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SITE REMEDIATION SUMMARY

58LL8-200302-C-1410

and

SITE CLOSURE REQUEST

COG Operating, LLC
SRO 5 State Com #504H & 505H
Eddy County, New Mexico
Unit Letter "P", Section 32, Township 25 South, Range 28 East
Latitude 32.08074° North, Longitude 104.10120° West
NMOCD Reference No. 2RP-5616

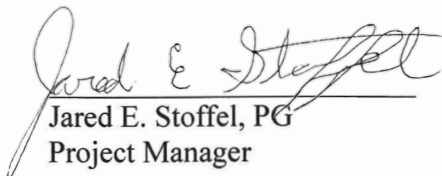
Prepared For:

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FEBRUARY 2020


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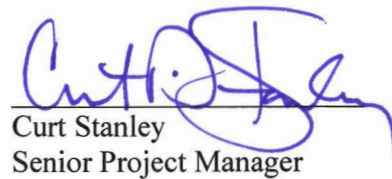

Curt Stanley
Senior Project Manager

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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 SRO 5 State Com #504H & 505H (the Site). The legal description of the Site is Unit Letter “P”, Section 32, Township 25 South, Range 28 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 32.08074°, W 104.10120°. A topographical map is provided as **Figure 1**. Photographs are provided in the photolog as **Appendix C**.

On August 9, 2019, COG discovered a recycled produced water release had occurred at the Site. The Release was attributed to a third-party contractor closing a manifold valve, resulting in the Release. On the discovery date, COG notified the New Mexico Oil Conservation Division (NMOCD) and New Mexico State Land Office (NMSLO) of the Release. The Release was assigned an NMOCD Reference number of 2RP-5616. During initial response activities, a vacuum truck was dispatched to recover all freestanding fluids. On August 21, 2019, the initial Release Notification and Corrective Action (Form C-141) was submitted to the NMOCD. The Form C-141 indicated three-hundred thirty-six (336) barrels (bbl) of recycled produced water was released. No recycled produced water was recovered during initial response activities. The Release affected an area measuring approximately 78,000 square feet (sq. ft.). The C-141 indicated the impacted area was located in a pastureland. 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) did not identify any registered water wells in Sections 31 or 32, Township 25 South, Range 28 East. The nearest well recorded in the NMOSE groundwater database is located approximately three quarters (0.75) of a mile northeast of the Site and has a depth to groundwater of approximately ninety (90) feet below ground surface (bgs). No water wells were observed within one-thousand (1,000) feet of the Site. No surface water was observed within one-thousand (1,000) feet of the Release. An aerial map with nearby water wells and floodplain data is provided as **Figure 2**.

Based on the inferred depth to groundwater at the SRO 5 State Com #504H & 505H Release Site, the NMOCD *Closure Criteria for Soils Impacted by a Release* may not warrant the most stringent closure criteria listed, due to the lack of definitive depth to groundwater data. However, the SRO 5 State Com #506H & 507H is located both in the ‘medium karst’ and ‘high karst’ areas as outlined in Bureau of Land Management (BLM) publicly available Karst Potential Map. The karst potential map is provided as **Figure 3**. The NMOCD stance on the regulation of releases in ‘medium to high karst’ areas is unclear, consequently COG will utilize the most stringent NMOCD Closure Criteria for Soils Impacted by a Release for the SRO 5 State Com #506H & 507H 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

SOIL INVESTIGATION SUMMARY

On September 17 and 18, 2019, an initial soil investigation was conducted at the Release Site. During the investigation, eighteen (18) investigation trenches (TT-1 through TT-18) were advanced within the Release area to characterize the vertical extent of the impacted area. In addition, twelve (12) investigation trenches (N1, S1, W1, W2, W3, W4, W5, E1, E2, E3, E4, and E5) were advanced outside the margins of the Release area to confirm the horizontal extent of the Release area. Investigation trenches were advanced utilizing either a backhoe or a hand auger.

Delineation trenches TT-1 and TT-2 were advanced near the northern terminus of the Release Site, at the bottom of the draw area and on the Crestwood pipeline right of way. Each delineation trench was advanced utilizing a hand auger to a depth of approximately four (4) feet bgs. Four (4) soil samples were collected from investigation trench TT-1 and four (4) soil samples were collected from investigation trench TT-2. Collected soil samples were submitted to Xenco Laboratories in Midland, TX for TPH and BTEX and/or chloride analyses by EPA 8015M, EPA 8021B, and EPA E300.0, respectively. Review of the analytical results indicated soil samples collected from investigation trenches TT-1 and TT-2 and analyzed for TPH and BTEX exhibited TPH and BTEX concentrations below the laboratory reporting limits (RL). In addition, soil samples collected from investigation trenches TT-1 and TT-2 exhibited chloride concentrations below NMOCD regulatory guidelines for chloride concentrations in each submitted soil sample with the exception of soil sample TT-2 @ 0-1.

