampled:	Apr-01-20 12:00	Apr-01-20 12:10				
BTEX by EPA 8021B	Extracted:	Apr-01-20 17:00	Apr-01-20 17:00				
	Analyzed:	Apr-02-20 03:46	Apr-02-20 04:06				
	Units/RL:	mg/kg RL	mg/kg RL				
Benzene		<0.00199 0.00199	<0.00198 0.00198				
Toluene		<0.00199 0.00199	<0.00198 0.00198				
Ethylbenzene		<0.00199 0.00199	<0.00198 0.00198				
m,p-Xylenes		<0.00398 0.00398	<0.00397 0.00397				
o-Xylene		<0.00199 0.00199	<0.00198 0.00198				
Total Xylenes		<0.00199 0.00199	<0.00198 0.00198				
Total BTEX		<0.00199 0.00199	<0.00198 0.00198				
Chloride by EPA 300	Extracted:	Apr-01-20 18:27	Apr-01-20 18:27				
	Analyzed:	Apr-01-20 21:16	Apr-01-20 21:21				
	Units/RL:	mg/kg RL	mg/kg RL				
Chloride		99.9 50.2	99.1 49.6				
TPH By SW8015 Mod	Extracted:	Apr-02-20 09:00	Apr-02-20 09:00				
	Analyzed:	Apr-02-20 16:39	Apr-02-20 17:00				
	Units/RL:	mg/kg RL	mg/kg RL				
Gasoline Range Hydrocarbons (GRO)		<50.1 50.1	<50.2 50.2				
Diesel Range Organics (DRO)		<50.1 50.1	<50.2 50.2				
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1	<50.2 50.2				
Total TPH		<50.1 50.1	<50.2 50.2				

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 - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer
Project Manager

Analytical Report 657636

for
TRC Solutions, Inc

Project Manager: Jared Stoffel

Pine Springs 2 State SWD

02-APR-20

Collected By: Client



**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)

Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)

Xenco-Carlsbad (LELAP): Louisiana (05092)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)

Xenco-Tampa: Florida (E87429), North Carolina (483)



02-APR-20

Project Manager: **Jared Stoffel**

TRC Solutions, Inc

2057 Commerce

Midland, TX 79703

Reference: XENCO Report No(s): **657636**

Pine Springs 2 State SWD

Project Address:

Jared Stoffel:

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) 657636. 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. 657636 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 'Jessica Kramer'.

Jessica Kramer

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 657636****TRC Solutions, Inc, Midland, TX**

Pine Springs 2 State SWD

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FL-66 @ 3'	S	04-01-20 10:00	3 ft	657636-001
FL-69 @ 2.5'	S	04-01-20 10:10	2.5 ft	657636-002
FL-70 @ 2.5'	S	04-01-20 10:20	2.5 ft	657636-003
FL-71 @ 3'	S	04-01-20 10:30	3 ft	657636-004
FL-72 @ 3"	S	04-01-20 10:40	3 ft	657636-005
FL-73 @ 3"	S	04-01-20 10:50	3 ft	657636-006
FL-74 @ 3"	S	04-01-20 11:00	3 ft	657636-007
FL-75 @ 3"	S	04-01-20 11:10	3 ft	657636-008
FL-76 @ 3"	S	04-01-20 11:20	3 ft	657636-009
FL-77 @ 3"	S	04-01-20 11:30	3 ft	657636-010
FL-78 @ 3"	S	04-01-20 11:40	3 ft	657636-011
FL-79 @ 3"	S	04-01-20 11:50	3 ft	657636-012
FL-80 @ 3"	S	04-01-20 12:00	3 ft	657636-013
FL-81 @ 3"	S	04-01-20 12:10	3 ft	657636-014

**CASE NARRATIVE****Client Name: TRC Solutions, Inc****Project Name: Pine Springs 2 State SWD**

Project ID:
Work Order Number(s): 657636

Report Date: 02-APR-20
Date Received: 04/01/2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3121693 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3121702 Chloride by EPA 300

Lab Sample ID 657636-007 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 657636-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013, -014.

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



Certificate of Analytical Results 657636

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-66 @ 3'**

Matrix: Soil

Date Received: 04.01.20 16.10

Lab Sample Id: 657636-001

Date Collected: 04.01.20 10.00

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 18.27

Basis: Wet Weight

Seq Number: 3121702

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	335	49.9	mg/kg	04.01.20 19.35		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.02.20 09.00

Basis: Wet Weight

Seq Number: 3121740

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.02.20 10.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.02.20 10.08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.02.20 10.08	U	1
Total TPH	PHC635	<50	50	mg/kg	04.02.20 10.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	04.02.20 10.08	
o-Terphenyl	84-15-1	105	%	70-135	04.02.20 10.08	



Certificate of Analytical Results 657636

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-66 @ 3'**

Matrix: Soil

Date Received: 04.01.20 16.10

Lab Sample Id: 657636-001

Date Collected: 04.01.20 10.00

Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 17.00

Basis: Wet Weight

Seq Number: 3121693

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	04.01.20 22.40	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	04.01.20 22.40	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	04.01.20 22.40	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	04.01.20 22.40	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	04.01.20 22.40	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	04.01.20 22.40	U	1
Total BTEX		<0.00201	0.00201	mg/kg	04.01.20 22.40	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	114	%	70-130	04.01.20 22.40		
4-Bromofluorobenzene	460-00-4	91	%	70-130	04.01.20 22.40		



Certificate of Analytical Results 657636

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-69 @ 2.5'**

Matrix: Soil

Date Received: 04.01.20 16.10

Lab Sample Id: 657636-002

Date Collected: 04.01.20 10.10

Sample Depth: 2.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 18.27

Basis: Wet Weight

Seq Number: 3121702

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	67.7	50.4	mg/kg	04.01.20 19.52		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.02.20 09.00

Basis: Wet Weight

Seq Number: 3121740

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	04.02.20 12.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	04.02.20 12.34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	04.02.20 12.34	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	04.02.20 12.34	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	115	%	70-135	04.02.20 12.34		
o-Terphenyl	84-15-1	119	%	70-135	04.02.20 12.34		



Certificate of Analytical Results 657636

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-69 @ 2.5'**

Matrix: Soil

Date Received: 04.01.20 16.10

Lab Sample Id: 657636-002

Date Collected: 04.01.20 10.10

Sample Depth: 2.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 17.00

Basis: Wet Weight

Seq Number: 3121693

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	04.01.20 23.00	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	04.01.20 23.00	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	04.01.20 23.00	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	04.01.20 23.00	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	04.01.20 23.00	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	04.01.20 23.00	U	1
Total BTEX		<0.00202	0.00202	mg/kg	04.01.20 23.00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	93	%	70-130	04.01.20 23.00		
1,4-Difluorobenzene	540-36-3	113	%	70-130	04.01.20 23.00		



Certificate of Analytical Results 657636

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-70 @ 2.5'**

Matrix: Soil

Date Received: 04.01.20 16.10

Lab Sample Id: 657636-003

Date Collected: 04.01.20 10.20

Sample Depth: 2.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 18.27

Basis: Wet Weight

Seq Number: 3121702

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	329	50.2	mg/kg	04.01.20 19.58		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.02.20 09.00

Basis: Wet Weight

Seq Number: 3121740

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.02.20 12.55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	04.02.20 12.55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.02.20 12.55	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.02.20 12.55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	108	%	70-135	04.02.20 12.55		
o-Terphenyl	84-15-1	112	%	70-135	04.02.20 12.55		



Certificate of Analytical Results 657636

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-70 @ 2.5'**

Matrix: Soil

Date Received: 04.01.20 16.10

Lab Sample Id: 657636-003

Date Collected: 04.01.20 10.20

Sample Depth: 2.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 17.00

Basis: Wet Weight

Seq Number: 3121693

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.01.20 23.21	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.01.20 23.21	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.01.20 23.21	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.01.20 23.21	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.01.20 23.21	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.01.20 23.21	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.01.20 23.21	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	114	%	70-130	04.01.20 23.21		
4-Bromofluorobenzene	460-00-4	92	%	70-130	04.01.20 23.21		



Certificate of Analytical Results 657636

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-71 @ 3'**

Matrix: Soil

Date Received: 04.01.20 16.10

Lab Sample Id: 657636-004

Date Collected: 04.01.20 10.30

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 18.27

Basis: Wet Weight

Seq Number: 3121702

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	454	49.9	mg/kg	04.01.20 20.03		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.02.20 09.00

Basis: Wet Weight

Seq Number: 3121740

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	04.02.20 13.15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	04.02.20 13.15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	04.02.20 13.15	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	04.02.20 13.15	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	115	%	70-135	04.02.20 13.15		
o-Terphenyl	84-15-1	118	%	70-135	04.02.20 13.15		



Certificate of Analytical Results 657636

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-71 @ 3'**

Matrix: Soil

Date Received: 04.01.20 16.10

Lab Sample Id: 657636-004

Date Collected: 04.01.20 10.30

Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 17.00

Basis: Wet Weight

Seq Number: 3121693

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.01.20 23.41	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.01.20 23.41	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.01.20 23.41	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.01.20 23.41	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.01.20 23.41	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.01.20 23.41	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.01.20 23.41	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	93	%	70-130	04.01.20 23.41		
1,4-Difluorobenzene	540-36-3	114	%	70-130	04.01.20 23.41		



Certificate of Analytical Results 657636

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-72 @ 3"**

Matrix: Soil

Date Received: 04.01.20 16.10

Lab Sample Id: 657636-005

Date Collected: 04.01.20 10.40

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 18.27

Basis: Wet Weight

Seq Number: 3121702

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	63.9	49.6	mg/kg	04.01.20 20.09		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.02.20 09.00

Basis: Wet Weight

Seq Number: 3121740

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	04.02.20 13.36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	04.02.20 13.36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	04.02.20 13.36	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	04.02.20 13.36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	102	%	70-135	04.02.20 13.36		
o-Terphenyl	84-15-1	107	%	70-135	04.02.20 13.36		



Certificate of Analytical Results 657636

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-72 @ 3"**

Matrix: Soil

Date Received: 04.01.20 16.10

Lab Sample Id: 657636-005

Date Collected: 04.01.20 10.40

Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 17.00

Basis: Wet Weight

Seq Number: 3121693

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.02.20 00.01	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.02.20 00.01	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.02.20 00.01	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.02.20 00.01	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.02.20 00.01	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.02.20 00.01	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.02.20 00.01	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	113	%	70-130	04.02.20 00.01		
4-Bromofluorobenzene	460-00-4	92	%	70-130	04.02.20 00.01		



Certificate of Analytical Results 657636

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-73 @ 3"**

Matrix: Soil

Date Received: 04.01.20 16.10

Lab Sample Id: 657636-006

Date Collected: 04.01.20 10.50

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 18.27

Basis: Wet Weight

Seq Number: 3121702

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	108	49.8	mg/kg	04.01.20 20.14		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.02.20 09.00

Basis: Wet Weight

Seq Number: 3121740

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	04.02.20 13.56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	04.02.20 13.56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	04.02.20 13.56	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	04.02.20 13.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	04.02.20 13.56	
o-Terphenyl	84-15-1	115	%	70-135	04.02.20 13.56	



Certificate of Analytical Results 657636

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-73 @ 3"**

Matrix: Soil

Date Received: 04.01.20 16.10

Lab Sample Id: 657636-006

Date Collected: 04.01.20 10.50

Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 17.00

Basis: Wet Weight

Seq Number: 3121693

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.02.20 00.22	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.02.20 00.22	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.02.20 00.22	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	04.02.20 00.22	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.02.20 00.22	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	04.02.20 00.22	U	1
Total BTEX		<0.002	0.002	mg/kg	04.02.20 00.22	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	89	%	70-130	04.02.20 00.22		
1,4-Difluorobenzene	540-36-3	112	%	70-130	04.02.20 00.22		



Certificate of Analytical Results 657636

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-74 @ 3"**

Matrix: Soil

Date Received: 04.01.20 16.10

Lab Sample Id: 657636-007

Date Collected: 04.01.20 11.00

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 18.27

Basis: Wet Weight

Seq Number: 3121702

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	371	50.0	mg/kg	04.01.20 20.20	X	5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.02.20 09.00

Basis: Wet Weight

Seq Number: 3121740

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	04.02.20 14.16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	04.02.20 14.16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	04.02.20 14.16	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	04.02.20 14.16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	102	%	70-135	04.02.20 14.16		
o-Terphenyl	84-15-1	105	%	70-135	04.02.20 14.16		



Certificate of Analytical Results 657636

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-74 @ 3"**

Matrix: Soil

Date Received: 04.01.20 16.10

Lab Sample Id: 657636-007

Date Collected: 04.01.20 11.00

Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 17.00

Basis: Wet Weight

Seq Number: 3121693

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	04.02.20 01.43	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	04.02.20 01.43	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	04.02.20 01.43	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	04.02.20 01.43	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	04.02.20 01.43	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	04.02.20 01.43	U	1
Total BTEX		<0.00202	0.00202	mg/kg	04.02.20 01.43	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	114	%	70-130	04.02.20 01.43		
4-Bromofluorobenzene	460-00-4	95	%	70-130	04.02.20 01.43		



Certificate of Analytical Results 657636

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-75 @ 3"**

Matrix: Soil

Date Received: 04.01.20 16.10

Lab Sample Id: 657636-008

Date Collected: 04.01.20 11.10

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 18.27

Basis: Wet Weight

Seq Number: 3121702

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	322	49.9	mg/kg	04.01.20 20.37		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.02.20 09.00

Basis: Wet Weight

Seq Number: 3121740

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	04.02.20 14.37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	04.02.20 14.37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	04.02.20 14.37	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	04.02.20 14.37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	105	%	70-135	04.02.20 14.37		
o-Terphenyl	84-15-1	109	%	70-135	04.02.20 14.37		



Certificate of Analytical Results 657636

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-75 @ 3"**

Matrix: Soil

Date Received: 04.01.20 16.10

Lab Sample Id: 657636-008

Date Collected: 04.01.20 11.10

Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 17.00

Basis: Wet Weight

Seq Number: 3121693

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	04.02.20 02.04	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	04.02.20 02.04	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	04.02.20 02.04	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	04.02.20 02.04	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	04.02.20 02.04	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	04.02.20 02.04	U	1
Total BTEX		<0.00202	0.00202	mg/kg	04.02.20 02.04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	91	%	70-130	04.02.20 02.04		
1,4-Difluorobenzene	540-36-3	113	%	70-130	04.02.20 02.04		



Certificate of Analytical Results 657636

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-76 @ 3"**

Matrix: Soil

Date Received: 04.01.20 16.10

Lab Sample Id: 657636-009

Date Collected: 04.01.20 11.20

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 18.27

Basis: Wet Weight

Seq Number: 3121702

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	109	49.7	mg/kg	04.01.20 20.42		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.02.20 09.00

Basis: Wet Weight

Seq Number: 3121740

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	04.02.20 14.57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	04.02.20 14.57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	04.02.20 14.57	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	04.02.20 14.57	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	99	%	70-135	04.02.20 14.57		
o-Terphenyl	84-15-1	102	%	70-135	04.02.20 14.57		



Certificate of Analytical Results 657636

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-76 @ 3"**

Matrix: Soil

Date Received: 04.01.20 16.10

Lab Sample Id: 657636-009

Date Collected: 04.01.20 11.20

Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 17.00

Basis: Wet Weight

Seq Number: 3121693

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	04.02.20 02.24	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	04.02.20 02.24	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	04.02.20 02.24	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	04.02.20 02.24	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	04.02.20 02.24	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	04.02.20 02.24	U	1
Total BTEX		<0.00202	0.00202	mg/kg	04.02.20 02.24	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	114	%	70-130	04.02.20 02.24		
4-Bromofluorobenzene	460-00-4	92	%	70-130	04.02.20 02.24		