Investigation trenches TT-3, TT-4, TT-5, TT-6, TT-7, TT-8, and TT-9 were advanced within the approximately three (3) to five (5) foot wide flowpath down the draw, starting from the top of the hill at TT-9 and ending at the bottom of the hill at TT-3. Each investigation trench was advanced with a hand auger to a depth of approximately four (4) feet bgs, with the exception of investigation trenches TT-8 and TT-9, which encountered hand auger mechanical refusal at approximately three (3) feet and approximately three and a half (3.5) feet bgs, respectively. Four (4) soil samples were collected from each investigation trench in the draw area with the exception of the three (3) soil samples that were collected from investigation trench TT-8. Soil samples collected from the draw area were submitted to the laboratory for chloride and/or TPH and BTEX analyses. A review of analytical results indicated each soil sample submitted for TPH and BTEX analyses exhibited TPH and BTEX concentrations below the laboratory RLs. In addition, each soil sample collected from the draw area exhibited chloride concentrations below NMOCD regulatory guidelines, with the exception of soil samples TT-3 @ 0-1', TT-5 @ 0-1', TT-6 @ 0-1', TT-8 @ 0-1', and TT-9 @ 0-1'.

Investigation trenches TT-10, TT-11, TT-12, TT-13, TT-14, TT-15, TT-16, TT-17, and TT-18 were advanced within the main body of the Release area at the top of the hill. An effort was made to ensure the investigation trenches were located in localized topographic low points to ensure delineation activities occurred at areas where fluids would have likely pooled. Each investigation trench was advanced with a backhoe to a depth of approximately five (5) feet bgs. Five (5) soil samples were collected from each investigation trench located within the main body of the Release area at the top of the hill. Soil samples collected from the area at the top of the hill were submitted to the laboratory for chloride and/or TPH and BTEX analyses. A review of analytical results indicated each soil sample submitted for TPH and BTEX analyses exhibited TPH and BTEX

concentrations below the laboratory RLs. In addition, each soil sample collected from the area at the top of the hill exhibited chloride concentrations below NMOCD regulatory guidelines for chloride concentrations with the exception of soil samples TT-12 @ 0-1' and TT-17 @ 0-1'.

Twelve (12) investigation trenches outside the margins of the Release area were advanced utilizing a hand auger to confirm lateral delineation of the Release Site. Investigation trench N1 was advanced north of the Release area, investigation trench S1 was advanced south of the Release area, investigation trenches E1 through E5 were advanced to the east of the Release area, and investigation trenches W1 through W5 were advanced to the west of the Release area. Two (2) soil samples were collected from each lateral investigation trench and were submitted to the laboratory for chloride analysis. A review of the analytical results indicated each submitted lateral delineation soil sample exhibited chloride concentrations below NMOCD regulatory guidelines.

Following delineation activities, the Release Site experienced several rain events which may have affected the chloride concentrations at the Site. As each soil sample which exhibited chloride concentrations above NMOCD regulatory guidelines was located in at the surface (0-1') interval, a hypothesis of chloride concentrations either migrating to a deeper interval or washing out was tested. On October 17, a hand auger was utilized to re-sample a selected subset of sample locations to determine the effect of the rain on the distribution of chloride concentrations. Soil sample locations at TT-2, TT-3, TT-5, TT-6, TT-8, TT-9, and TT-17 were all resampled within approximately five (5) feet of the original sample location. Two (2) soil samples were collected from each sample location TT-2, TT-3, TT-6, TT-8, and TT-17, and four (4) soil samples were collected from each sample location at TT-5 and TT-9. Soil samples collected on October 17 were submitted to the laboratory for chloride analysis. A review of the laboratory analytical results indicated soil samples collected on October 17 exhibited chloride concentrations below NMOCD regulatory guidelines, with the exception of soil samples TT-8 @ 0-1', TT-9 @ 2', and TT-17 @ 0-1'. Based on the difference between sample results in the same location before and after the rain, soil sample locations TT-2, TT-3, TT-5, and TT-6 experienced a wash out of chloride concentrations with the rain events, and no longer exhibited chloride concentrations above NMOCD regulatory guidelines. Soil sample locations TT-8 and TT-17 experienced no significant change in the chloride concentrations as a result of the rain events, and the only interval impacted above NMOCD regulatory guidelines was the surface (0-1') interval. Soil sample location TT-9 experienced a migration of chloride concentrations to a deeper interval, as the 0-1' interval no longer exhibited chloride concentrations above NMOCD regulatory guidelines, but the 2' interval exhibited NMOCD regulatory guideline exceedances for chloride concentrations.