Certificate of Analytical Results 657636

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-77 @ 3"**

Matrix: Soil

Date Received: 04.01.20 16.10

Lab Sample Id: 657636-010

Date Collected: 04.01.20 11.30

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 18.27

Basis: Wet Weight

Seq Number: 3121702

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	71.4	49.8	mg/kg	04.01.20 20.59		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.02.20 09.00

Basis: Wet Weight

Seq Number: 3121740

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	04.02.20 15.18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	04.02.20 15.18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	04.02.20 15.18	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	04.02.20 15.18	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	114	%	70-135	04.02.20 15.18		
o-Terphenyl	84-15-1	118	%	70-135	04.02.20 15.18		



Certificate of Analytical Results 657636

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-77 @ 3"**

Matrix: Soil

Date Received: 04.01.20 16.10

Lab Sample Id: 657636-010

Date Collected: 04.01.20 11.30

Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 17.00

Basis: Wet Weight

Seq Number: 3121693

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.02.20 02.44	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.02.20 02.44	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.02.20 02.44	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.02.20 02.44	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.02.20 02.44	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.02.20 02.44	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.02.20 02.44	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	114	%	70-130	04.02.20 02.44		
4-Bromofluorobenzene	460-00-4	92	%	70-130	04.02.20 02.44		



Certificate of Analytical Results 657636

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-78 @ 3"**

Matrix: Soil

Date Received: 04.01.20 16.10

Lab Sample Id: 657636-011

Date Collected: 04.01.20 11.40

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 18.27

Basis: Wet Weight

Seq Number: 3121702

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	69.6	50.0	mg/kg	04.01.20 21.04		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.02.20 09.00

Basis: Wet Weight

Seq Number: 3121740

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.02.20 15.59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.02.20 15.59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.02.20 15.59	U	1
Total TPH	PHC635	<50	50	mg/kg	04.02.20 15.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	04.02.20 15.59	
o-Terphenyl	84-15-1	117	%	70-135	04.02.20 15.59	



Certificate of Analytical Results 657636

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-78 @ 3"**

Matrix: Soil

Date Received: 04.01.20 16.10

Lab Sample Id: 657636-011

Date Collected: 04.01.20 11.40

Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 17.00

Basis: Wet Weight

Seq Number: 3121693

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	04.02.20 03.05	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	04.02.20 03.05	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	04.02.20 03.05	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	04.02.20 03.05	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	04.02.20 03.05	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	04.02.20 03.05	U	1
Total BTEX		<0.00202	0.00202	mg/kg	04.02.20 03.05	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	113	%	70-130	04.02.20 03.05		
4-Bromofluorobenzene	460-00-4	92	%	70-130	04.02.20 03.05		



Certificate of Analytical Results 657636

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-79 @ 3"**

Matrix: Soil

Date Received: 04.01.20 16.10

Lab Sample Id: 657636-012

Date Collected: 04.01.20 11.50

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 18.27

Basis: Wet Weight

Seq Number: 3121702

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	62.9	50.1	mg/kg	04.01.20 21.10		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.02.20 09.00

Basis: Wet Weight

Seq Number: 3121740

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	04.02.20 16.19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	04.02.20 16.19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	04.02.20 16.19	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	04.02.20 16.19	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	113	%	70-135	04.02.20 16.19		
o-Terphenyl	84-15-1	117	%	70-135	04.02.20 16.19		



Certificate of Analytical Results 657636

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-79 @ 3"**

Matrix: Soil

Date Received: 04.01.20 16.10

Lab Sample Id: 657636-012

Date Collected: 04.01.20 11.50

Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 17.00

Basis: Wet Weight

Seq Number: 3121693

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.02.20 03.25	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.02.20 03.25	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.02.20 03.25	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.02.20 03.25	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.02.20 03.25	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.02.20 03.25	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.02.20 03.25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	91	%	70-130	04.02.20 03.25		
1,4-Difluorobenzene	540-36-3	114	%	70-130	04.02.20 03.25		



Certificate of Analytical Results 657636

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-80 @ 3"**

Matrix: Soil

Date Received: 04.01.20 16.10

Lab Sample Id: 657636-013

Date Collected: 04.01.20 12.00

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 18.27

Basis: Wet Weight

Seq Number: 3121702

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	99.9	50.2	mg/kg	04.01.20 21.16		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.02.20 09.00

Basis: Wet Weight

Seq Number: 3121740

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	04.02.20 16.39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	04.02.20 16.39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	04.02.20 16.39	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	04.02.20 16.39	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	106	%	70-135	04.02.20 16.39		
o-Terphenyl	84-15-1	109	%	70-135	04.02.20 16.39		



Certificate of Analytical Results 657636

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-80 @ 3"**

Matrix: Soil

Date Received: 04.01.20 16.10

Lab Sample Id: 657636-013

Date Collected: 04.01.20 12.00

Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 17.00

Basis: Wet Weight

Seq Number: 3121693

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.02.20 03.46	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.02.20 03.46	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.02.20 03.46	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.02.20 03.46	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.02.20 03.46	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.02.20 03.46	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.02.20 03.46	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	89	%	70-130	04.02.20 03.46		
1,4-Difluorobenzene	540-36-3	114	%	70-130	04.02.20 03.46		



Certificate of Analytical Results 657636

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-81 @ 3"**

Matrix: Soil

Date Received: 04.01.20 16.10

Lab Sample Id: 657636-014

Date Collected: 04.01.20 12.10

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 18.27

Basis: Wet Weight

Seq Number: 3121702

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	99.1	49.6	mg/kg	04.01.20 21.21		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.02.20 09.00

Basis: Wet Weight

Seq Number: 3121740

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.02.20 17.00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	04.02.20 17.00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	04.02.20 17.00	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	04.02.20 17.00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	105	%	70-135	04.02.20 17.00		
o-Terphenyl	84-15-1	109	%	70-135	04.02.20 17.00		



Certificate of Analytical Results 657636

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **FL-81 @ 3"**

Matrix: Soil

Date Received: 04.01.20 16.10

Lab Sample Id: 657636-014

Date Collected: 04.01.20 12.10

Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 17.00

Basis: Wet Weight

Seq Number: 3121693

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	04.02.20 04.06	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	04.02.20 04.06	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	04.02.20 04.06	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	04.02.20 04.06	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	04.02.20 04.06	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	04.02.20 04.06	U	1
Total BTEX		<0.00198	0.00198	mg/kg	04.02.20 04.06	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	113	%	70-130	04.02.20 04.06		
4-Bromofluorobenzene	460-00-4	90	%	70-130	04.02.20 04.06		



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



TRC Solutions, Inc
Pine Springs 2 State SWD

Analytical Method: Chloride by EPA 300

Seq Number: 3121702

MB Sample Id: 7700327-1-BLK

Matrix: Solid

LCS Sample Id: 7700327-1-BKS

Prep Method: E300P

Date Prep: 04.01.20

LCSD Sample Id: 7700327-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	267	107	268	107	90-110	0	20	mg/kg	04.01.20 18:50	

Analytical Method: Chloride by EPA 300

Seq Number: 3121702

Parent Sample Id: 657619-001

Matrix: Soil

MS Sample Id: 657619-001 S

Prep Method: E300P

Date Prep: 04.01.20

MSD Sample Id: 657619-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<9.98	200	217	109	218	109	90-110	0	20	mg/kg	04.01.20 19:07	

Analytical Method: Chloride by EPA 300

Seq Number: 3121702

Parent Sample Id: 657636-007

Matrix: Soil

MS Sample Id: 657636-007 S

Prep Method: E300P

Date Prep: 04.01.20

MSD Sample Id: 657636-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	371	199	580	105	592	112	90-110	2	20	mg/kg	04.01.20 20:25	X

Analytical Method: TPH By SW8015 Mod

Seq Number: 3121740

MB Sample Id: 7700358-1-BLK

Matrix: Solid

LCS Sample Id: 7700358-1-BKS

Prep Method: SW8015P

Date Prep: 04.02.20

LCSD Sample Id: 7700358-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	925	93	872	87	70-135	6	35	mg/kg	04.02.20 09:28	
Diesel Range Organics (DRO)	<50.0	1000	968	97	898	90	70-135	8	35	mg/kg	04.02.20 09:28	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	89		110		115		70-135	%	04.02.20 09:28
o-Terphenyl	90		100		91		70-135	%	04.02.20 09:28

Analytical Method: TPH By SW8015 Mod

Seq Number: 3121740

Matrix: Solid

MB Sample Id: 7700358-1-BLK

Prep Method: SW8015P

Date Prep: 04.02.20

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	04.02.20 09:07	

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



TRC Solutions, Inc
Pine Springs 2 State SWD

Analytical Method: TPH By SW8015 Mod

Seq Number: 3121740

Parent Sample Id: 657636-001

Matrix: Soil

MS Sample Id: 657636-001 S

Prep Method: SW8015P

Date Prep: 04.02.20

MSD Sample Id: 657636-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.1	1000	951	95	927	93	70-135	3	35	mg/kg	04.02.20 10:29	
Diesel Range Organics (DRO)	<50.1	1000	1000	100	996	100	70-135	0	35	mg/kg	04.02.20 10:29	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	117		120		70-135	%	04.02.20 10:29
o-Terphenyl	116		117		70-135	%	04.02.20 10:29

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121693

MB Sample Id: 7700314-1-BLK

Matrix: Solid

LCS Sample Id: 7700314-1-BKS

Prep Method: SW5030B

Date Prep: 04.01.20

LCSD Sample Id: 7700314-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.114	114	0.122	122	70-130	7	35	mg/kg	04.01.20 19:16	
Toluene	<0.00200	0.100	0.107	107	0.110	110	70-130	3	35	mg/kg	04.01.20 19:16	
Ethylbenzene	<0.00200	0.100	0.0981	98	0.100	100	71-129	2	35	mg/kg	04.01.20 19:16	
m,p-Xylenes	<0.00400	0.200	0.190	95	0.194	97	70-135	2	35	mg/kg	04.01.20 19:16	
o-Xylene	<0.00200	0.100	0.0988	99	0.101	101	71-133	2	35	mg/kg	04.01.20 19:16	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	112		106		108		70-130	%	04.01.20 19:16
4-Bromofluorobenzene	88		89		86		70-130	%	04.01.20 19:16

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121693

Parent Sample Id: 657619-001

Matrix: Soil

MS Sample Id: 657619-001 S

Prep Method: SW5030B

Date Prep: 04.01.20

MSD Sample Id: 657619-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.129	129	0.124	124	70-130	4	35	mg/kg	04.01.20 19:57	
Toluene	<0.00200	0.0998	0.119	119	0.124	124	70-130	4	35	mg/kg	04.01.20 19:57	
Ethylbenzene	<0.00200	0.0998	0.111	111	0.117	117	71-129	5	35	mg/kg	04.01.20 19:57	
m,p-Xylenes	<0.00399	0.200	0.215	108	0.227	114	70-135	5	35	mg/kg	04.01.20 19:57	
o-Xylene	<0.00200	0.0998	0.109	109	0.114	114	71-133	4	35	mg/kg	04.01.20 19:57	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		108		70-130	%	04.01.20 19:57
4-Bromofluorobenzene	85		86		70-130	%	04.01.20 19:57

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



Chain of Custody

Work Order No: 6097631e

Houston, TX (281) 240-4200 Dallas, TX (214) 302-0300 San Antonio, TX (210) 509-3334
Midland, TX (432) 704-5440 El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296 Crashpad, NM (432) 704-5440
Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 445-8800 Tampa, FL (813) 620-2000 West Palm Beach, FL (561) 689-6100

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Project Manager:	Jared Stoffel	Bill to: (if different)	JD McCormick
Company Name:	TRC	Company Name:	Black River Trucking
Address:	10 Delta Dr. STE 156E	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	432-238-3003	Email:	Jared, Tania, JD, Del, Frankie

Work Order Comments
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐ State of Project: Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐ Deliverables: EDD ☐ ADAPT ☐ Other: _____

Project Name:	Five Springs 2 State SUD	Turn Around
Project Number:		Routine ☐
Project Location		Rush: 24HRS
Sampler's Name:	Tonia Gaba	Due Date:
PO #:		Quote #:

ANALYSIS REQUEST								Preservative Codes
								MeOH: Me
								None: NO
								HNO ₃ : HN
								H ₂ SO ₄ : H2

SAMPLE RECEIPT		Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):		25			Thermometer ID	TN007	
Received intact:	Yes	No			Correction Factor:	-0.2	
Cooler Custody Seals:	Yes	No			Total Containers:	14	
Sample Custody Seals:	Yes	No					

HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn
TAT starts the day received by the lab, if received by 4:00pm

[illegible]

Total	200.7 / 6010	200.8 / 6020:
-------	--------------	---------------

Circle Method(s) and Metal(s) to be analyzed

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn
 TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
 1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenico. Its affixes standard terms and conditions of service. Xenico 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 Xenico. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenico, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		11/20 16:10			



Chain of Custody

Work Order No: 105710310

Houston, TX (281) 240-4200 Dallas TX (214) 902-0300 San Antonio, TX (210) 509-3334
 Midland TX (432) 704-5440 EL Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296 Crashtad, NM (432) 704-5440
 Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

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Project Manager: Jared Stoffel

Company Name: TRC

Address: 10 Delta Dr. STE 150E

City, State ZIP: Midland, TX 79705

Phone: 432-238-3003

Email: Jared.Stoffel@trc.com

Bill to: (if different) JD Performance

Company Name: Bice River Trucking

Address:

City, State ZIP:

Work Order Comments

Program: ☐ PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
 State of Project:

Reporting Level: ☐ Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
 Deliverables: EDD ☐ ADAPT ☐ Other:

ANALYSIS REQUEST

Preservative Codes

MeOH: Me

None: NO

HNO3: HN

H2SO4: H2

HCL: HL

NaOH: Na

Zn Acetate+ NaOH: Zn

TAT starts the day received by the lab, if received by 4:00pm

Sample Comments

SAMPLE RECEIPT

Temperature (°C):

Received In: Yes No

Cooler Custody Seals: Yes No N/A

Sample Custody Seals: Yes No N/A

Temp Blank: Yes No

Wet Ice: Yes No

Correction Factor: Thermometer ID

Total Containers:

Quote #:

Rush: 24HRS

Due Date:

Turn Around

Pres. Code

Number of Containers

Chlorides (E3w)

BTEx (8021)

TAL (8015)

Lab ID

Sample Identification

Matrix

Date Sampled

Time Sampled

Depth

Number of Containers

Chlorides (E3w)

BTEx (8021)

TAL (8015)

Total 200.7 / 6010 200.8 / 6020:

Circle Method(s) and Metal(s) to be analyzed

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn

TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U

1631 / 245.1 / 7470 / 7471 : Hg

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 \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

1

2

4/20/20

6

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 04.01.2020 04.10.00 PM

Work Order #: 657636

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.5
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6 *Custody Seals Signed and dated?	Yes
#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:



Elizabeth McClellan

Date: 04.01.2020

Checklist reviewed by:



Jessica Kramer

Date: 04.02.2020



Certificate of Analysis Summary 657638

TRC Solutions, Inc, Midland, TX

Project Name: Pine Springs 2 State SWD

Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Wed Apr-01-20 04:10 pm

Report Date: 03-APR-20

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	657638-001	657638-002	657638-003	657638-004	657638-005	657638-006
	<i>Field Id:</i>	ESW-4	ESW-5	ESW-6	ESW-7	WSW-4	WSW-5
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Apr-01-20 13:00	Apr-01-20 13:10	Apr-01-20 13:20	Apr-01-20 13:30	Apr-01-20 13:40	Apr-01-20 13:50
BTEX by EPA 8021B	<i>Extracted:</i>	Apr-01-20 17:00	Apr-01-20 17:00	Apr-01-20 20:09	Apr-01-20 20:09	Apr-01-20 20:09	Apr-01-20 20:09
	<i>Analyzed:</i>	Apr-02-20 04:26	Apr-02-20 04:47	Apr-02-20 05:30	Apr-02-20 05:51	Apr-02-20 06:11	Apr-02-20 07:12
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200
Toluene		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200
Ethylbenzene		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200
m,p-Xylenes		<0.00403 0.00403	<0.00401 0.00401	<0.00399 0.00399	<0.00398 0.00398	<0.00402 0.00402	<0.00401 0.00401
o-Xylene		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200
Total Xylenes		<0.00202 0.00202	<0.002 0.002	<0.002 0.002	<0.00199 0.00199	<0.00201 0.00201	<0.002 0.002
Total BTEX		<0.00202 0.00202	<0.002 0.002	<0.002 0.002	<0.00199 0.00199	<0.00201 0.00201	<0.002 0.002
Chloride by EPA 300	<i>Extracted:</i>	Apr-01-20 18:27	Apr-01-20 18:27	Apr-01-20 18:38	Apr-01-20 18:38	Apr-01-20 18:38	Apr-01-20 18:38
	<i>Analyzed:</i>	Apr-01-20 21:27	Apr-01-20 21:32	Apr-01-20 22:06	Apr-01-20 22:23	Apr-01-20 22:28	Apr-01-20 22:34
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		212 49.9	95.3 49.9	65.5 49.8	56.6 49.8	82.9 49.9	90.3 49.6
TPH By SW8015 Mod	<i>Extracted:</i>	Apr-02-20 09:00	Apr-02-20 09:00	Apr-02-20 09:00	Apr-02-20 09:00	Apr-02-20 09:00	Apr-02-20 09:00
	<i>Analyzed:</i>	Apr-02-20 17:20	Apr-02-20 17:41	Apr-02-20 18:02	Apr-02-20 18:22	Apr-02-20 18:43	Apr-02-20 19:03
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.3 50.3	<50.2 50.2	<50.1 50.1	<50.0 50.0	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		<50.3 50.3	<50.2 50.2	<50.1 50.1	<50.0 50.0	<50.0 50.0	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.3 50.3	<50.2 50.2	<50.1 50.1	<50.0 50.0	<50.0 50.0	<50.0 50.0
Total TPH		<50.3 50.3	<50.2 50.2	<50.1 50.1	<50 50	<50 50	<50 50

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

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Version: 1.9%

Jessica Kramer
Project Manager



Certificate of Analysis Summary 657638

TRC Solutions, Inc, Midland, TX

Project Name: Pine Springs 2 State SWD

Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Wed Apr-01-20 04:10 pm

Report Date: 03-APR-20

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	657638-007	657638-008	657638-009	657638-010		
	<i>Field Id:</i>	WSW-6	WSW-7	WSW-8	SSW-1		
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL		
	<i>Sampled:</i>	Apr-01-20 14:00	Apr-01-20 14:10	Apr-01-20 14:20	Apr-01-20 14:30		
BTEX by EPA 8021B	<i>Extracted:</i>	Apr-01-20 20:09	Apr-01-20 20:09	Apr-01-20 20:09	Apr-01-20 20:09		
	<i>Analyzed:</i>	Apr-02-20 07:33	Apr-02-20 07:53	Apr-02-20 08:14	Apr-02-20 08:34		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200		
Toluene		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200		
Ethylbenzene		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200		
m,p-Xylenes		<0.00397 0.00397	<0.00399 0.00399	<0.00399 0.00399	<0.00399 0.00399		
o-Xylene		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200		
Total Xylenes		<0.00198 0.00198	<0.002 0.002	<0.002 0.002	<0.002 0.002		
Total BTEX		<0.00198 0.00198	<0.002 0.002	<0.002 0.002	<0.002 0.002		
Chloride by EPA 300	<i>Extracted:</i>	Apr-01-20 18:38	Apr-01-20 18:38	Apr-01-20 18:38	Apr-01-20 18:38		
	<i>Analyzed:</i>	Apr-01-20 22:39	Apr-01-20 22:56	Apr-01-20 23:02	Apr-01-20 23:08		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		59.7 50.1	50.7 50.2	85.4 50.4	89.4 50.1		
TPH By SW8015 Mod	<i>Extracted:</i>	Apr-02-20 09:00	Apr-02-20 15:50	Apr-02-20 15:50	Apr-02-20 15:50		
	<i>Analyzed:</i>	Apr-02-20 10:08	Apr-02-20 22:26	Apr-02-20 22:47	Apr-02-20 23:07		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.8 49.8	<50.1 50.1	<50.0 50.0		
Diesel Range Organics (DRO)		<50.0 50.0	<49.8 49.8	<50.1 50.1	<50.0 50.0		
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.8 49.8	<50.1 50.1	<50.0 50.0		
Total TPH		<50 50	<49.8 49.8	<50.1 50.1	<50 50		

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

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Version: 1.0%

Jessica Kramer
Project Manager

Analytical Report 657638

for
TRC Solutions, Inc

Project Manager: Jared Stoffel

Pine Springs 2 State SWD

03-APR-20

Collected By: Client



**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)

Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)

Xenco-Carlsbad (LELAP): Louisiana (05092)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)

Xenco-Tampa: Florida (E87429), North Carolina (483)



03-APR-20

Project Manager: **Jared Stoffel**

TRC Solutions, Inc

2057 Commerce

Midland, TX 79703

Reference: XENCO Report No(s): **657638**

Pine Springs 2 State SWD

Project Address:

Jared Stoffel:

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) 657638. 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. 657638 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 'Jessica Kramer'.

Jessica Kramer

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

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**Sample Cross Reference 657638****TRC Solutions, Inc, Midland, TX**

Pine Springs 2 State SWD

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
ESW-4	S	04-01-20 13:00		657638-001
ESW-5	S	04-01-20 13:10		657638-002
ESW-6	S	04-01-20 13:20		657638-003
ESW-7	S	04-01-20 13:30		657638-004
WSW-4	S	04-01-20 13:40		657638-005
WSW-5	S	04-01-20 13:50		657638-006
WSW-6	S	04-01-20 14:00		657638-007
WSW-7	S	04-01-20 14:10		657638-008
WSW-8	S	04-01-20 14:20		657638-009
SSW-1	S	04-01-20 14:30		657638-010



CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: Pine Springs 2 State SWD

Project ID:

Work Order Number(s): 657638

Report Date: 03-APR-20

Date Received: 04/01/2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3121693 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3121698 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



Certificate of Analytical Results 657638

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **ESW-4**
Lab Sample Id: 657638-001

Matrix: Soil
Date Collected: 04.01.20 13.00

Date Received: 04.01.20 16.10

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 18.27

Basis: Wet Weight

Seq Number: 3121702

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	212	49.9	mg/kg	04.01.20 21.27		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.02.20 09.00

Basis: Wet Weight

Seq Number: 3121740

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	04.02.20 17.20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	04.02.20 17.20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	04.02.20 17.20	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	04.02.20 17.20	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	121	%	70-135	04.02.20 17.20		
o-Terphenyl	84-15-1	128	%	70-135	04.02.20 17.20		



Certificate of Analytical Results 657638

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **ESW-4**
Lab Sample Id: 657638-001

Matrix: Soil
Date Collected: 04.01.20 13.00

Date Received: 04.01.20 16.10

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 17.00

Basis: Wet Weight

Seq Number: 3121693

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	04.02.20 04.26	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	04.02.20 04.26	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	04.02.20 04.26	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	04.02.20 04.26	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	04.02.20 04.26	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	04.02.20 04.26	U	1
Total BTEX		<0.00202	0.00202	mg/kg	04.02.20 04.26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	93	%	70-130	04.02.20 04.26		
1,4-Difluorobenzene	540-36-3	113	%	70-130	04.02.20 04.26		



Certificate of Analytical Results 657638

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **ESW-5**
Lab Sample Id: 657638-002

Matrix: Soil
Date Collected: 04.01.20 13.10

Date Received: 04.01.20 16.10

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 18.27

Basis: Wet Weight

Seq Number: 3121702

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	95.3	49.9	mg/kg	04.01.20 21.32		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.02.20 09.00

Basis: Wet Weight

Seq Number: 3121740

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	04.02.20 17.41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	04.02.20 17.41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	04.02.20 17.41	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	04.02.20 17.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	121	%	70-135	04.02.20 17.41	
o-Terphenyl	84-15-1	125	%	70-135	04.02.20 17.41	