In addition, on October 24, 2019, a Geoprobe® direct push rig was mobilized to evaluate migration of chloride concentrations in TT-12 and the effect of the rain events in late September and early October 2019. The direct push rig was utilized, as the expectation was chloride concentrations would migrate deeper, as topographically, sample location TT-12 was located in the lowest spot on the top of the hill. Five (5) soil samples were collected from sample location TT-12 and were submitted to the laboratory for chloride analysis. A review of the analytical results indicated chloride concentrations were below NMOCD regulatory guidelines in each submitted soil sample, with the exception of SB-12 @ 0-1', SB-12 @ 2', and SB-12 @ 3'. Based on the difference between sample results before and after the rain, the rain events resulted in chloride concentrations migrating deeper in the area represented by soil sample location TT-12. A summary of the analytical results are presented in **Table 1**. The sample locations are depicted in **Figure 4**.

REMEDIATION SUMMARY

Based on the laboratory analytical results from the soil samples collected in September and October 2019, the Release Site does not appear to be impacted above NMOCD regulatory guidelines by TPH or BTEX constituents. However, after the rain events the areas represented by soil sample locations TT-8, TT-9, TT-12, and TT-17 exhibited chloride concentrations above NMOCD regulatory guidelines.

On November 18, excavation activities commenced to remove the chloride impacted soils from the Release Site. The area represented by sample location TT-17 was excavated to a depth of approximately one and a half (1.5) feet bgs, and was designated as area A. The area represented by sample location TT-12 was excavated to a depth of approximately three and a half (3.5) to four (4) feet bgs, and was designated as area B. The area represented by sample location TT-9 was excavated to a depth of approximately two and a half (2.5) feet bgs and was designated as area C. The area represented by sample location TT-8 was excavated to a depth of approximately one and a half (1.5) feet bgs and was designated as area D. Each area was advanced laterally until chloride field screen results indicated the lateral extent of the impacted area had been excavated. Sidewall confirmation soil samples were collected in each cardinal direction, and at an every fifty (50) linear foot interval if the sidewall was greater than fifty (50) feet in length. Floor confirmation samples were collected on a one (1) five-point composite soil sample for every two hundred (200) square foot of excavation footprint basis.

On November 18, 2019, six (6) sidewall soil samples were collected from area A and were submitted to the laboratory for chloride and/or TPH and BTEX analyses. A review of the analytical results indicated each sidewall sample from area A exhibited chloride concentrations below NMOCD regulatory guidelines, and each soil sample submitted for TPH and BTEX analyses exhibited concentrations below the laboratory RLs.

On November 19, 2019, four (4) sidewall soil samples were collected from area B and were submitted to the laboratory for chloride analysis and/or TPH and BTEX analyses. A review of the analytical results indicated each sidewall sample from area B exhibited chloride concentrations below NMOCD regulatory guidelines, and each soil sample submitted for TPH and BTEX analyses exhibited concentrations below the laboratory RLs.

On November 20, 2019, five (5) sidewall soil samples were collected from area C and five (5) sidewall soil samples were collected from area D. In addition, nine (9) five-point composite floor confirmation soil samples were collected from area A, six (6) five-point composite floor soil samples were collected from area B, two (2) five-point composite floor soil samples were collected from area C, and two (2) five-point composite soil samples were collected from area D. Collected soil samples were submitted to the laboratory for chloride and/or TPH and BTEX analyses. A review of analytical results indicated each soil sample submitted for TPH and BTEX analyses exhibited concentrations below the laboratory RLs, and each soil sample exhibited chloride concentrations below NMOCD regulatory guidelines, with the exception of soil samples CSW-SSW-C1-1.25', CSW-ESW-C1-1.25', FL-B05-4.5', and FL-D2-1.5'.

On November 21, 2019, the excavation in area C was advanced laterally to the south and the east to remove impacted soil represented by soil samples CSW-SSW-C1-1.25' and CSW-ESW-C1-1.25'. Two (2) sidewall confirmation soil samples (CSW-SSW-C1-1.25'R and CSW-ESW-C1-1.25'R) were collected from the sidewalls in area C. Additionally, the excavation in area B was advanced vertically in the area represented by soil sample FL-B05-4.5'. One (1) five-point composite floor confirmation soil sample (FL-B05-5') was collected from the base of the excavation. Finally, the excavation in area D was advanced vertically in the area represented by soil sample FL-D2-1.5'. One (1) five-point composite floor confirmation soil sample (FL-D2-2') was collected from the base of the excavation. Collected soil samples were submitted to the laboratory for chloride analysis. A review of analytical results indicated each submitted soil sample exhibited chloride concentrations below NMOCD regulatory guidelines.