Certificate of Analytical Results 657638

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **ESW-5**
Lab Sample Id: 657638-002

Matrix: Soil
Date Collected: 04.01.20 13.10

Date Received: 04.01.20 16.10

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 17.00

Basis: Wet Weight

Seq Number: 3121693

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.02.20 04.47	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.02.20 04.47	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.02.20 04.47	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	04.02.20 04.47	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.02.20 04.47	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	04.02.20 04.47	U	1
Total BTEX		<0.002	0.002	mg/kg	04.02.20 04.47	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	93	%	70-130	04.02.20 04.47		
1,4-Difluorobenzene	540-36-3	113	%	70-130	04.02.20 04.47		



Certificate of Analytical Results 657638

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **ESW-6**
Lab Sample Id: 657638-003

Matrix: Soil
Date Collected: 04.01.20 13.20

Date Received: 04.01.20 16.10

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 18.38

Basis: Wet Weight

Seq Number: 3121704

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	65.5	49.8	mg/kg	04.01.20 22.06		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.02.20 09.00

Basis: Wet Weight

Seq Number: 3121740

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	04.02.20 18.02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	04.02.20 18.02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	04.02.20 18.02	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	04.02.20 18.02	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	103	%	70-135	04.02.20 18.02		
o-Terphenyl	84-15-1	107	%	70-135	04.02.20 18.02		



Certificate of Analytical Results 657638

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **ESW-6**
Lab Sample Id: 657638-003

Matrix: Soil
Date Collected: 04.01.20 13.20

Date Received: 04.01.20 16.10

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 20.09

Basis: Wet Weight

Seq Number: 3121698

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.02.20 05.30	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.02.20 05.30	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.02.20 05.30	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	04.02.20 05.30	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.02.20 05.30	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	04.02.20 05.30	U	1
Total BTEX		<0.002	0.002	mg/kg	04.02.20 05.30	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	04.02.20 05.30		
1,4-Difluorobenzene	540-36-3	109	%	70-130	04.02.20 05.30		



Certificate of Analytical Results 657638

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **ESW-7**
Lab Sample Id: 657638-004

Matrix: Soil
Date Collected: 04.01.20 13.30

Date Received: 04.01.20 16.10

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 18.38

Basis: Wet Weight

Seq Number: 3121704

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	56.6	49.8	mg/kg	04.01.20 22.23		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.02.20 09.00

Basis: Wet Weight

Seq Number: 3121740

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.02.20 18.22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.02.20 18.22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.02.20 18.22	U	1
Total TPH	PHC635	<50	50	mg/kg	04.02.20 18.22	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	114	%	70-135	04.02.20 18.22		
o-Terphenyl	84-15-1	117	%	70-135	04.02.20 18.22		



Certificate of Analytical Results 657638

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **ESW-7**
Lab Sample Id: 657638-004

Matrix: Soil
Date Collected: 04.01.20 13.30

Date Received: 04.01.20 16.10

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 20.09

Basis: Wet Weight

Seq Number: 3121698

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.02.20 05.51	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.02.20 05.51	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.02.20 05.51	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.02.20 05.51	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.02.20 05.51	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.02.20 05.51	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.02.20 05.51	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	04.02.20 05.51		
4-Bromofluorobenzene	460-00-4	97	%	70-130	04.02.20 05.51		



Certificate of Analytical Results 657638

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **WSW-4**
Lab Sample Id: 657638-005

Matrix: Soil
Date Collected: 04.01.20 13.40

Date Received: 04.01.20 16.10

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 18.38

Basis: Wet Weight

Seq Number: 3121704

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	82.9	49.9	mg/kg	04.01.20 22.28		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.02.20 09.00

Basis: Wet Weight

Seq Number: 3121740

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.02.20 18.43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.02.20 18.43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.02.20 18.43	U	1
Total TPH	PHC635	<50	50	mg/kg	04.02.20 18.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	04.02.20 18.43	
o-Terphenyl	84-15-1	121	%	70-135	04.02.20 18.43	



Certificate of Analytical Results 657638

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **WSW-4**
Lab Sample Id: 657638-005

Matrix: Soil
Date Collected: 04.01.20 13.40

Date Received: 04.01.20 16.10

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 20.09

Basis: Wet Weight

Seq Number: 3121698

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	04.02.20 06.11	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	04.02.20 06.11	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	04.02.20 06.11	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	04.02.20 06.11	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	04.02.20 06.11	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	04.02.20 06.11	U	1
Total BTEX		<0.00201	0.00201	mg/kg	04.02.20 06.11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	99	%	70-130	04.02.20 06.11		
1,4-Difluorobenzene	540-36-3	111	%	70-130	04.02.20 06.11		



Certificate of Analytical Results 657638

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **WSW-5**
Lab Sample Id: 657638-006

Matrix: Soil
Date Collected: 04.01.20 13.50

Date Received: 04.01.20 16.10

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 18.38

Basis: Wet Weight

Seq Number: 3121704

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	90.3	49.6	mg/kg	04.01.20 22.34		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.02.20 09.00

Basis: Wet Weight

Seq Number: 3121740

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.02.20 19.03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.02.20 19.03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.02.20 19.03	U	1
Total TPH	PHC635	<50	50	mg/kg	04.02.20 19.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	04.02.20 19.03	
o-Terphenyl	84-15-1	119	%	70-135	04.02.20 19.03	



Certificate of Analytical Results 657638

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **WSW-5**
Lab Sample Id: 657638-006

Matrix: Soil
Date Collected: 04.01.20 13.50

Date Received: 04.01.20 16.10

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 20.09

Basis: Wet Weight

Seq Number: 3121698

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.02.20 07.12	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.02.20 07.12	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.02.20 07.12	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	04.02.20 07.12	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.02.20 07.12	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	04.02.20 07.12	U	1
Total BTEX		<0.002	0.002	mg/kg	04.02.20 07.12	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	04.02.20 07.12		
1,4-Difluorobenzene	540-36-3	110	%	70-130	04.02.20 07.12		



Certificate of Analytical Results 657638

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **WSW-6**
Lab Sample Id: 657638-007

Matrix: Soil
Date Collected: 04.01.20 14.00

Date Received: 04.01.20 16.10

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 18.38

Basis: Wet Weight

Seq Number: 3121704

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	59.7	50.1	mg/kg	04.01.20 22.39		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.02.20 09.00

Basis: Wet Weight

Seq Number: 3121741

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.02.20 10.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.02.20 10.08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.02.20 10.08	U	1
Total TPH	PHC635	<50	50	mg/kg	04.02.20 10.08	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	107	%	70-135	04.02.20 10.08		
o-Terphenyl	84-15-1	116	%	70-135	04.02.20 10.08		



Certificate of Analytical Results 657638

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **WSW-6**
Lab Sample Id: 657638-007

Matrix: Soil
Date Collected: 04.01.20 14.00

Date Received: 04.01.20 16.10

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 20.09

Basis: Wet Weight

Seq Number: 3121698

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	04.02.20 07.33	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	04.02.20 07.33	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	04.02.20 07.33	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	04.02.20 07.33	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	04.02.20 07.33	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	04.02.20 07.33	U	1
Total BTEX		<0.00198	0.00198	mg/kg	04.02.20 07.33	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	04.02.20 07.33		
4-Bromofluorobenzene	460-00-4	94	%	70-130	04.02.20 07.33		



Certificate of Analytical Results 657638

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **WSW-7**
Lab Sample Id: 657638-008

Matrix: Soil
Date Collected: 04.01.20 14.10

Date Received: 04.01.20 16.10

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 18.38

Basis: Wet Weight

Seq Number: 3121704

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	50.7	50.2	mg/kg	04.01.20 22.56		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.02.20 15.50

Basis: Wet Weight

Seq Number: 3121830

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	04.02.20 22.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	04.02.20 22.26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	04.02.20 22.26	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	04.02.20 22.26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	107	%	70-135	04.02.20 22.26		
o-Terphenyl	84-15-1	109	%	70-135	04.02.20 22.26		



Certificate of Analytical Results 657638

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **WSW-7**
Lab Sample Id: 657638-008

Matrix: Soil
Date Collected: 04.01.20 14.10

Date Received: 04.01.20 16.10

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 20.09

Basis: Wet Weight

Seq Number: 3121698

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.02.20 07.53	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.02.20 07.53	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.02.20 07.53	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	04.02.20 07.53	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.02.20 07.53	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	04.02.20 07.53	U	1
Total BTEX		<0.002	0.002	mg/kg	04.02.20 07.53	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	109	%	70-130	04.02.20 07.53		
4-Bromofluorobenzene	460-00-4	98	%	70-130	04.02.20 07.53		



Certificate of Analytical Results 657638

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **WSW-8**
Lab Sample Id: 657638-009

Matrix: Soil
Date Collected: 04.01.20 14.20

Date Received: 04.01.20 16.10

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 18.38

Basis: Wet Weight

Seq Number: 3121704

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	85.4	50.4	mg/kg	04.01.20 23.02		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.02.20 15.50

Basis: Wet Weight

Seq Number: 3121830

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	04.02.20 22.47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	04.02.20 22.47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	04.02.20 22.47	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	04.02.20 22.47	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	114	%	70-135	04.02.20 22.47		
o-Terphenyl	84-15-1	118	%	70-135	04.02.20 22.47		



Certificate of Analytical Results 657638

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **WSW-8**
Lab Sample Id: 657638-009

Matrix: Soil
Date Collected: 04.01.20 14.20

Date Received: 04.01.20 16.10

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 20.09

Basis: Wet Weight

Seq Number: 3121698

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.02.20 08.14	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.02.20 08.14	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.02.20 08.14	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	04.02.20 08.14	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.02.20 08.14	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	04.02.20 08.14	U	1
Total BTEX		<0.002	0.002	mg/kg	04.02.20 08.14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	91	%	70-130	04.02.20 08.14		
1,4-Difluorobenzene	540-36-3	110	%	70-130	04.02.20 08.14		



Certificate of Analytical Results 657638

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **SSW-1**
Lab Sample Id: 657638-010

Matrix: Soil
Date Collected: 04.01.20 14.30

Date Received: 04.01.20 16.10

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 18.38

Basis: Wet Weight

Seq Number: 3121704

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	89.4	50.1	mg/kg	04.01.20 23.08		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 04.02.20 15.50

Basis: Wet Weight

Seq Number: 3121830

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.02.20 23.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.02.20 23.07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.02.20 23.07	U	1
Total TPH	PHC635	<50	50	mg/kg	04.02.20 23.07	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	101	%	70-135	04.02.20 23.07		
o-Terphenyl	84-15-1	103	%	70-135	04.02.20 23.07		



Certificate of Analytical Results 657638

TRC Solutions, Inc, Midland, TX

Pine Springs 2 State SWD

Sample Id: **SSW-1**
Lab Sample Id: 657638-010

Matrix: Soil
Date Collected: 04.01.20 14.30

Date Received: 04.01.20 16.10

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 04.01.20 20.09

Basis: Wet Weight

Seq Number: 3121698

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.02.20 08.34	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.02.20 08.34	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.02.20 08.34	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	04.02.20 08.34	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.02.20 08.34	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	04.02.20 08.34	U	1
Total BTEX		<0.002	0.002	mg/kg	04.02.20 08.34	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	99	%	70-130	04.02.20 08.34		
1,4-Difluorobenzene	540-36-3	111	%	70-130	04.02.20 08.34		



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



TRC Solutions, Inc
Pine Springs 2 State SWD

Analytical Method: Chloride by EPA 300

Seq Number: 3121702

MB Sample Id: 7700327-1-BLK

Matrix: Solid

LCS Sample Id: 7700327-1-BKS

Prep Method: E300P

Date Prep: 04.01.20

LCSD Sample Id: 7700327-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	267	107	268	107	90-110	0	20	mg/kg	04.01.20 18:50	

Analytical Method: Chloride by EPA 300

Seq Number: 3121704

MB Sample Id: 7700329-1-BLK

Matrix: Solid

LCS Sample Id: 7700329-1-BKS

Prep Method: E300P

Date Prep: 04.01.20

LCSD Sample Id: 7700329-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	257	103	253	101	90-110	2	20	mg/kg	04.01.20 21:55	

Analytical Method: Chloride by EPA 300

Seq Number: 3121702

Parent Sample Id: 657619-001

Matrix: Soil

MS Sample Id: 657619-001 S

Prep Method: E300P

Date Prep: 04.01.20

MSD Sample Id: 657619-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<9.98	200	217	109	218	109	90-110	0	20	mg/kg	04.01.20 19:07	

Analytical Method: Chloride by EPA 300

Seq Number: 3121702

Parent Sample Id: 657636-007

Matrix: Soil

MS Sample Id: 657636-007 S

Prep Method: E300P

Date Prep: 04.01.20

MSD Sample Id: 657636-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	371	199	580	105	592	112	90-110	2	20	mg/kg	04.01.20 20:25	X

Analytical Method: Chloride by EPA 300

Seq Number: 3121704

Parent Sample Id: 657638-003

Matrix: Soil

MS Sample Id: 657638-003 S

Prep Method: E300P

Date Prep: 04.01.20

MSD Sample Id: 657638-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	65.5	200	257	96	259	97	90-110	1	20	mg/kg	04.01.20 22:11	

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



TRC Solutions, Inc
Pine Springs 2 State SWD

Analytical Method: Chloride by EPA 300

Seq Number: 3121704

Parent Sample Id: 657640-004

Matrix: Soil

MS Sample Id: 657640-004 S

Prep Method: E300P

Date Prep: 04.01.20

MSD Sample Id: 657640-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2100	247	2380	113	2400	121	90-110	1	20	mg/kg	04.01.20 23:38	X

Analytical Method: TPH By SW8015 Mod

Seq Number: 3121740

MB Sample Id: 7700358-1-BLK

Matrix: Solid

LCS Sample Id: 7700358-1-BKS

Prep Method: SW8015P

Date Prep: 04.02.20

LCSD Sample Id: 7700358-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	925	93	872	87	70-135	6	35	mg/kg	04.02.20 09:28	
Diesel Range Organics (DRO)	<50.0	1000	968	97	898	90	70-135	8	35	mg/kg	04.02.20 09:28	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	89		110		115		70-135	%	04.02.20 09:28
o-Terphenyl	90		100		91		70-135	%	04.02.20 09:28

Analytical Method: TPH By SW8015 Mod

Seq Number: 3121741

MB Sample Id: 7700357-1-BLK

Matrix: Solid

LCS Sample Id: 7700357-1-BKS

Prep Method: SW8015P

Date Prep: 04.02.20

LCSD Sample Id: 7700357-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	990	99	890	89	70-135	11	35	mg/kg	04.02.20 09:28	
Diesel Range Organics (DRO)	<50.0	1000	1150	115	1020	102	70-135	12	35	mg/kg	04.02.20 09:28	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	104		124		107		70-135	%	04.02.20 09:28
o-Terphenyl	109		121		106		70-135	%	04.02.20 09:28

Analytical Method: TPH By SW8015 Mod

Seq Number: 3121830

MB Sample Id: 7700393-1-BLK

Matrix: Solid

LCS Sample Id: 7700393-1-BKS

Prep Method: SW8015P

Date Prep: 04.02.20

LCSD Sample Id: 7700393-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	999	100	964	96	70-135	4	35	mg/kg	04.02.20 20:45	
Diesel Range Organics (DRO)	<50.0	1000	1090	109	1040	104	70-135	5	35	mg/kg	04.02.20 20:45	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	105		114		113		70-135	%	04.02.20 20:45
o-Terphenyl	108		114		106		70-135	%	04.02.20 20:45

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



TRC Solutions, Inc
Pine Springs 2 State SWD

Analytical Method: TPH By SW8015 Mod

Seq Number: 3121740

Matrix: Solid

Prep Method: SW8015P

Date Prep: 04.02.20

MB Sample Id: 7700358-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	04.02.20 09:07	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3121741