During excavation activities, excavated soil was staged on a poly ethylene liner pending final disposition at an NMOCD approved disposal facility. Following a final review of the analytical data, the excavation was backfilled to grade with locally sourced non-impacted 'like' material. The impacted material was transported under manifest to R360 Red Bluff for disposal. A summary of the excavation locations are depicted in Figure 5. Confirmation soil sample locations are depicted in **Figure 6**. A summary of analytical data is shown in **Table 2**. 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 SRO 5 State 504H & 505H.

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 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 Operating, LLC. 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 Operating, LLC.

DISTRIBUTION

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TABLE 1
Summary of Sampling Analytical Results (Delineation Samples)
Concentrations of BTEX, TPH, and/or Chloride in Soil

Sample ID	Date	Chloride Re-Sample Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					E 300	E 300
					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 ₃₅ (mg/kg)	TPH C ₆ -C ₃₅ (mg/kg)	Chloride (mg/kg)	Chloride (mg/kg) Re-sampled 10/17/19
TT-1 @ 0-1'	9/17/19	-	0-1'	In-Situ	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	17.6	-
TT-1 @ 2'	9/17/19	-	2'	In-Situ	-	-	-	-	-	-	-	13.5	-
TT-1 @ 3'	9/17/19	-	3'	In-Situ	-	-	-	-	-	-	-	5.55	-
TT-1 @ 4'	9/17/19	-	4'	In-Situ	-	-	-	-	-	-	-	38.5	-
TT-2 @ 0-1'	9/17/19	10/17/19	0-1'	In-Situ	<0.00201	<0.00201	<49.8	<49.8	<49.8	<49.8	<49.8	2,260	11.7
TT-2 @ 2'	9/17/19	10/17/19	2'	In-Situ	-	-	-	-	-	-	-	135	<4.97
TT-2 @ 3'	9/17/19	-	3'	In-Situ	-	-	-	-	-	-	-	71.3	-
TT-2 @ 4'	9/17/19	-	4'	In-Situ	-	-	-	-	-	-	-	19.0	-
TT-3 @ 0-1'	9/17/19	10/17/19	0-1'	In-Situ	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	1,360	7.5
TT-3 @ 2'	9/17/19	10/17/19	2'	In-Situ	-	-	-	-	-	-	-	40.6	8.4
TT-3 @ 3'	9/17/19	-	3'	In-Situ	-	-	-	-	-	-	-	20.5	-
TT-3 @ 4'	9/17/19	-	4'	In-Situ	-	-	-	-	-	-	-	22.5	-
TT-4 @ 0-1'	9/17/19	-	0-1'	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	400	-
TT-4 @ 2'	9/17/19	-	2'	In-Situ	-	-	-	-	-	-	-	13.2	-
TT-4 @ 3'	9/17/19	-	3'	In-Situ	-	-	-	-	-	-	-	7.28	-
TT-4 @ 4'	9/17/19	-	4'	In-Situ	-	-	-	-	-	-	-	17.1	-
TT-5 @ 0-1'	9/17/19	10/17/19	0-1'	In-Situ	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	1,130	51.4
TT-5 @ 2'	9/17/19	10/17/19	2'	In-Situ	-	-	-	-	-	-	-	33.7	132
TT-5 @ 3'	9/17/19	10/17/19	3'	In-Situ	-	-	-	-	-	-	-	12.4	13.8
TT-5 @ 4'	9/17/19	10/17/19	4'	In-Situ	-	-	-	-	-	-	-	34.9	10.8
TT-6 @ 0-1'	9/17/19	10/17/19	0-1'	In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	1,870	11.0
TT-6 @ 2'	9/17/19	10/17/19	2'	In-Situ	-	-	-	-	-	-	-	59.5	10.8
TT-6 @ 3'	9/17/19	-	3'	In-Situ	-	-	-	-	-	-	-	54.3	-
TT-6 @ 4'	9/17/19	-	4'	In-Situ	-	-	-	-	-	-	-	274	-
TT-7 @ 0-1'	9/18/19	-	0-1'	In-Situ	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	9.08	-
TT-7 @ 2'	9/18/19	-	2'	In-Situ	-	-	-	-	-	-	-	29.4	-
NMOCD Closure Criteria					10	50	-	-	-	-	100	600	600