Matrix: Solid

Prep Method: SW8015P

Date Prep: 04.02.20

MB Sample Id: 7700357-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	04.02.20 09:07	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3121830

Matrix: Solid

Prep Method: SW8015P

Date Prep: 04.02.20

MB Sample Id: 7700393-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	04.02.20 20:24	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3121740

Matrix: Soil

Prep Method: SW8015P

Date Prep: 04.02.20

Parent Sample Id: 657636-001

MS Sample Id: 657636-001 S

MSD Sample Id: 657636-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.1	1000	951	95	927	93	70-135	3	35	mg/kg	04.02.20 10:29	
Diesel Range Organics (DRO)	<50.1	1000	1000	100	996	100	70-135	0	35	mg/kg	04.02.20 10:29	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	117		120		70-135	%	04.02.20 10:29
o-Terphenyl	116		117		70-135	%	04.02.20 10:29

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. = $\text{Log}(\text{Sample Duplicate}) - \text{Log}(\text{Original Sample})$

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



TRC Solutions, Inc
Pine Springs 2 State SWD

Analytical Method: TPH By SW8015 Mod

Seq Number: 3121741

Parent Sample Id: 657638-007

Matrix: Soil

MS Sample Id: 657638-007 S

Prep Method: SW8015P

Date Prep: 04.02.20

MSD Sample Id: 657638-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.8	995	842	85	815	82	70-135	3	35	mg/kg	04.02.20 10:29	
Diesel Range Organics (DRO)	<49.8	995	978	98	948	95	70-135	3	35	mg/kg	04.02.20 10:29	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	126		133		70-135	%	04.02.20 10:29
o-Terphenyl	126		122		70-135	%	04.02.20 10:29

Analytical Method: TPH By SW8015 Mod

Seq Number: 3121830

Parent Sample Id: 657244-038

Matrix: Soil

MS Sample Id: 657244-038 S

Prep Method: SW8015P

Date Prep: 04.02.20

MSD Sample Id: 657244-038 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	998	966	97	881	88	70-135	9	35	mg/kg	04.02.20 21:46	
Diesel Range Organics (DRO)	<49.9	998	1050	105	940	94	70-135	11	35	mg/kg	04.02.20 21:46	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	122		124		70-135	%	04.02.20 21:46
o-Terphenyl	117		105		70-135	%	04.02.20 21:46

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121693

MB Sample Id: 7700314-1-BLK

Matrix: Solid

LCS Sample Id: 7700314-1-BKS

Prep Method: SW5030B

Date Prep: 04.01.20

LCSD Sample Id: 7700314-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.114	114	0.122	122	70-130	7	35	mg/kg	04.01.20 19:16	
Toluene	<0.00200	0.100	0.107	107	0.110	110	70-130	3	35	mg/kg	04.01.20 19:16	
Ethylbenzene	<0.00200	0.100	0.0981	98	0.100	100	71-129	2	35	mg/kg	04.01.20 19:16	
m,p-Xylenes	<0.00400	0.200	0.190	95	0.194	97	70-135	2	35	mg/kg	04.01.20 19:16	
o-Xylene	<0.00200	0.100	0.0988	99	0.101	101	71-133	2	35	mg/kg	04.01.20 19:16	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	112		106		108		70-130	%	04.01.20 19:16
4-Bromofluorobenzene	88		89		86		70-130	%	04.01.20 19:16

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



TRC Solutions, Inc
Pine Springs 2 State SWD

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121698

MB Sample Id: 7700318-1-BLK

Matrix: Solid

LCS Sample Id: 7700318-1-BKS

Prep Method: SW5030B

Date Prep: 04.01.20

LCSD Sample Id: 7700318-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.105	105	0.104	104	70-130	1	35	mg/kg	04.02.20 01:26	
Toluene	<0.00200	0.100	0.0990	99	0.0988	99	70-130	0	35	mg/kg	04.02.20 01:26	
Ethylbenzene	<0.00200	0.100	0.0926	93	0.0922	92	71-129	0	35	mg/kg	04.02.20 01:26	
m,p-Xylenes	<0.00400	0.200	0.190	95	0.188	94	70-135	1	35	mg/kg	04.02.20 01:26	
o-Xylene	<0.00200	0.100	0.0973	97	0.0965	97	71-133	1	35	mg/kg	04.02.20 01:26	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		108		109		70-130	%	04.02.20 01:26
4-Bromofluorobenzene	97		92		95		70-130	%	04.02.20 01:26

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121693

Parent Sample Id: 657619-001

Matrix: Soil

MS Sample Id: 657619-001 S

Prep Method: SW5030B

Date Prep: 04.01.20

MSD Sample Id: 657619-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.129	129	0.124	124	70-130	4	35	mg/kg	04.01.20 19:57	
Toluene	<0.00200	0.0998	0.119	119	0.124	124	70-130	4	35	mg/kg	04.01.20 19:57	
Ethylbenzene	<0.00200	0.0998	0.111	111	0.117	117	71-129	5	35	mg/kg	04.01.20 19:57	
m,p-Xylenes	<0.00399	0.200	0.215	108	0.227	114	70-135	5	35	mg/kg	04.01.20 19:57	
o-Xylene	<0.00200	0.0998	0.109	109	0.114	114	71-133	4	35	mg/kg	04.01.20 19:57	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		108		70-130	%	04.01.20 19:57
4-Bromofluorobenzene	85		86		70-130	%	04.01.20 19:57

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121698

Parent Sample Id: 657364-045

Matrix: Soil

MS Sample Id: 657364-045 S

Prep Method: SW5030B

Date Prep: 04.01.20

MSD Sample Id: 657364-045 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0956	96	0.0928	93	70-130	3	35	mg/kg	04.02.20 02:06	
Toluene	<0.00200	0.100	0.0888	89	0.0881	89	70-130	1	35	mg/kg	04.02.20 02:06	
Ethylbenzene	<0.00200	0.100	0.0830	83	0.0816	82	71-129	2	35	mg/kg	04.02.20 02:06	
m,p-Xylenes	<0.00401	0.200	0.171	86	0.168	84	70-135	2	35	mg/kg	04.02.20 02:06	
o-Xylene	<0.00200	0.100	0.0866	87	0.0852	86	71-133	2	35	mg/kg	04.02.20 02:06	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		108		70-130	%	04.02.20 02:06
4-Bromofluorobenzene	94		95		70-130	%	04.02.20 02:06

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



Chain of Custody

Work Order No: 1057038

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
 Midland, TX (432) 704-5440 El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296
 Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

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Page 1 of 1

Project Manager:	Sured Staffel	Bill to: (if different)	JD McLeimick
Company Name:	Tec	Company Name:	Black River Trucking
Address:	10 Deste Dr. STE 158 E	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	432-238-3803	Email:	Sured, Tanya, Ice, JD, Joel, Franke

Program: ☐ PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐ State of Project:	
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	Deliverables: EDD ☐ ADAPT ☐ Other:

Project Name:	Pine Springs 2 State SWD	Turn Around	
Project Number:		Routine ☐	
Project Location:		Rush: 24 HRS	
Sampler's Name:	Tania Barba	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT		Temp Blank:	Yes ☐ No ☒	Wet Ice:	Yes ☐ No ☒
Temperature (°C):	3.5	Thermometer ID	TMM007		
Received Intact:	Yes ☒ No ☐	Correction Factor:			
Cooler Custody Seals:	Yes ☐ No ☒	Total Containers:	10		
Sample Custody Seals:	Yes ☐ No ☒				

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers
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ESU-4	S	04/21/20	1300	—	1	Chlorides (E300)
ESU-5			1310		X	BTEX (8021)
ESU-6			1320		X	TPH (8015)
ESU-7			1330			
USU-4			1340			
USU-5			1350			
USU-6			1400			
USU-7			1410			
USU-8			1416			
SSU-1			1430			

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti 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 \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		4/1/20 16:10			2
					4
					6

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 04.01.2020 04.10.00 PM

Work Order #: 657638

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.5
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6 *Custody Seals Signed and dated?	Yes
#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:



Elizabeth McClellan

Date: 04.01.2020

Checklist reviewed by:



Jessica Kramer

Date: 04.02.2020