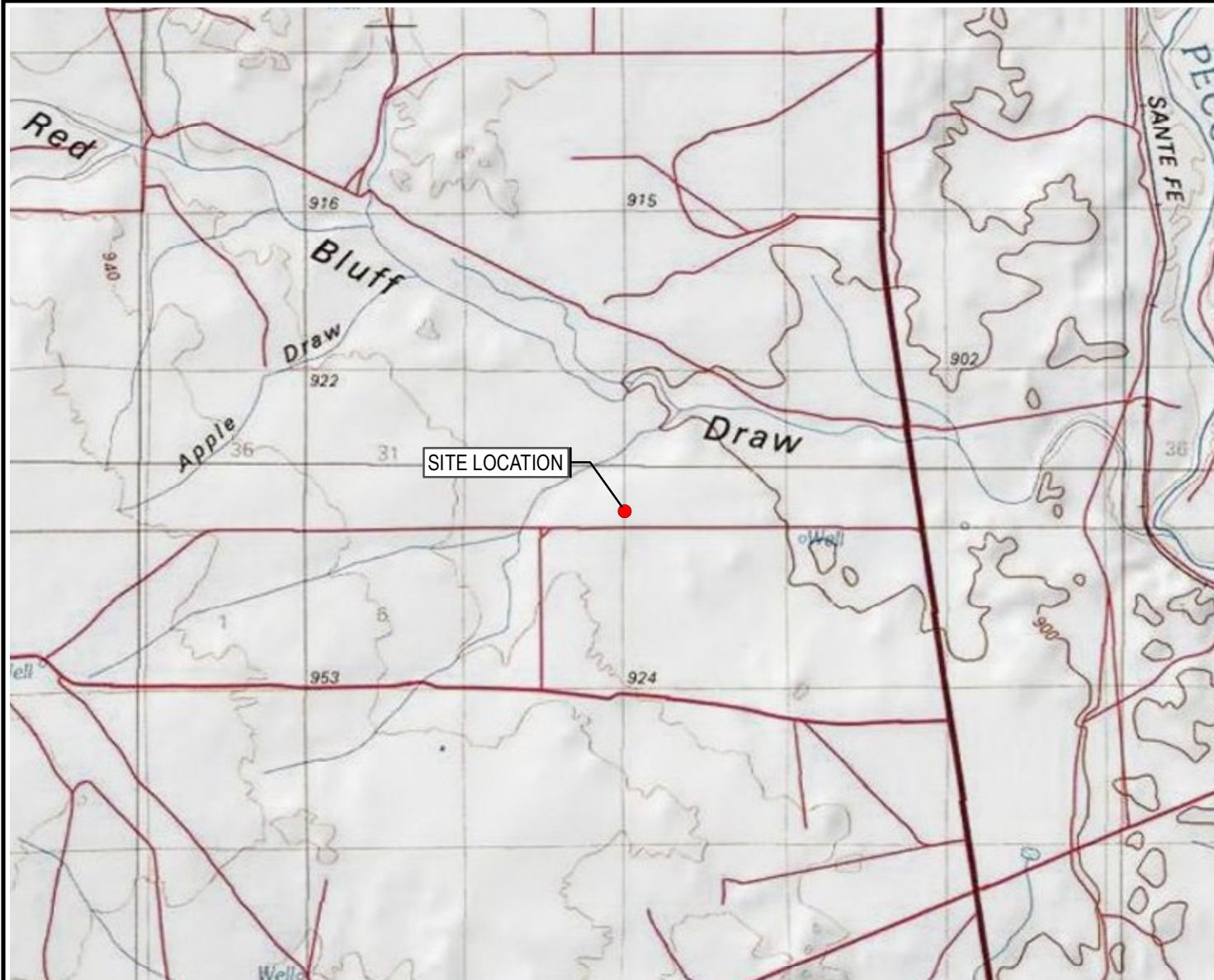
TABLE 1 Summary of Sampling Analytical Results (Delineation Samples) Concentrations of BTEX, TPH, and/or Chloride in Soil													
Sample ID	Date	Chloride Re-Sample Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					E 300	E 300
					Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₅ (mg/kg)	TPH C ₆ -C ₃₅ (mg/kg)	Chloride (mg/kg)	Chloride (mg/kg) Re-sampled 10/17/19
TT-7 @ 3'	9/18/19	-	3'	In-Situ	-	-	-	-	-	-	-	44.9	-
TT-7 @ 4'	9/18/19	-	4'	In-Situ	-	-	-	-	-	-	-	20.1	-
TT-8 @ 0-1'	9/17/19	10/17/19	0-1'	Excavated	<0.00201	<0.00201	<49.8	<49.8	<49.8	<49.8	<49.8	1,190	1,810
TT-8 @ 2'	9/17/19	10/17/19	2'	In-Situ	-	-	-	-	-	-	-	66.6	284
TT-8 @ 3' R	9/17/19	-	3'	In-Situ	-	-	-	-	-	-	-	69.3	-
TT-9 @ 0-1'	9/17/19	10/17/19	0-1'	Excavated	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	2,330	588
TT-9 @ 2'	9/17/19	10/17/19	2'	Excavated	-	-	-	-	-	-	-	42.2	2,460
TT-9 @ 3'	9/17/19	10/17/19	3'	In-Situ	-	-	-	-	-	-	-	73.6	40.7
TT-9 @ 3.5'	9/17/19	-	3.5'	In-Situ	-	-	-	-	-	-	-	6.44	-
TT-9A @ 4'	-	10/17/19	4'	In-Situ	-	-	-	-	-	-	-	-	33.2
TT-10 @ 0-1'	9/18/19	-	0-1'	In-Situ	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	10.4	-
TT-10 @ 2'	9/18/19	-	2'	In-Situ	-	-	-	-	-	-	-	102	-
TT-10 @ 3'	9/18/19	-	3'	In-Situ	-	-	-	-	-	-	-	157	-
TT-10 @ 4'	9/18/19	-	4'	In-Situ	-	-	-	-	-	-	-	162	-
TT-10 @ 5'	9/18/19	-	5'	In-Situ	-	-	-	-	-	-	-	44.1	-
TT-11 @ 0-1'	9/18/19	-	0-1'	In-Situ	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	13.0	-
TT-11 @ 2'	9/18/19	-	2'	In-Situ	-	-	-	-	-	-	-	97.1	-
TT-11 @ 3'	9/18/19	-	3'	In-Situ	-	-	-	-	-	-	-	33.3	-
TT-11 @ 4'	9/18/19	-	4'	In-Situ	-	-	-	-	-	-	-	5.11	-
TT-11 @ 5'	9/18/19	-	5'	In-Situ	-	-	-	-	-	-	-	35.2	-
TT-12 @ 0-1'	9/18/19	10/24/2019	0-1'	Excavated	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	1,260	2,870
TT-12 @ 2'	9/18/19	10/24/2019	2'	Excavated	-	-	-	-	-	-	-	9.44	3,620
TT-12 @ 3'	9/18/19	10/24/2019	3'	Excavated	-	-	-	-	-	-	-	6.94	778
TT-12 @ 4'	9/18/19	10/24/2019	4'	In-Situ	-	-	-	-	-	-	-	5.40	321
TT-12 @ 5'	9/18/19	10/24/2019	5'	In-Situ	-	-	-	-	-	-	-	13.3	53.3
TT-13 @ 0-1'	9/18/19	-	0-1'	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	95.4	-
TT-13 @ 2'	9/18/19	-	2'	In-Situ	-	-	-	-	-	-	-	35.2	-
TT-13 @ 3'	9/18/19	-	3'	In-Situ	-	-	-	-	-	-	-	94.9	-
TT-13 @ 4'	9/18/19	-	4'	In-Situ	-	-	-	-	-	-	-	195	-
NMOCD Closure Criteria					10	50	-	-	-	-	100	600	600

TABLE 1 Summary of Sampling Analytical Results (Delineation Samples) Concentrations of BTEX, TPH, and/or Chloride in Soil													
Sample ID	Date	Chloride Re-Sample Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					E 300	E 300
					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 ₃₅ (mg/kg)	TPH C ₆ -C ₃₅ (mg/kg)	Chloride (mg/kg)	Chloride (mg/kg) Re-sampled 10/17/19
TT-13 @ 5'	9/18/19	-	5'	In-Situ	-	-	-	-	-	-	-	193	-
TT-14 @ 0-1'	9/18/19	-	0-1'	In-Situ	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	12.1	-
TT-14 @ 2'	9/18/19	-	2'	In-Situ	-	-	-	-	-	-	-	66.3	-
TT-14 @ 3'	9/18/19	-	3'	In-Situ	-	-	-	-	-	-	-	96.6	-
TT-14 @ 4'	9/18/19	-	4'	In-Situ	-	-	-	-	-	-	-	183	-
TT-14 @ 5'	9/18/19	-	5'	In-Situ	-	-	-	-	-	-	-	177	-
TT-15 @ 0-1'	9/18/19	-	0-1'	In-Situ	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	23.9	-
TT-15 @ 2'	9/18/19	-	2'	In-Situ	-	-	-	-	-	-	-	292	-
TT-15 @ 3'	9/18/19	-	3'	In-Situ	-	-	-	-	-	-	-	100	-
TT-15 @ 4'	9/18/19	-	4'	In-Situ	-	-	-	-	-	-	-	283	-
TT-15 @ 5'	9/18/19	-	5'	In-Situ	-	-	-	-	-	-	-	354	-
TT-16 @ 0-1'	9/18/19	-	0-1'	In-Situ	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	16.9	-
TT-16 @ 2'	9/18/19	-	2'	In-Situ	-	-	-	-	-	-	-	24.8	-
TT-16 @ 3'	9/18/19	-	3'	In-Situ	-	-	-	-	-	-	-	59.9	-
TT-16 @ 4'	9/18/19	-	4'	In-Situ	-	-	-	-	-	-	-	77.9	-
TT-16 @ 5'	9/18/19	-	5'	In-Situ	-	-	-	-	-	-	-	66.7	-
TT-17 @ 0-1'	9/18/19	10/17/19	0-1'	Excavated	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	676	1,950
TT-17 @ 2'	9/18/19	10/17/19	2'	In-Situ	-	-	-	-	-	-	-	123	211
TT-17 @ 3'	9/18/19	-	3'	In-Situ	-	-	-	-	-	-	-	317	-
TT-17 @ 4'	9/18/19	-	4'	In-Situ	-	-	-	-	-	-	-	471	-
TT-17 @ 5'	9/18/19	-	5'	In-Situ	-	-	-	-	-	-	-	434	-
TT-18 @ 0-1'	9/18/19	-	0-1'	In-Situ	<0.00201	<0.00201	<49.8	<49.8	<49.8	<49.8	<49.8	148	-
TT-18 @ 2'	9/18/19	-	2'	In-Situ	-	-	-	-	-	-	-	41.9	-
TT-18 @ 3'	9/18/19	-	3'	In-Situ	-	-	-	-	-	-	-	23.7	-
TT-18 @ 4'	9/18/19	-	4'	In-Situ	-	-	-	-	-	-	-	34.3	-
TT-18 @ 5'	9/18/19	-	5'	In-Situ	-	-	-	-	-	-	-	24.1	-
NMOCD Closure Criteria					10	50	-	-	-	-	100	600	600

TABLE 1 Summary of Sampling Analytical Results (Delineation Samples) Concentrations of BTEX, TPH, and/or Chloride in Soil													
Sample ID	Date	Chloride Re-Sample Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					E 300	E 300
					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 ₃₅ (mg/kg)	TPH C ₆ -C ₃₅ (mg/kg)	Chloride (mg/kg)	Chloride (mg/kg) Re-sampled 10/17/19
N1 @ 0-1'	9/17/19	-	0-1'	In-Situ	-	-	-	-	-	-	-	9.46	-
N1 @ 2'	9/17/19	-	2'	In-Situ	-	-	-	-	-	-	-	<5.01	-
E1 @ 0-1'	9/17/19	-	0-1'	In-Situ	-	-	-	-	-	-	-	10.1	-
E1 @ 2'	9/17/19	-	2'	In-Situ	-	-	-	-	-	-	-	<5.02	-
E2 @ 0-1'	9/18/19	-	0-1'	In-Situ	-	-	-	-	-	-	-	5.98	-
E2 @ 2'	9/18/19	-	2'	In-Situ	-	-	-	-	-	-	-	<5.02	-
E3 @ 0-1'	9/18/19	-	0-1'	In-Situ	-	-	-	-	-	-	-	<4.96	-
E3 @ 2'	9/18/19	-	2'	In-Situ	-	-	-	-	-	-	-	<4.98	-
E4 @ 0-1'	9/18/19	-	0-1'	In-Situ	-	-	-	-	-	-	-	5.50	-
E4 @ 2'	9/18/19	-	2'	In-Situ	-	-	-	-	-	-	-	<5.03	-
E5 @ 0-1'	9/18/19	-	0-1'	In-Situ	-	-	-	-	-	-	-	7.70	-
E5 @ 2'	9/18/19	-	2'	In-Situ	-	-	-	-	-	-	-	7.41	-
S1 @ 0-1'	9/18/19	-	0-1'	In-Situ	-	-	-	-	-	-	-	11.4	-
S1 @ 2'	9/18/19	-	2'	In-Situ	-	-	-	-	-	-	-	7.08	-
W1 @ 0-1'	9/17/19	-	0-1'	In-Situ	-	-	-	-	-	-	-	11.6	-
W1 @ 2'	9/17/19	-	2'	In-Situ	-	-	-	-	-	-	-	<4.99	-
W2 @ 0-1'	9/18/19	-	0-1'	In-Situ	-	-	-	-	-	-	-	<5.00	-
W2 @ 2'	9/18/19	-	2'	In-Situ	-	-	-	-	-	-	-	<5.00	-
W3 @ 0-1'	9/18/19	-	0-1'	In-Situ	-	-	-	-	-	-	-	<5.00	-
W3 @ 2'	9/18/19	-	2'	In-Situ	-	-	-	-	-	-	-	16.3	-
W4 @ 0-1'	9/18/19	-	0-1'	In-Situ	-	-	-	-	-	-	-	23.0	-
W4 @ 2'	9/18/19	-	2'	In-Situ	-	-	-	-	-	-	-	65.3	-
W5 @ 0-1'	9/18/19	-	0-1'	In-Situ	-	-	-	-	-	-	-	26.0	-
W5 @ 2'	9/18/19	-	2'	In-Situ	-	-	-	-	-	-	-	75.6	-
NMOCD Closure Criteria					10	50	-	-	-	-	100	600	600

TABLE 2 Summary of Sampling Analytical Results (Confirmation Samples) Concentrations of BTEX, TPH, and/or Chloride in Soil											
Sample ID	Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					E 300
				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 ₃₅ (mg/kg)	TPH C ₆ -C ₃₅ (mg/kg)	Chloride (mg/kg)
ASW-ESW-A1-0.75'	11/18/19	0.75'	In-situ	-	-	-	-	-	-	-	159
ASW-WSW-A1-0.75'	11/18/19	0.75'	In-situ	-	-	-	-	-	-	-	40.4
ASW-NSW-A1-0.75'	11/18/19	0.75'	In-situ	-	-	-	-	-	-	-	146
ASW-SSW-A1-0.75'	11/18/19	0.75'	In-situ	-	-	-	-	-	-	-	<10.1
ASW-WSW-A2-0.75'	11/18/19	0.75'	In-situ	<0.00201	<0.00201	<49.8	<49.8	<49.8	<49.8	<49.8	256
ASW-ESW-A2-0.75'	11/18/19	0.75'	In-situ	-	-	-	-	-	-	-	11.3
BSW-NSW-B1-1.75'	11/19/19	1.75'	In-situ	-	-	-	-	-	-	-	22.4
BSW-ESW-B1-1.75'	11/19/19	1.75'	In-situ	<0.00201	<0.00201	-	-	-	-	-	86.1
BSW-SSW-B1-1.75'	11/19/19	1.75'	In-situ	-	-	-	-	-	-	-	252
BSW-WSW-B1-1.75'	11/20/19	1.75'	In-situ	-	-	-	-	-	-	-	29.1
CSW-SSW-C1-1.25'	11/20/19	1.25'	Excavated	-	-	-	-	-	-	-	630
CSW-SSW-C1-1.25'R	11/21/19	1.25'	In-situ	-	-	-	-	-	-	-	133
CSW-ESW-C1-1.25'	11/20/19	1.25'	Excavated	-	-	-	-	-	-	-	662
CSW-ESW-C1-1.25'R	11/21/19	1.25'	In-situ	-	-	-	-	-	-	-	425
CSW-WSW-C1-1.25'	11/20/19	1.25'	In-situ	-	-	-	-	-	-	-	145
CSW-ESW-C2-1.25'	11/20/19	1.25'	In-situ	-	-	-	-	-	-	-	10.7
CSW-WSW-C2-1.25'	11/20/19	1.25'	In-situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	68.2
DSW-ESW-D1-0.75'	11/20/19	0.75'	In-situ	-	-	-	-	-	-	-	16.7
DSW-WSW-D1-0.75'	11/20/19	0.75'	In-situ	-	-	-	-	-	-	-	238
DSW-NSW-D1-0.75'	11/20/19	0.75'	In-situ	-	-	-	-	-	-	-	57.5
DSW-ESW-D2-0.75'	11/20/19	0.75'	In-situ	<0.00201	<0.00201	<50.1	<50.1	<50.1	<50.1	<50.1	20.4
DSW-WSW-D2-0.75'	11/20/19	0.75'	In-situ	-	-	-	-	-	-	-	52.4
FL-A01-1.5'	11/20/19	1.5'	In-situ	-	-	-	-	-	-	-	403
FL-A02-1.5'	11/20/19	1.5'	In-situ	-	-	-	-	-	-	-	28.6
FL-A03-1.5'	11/20/19	1.5'	In-situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	47.0
FL-A04-1.5'	11/20/19	1.5'	In-situ	-	-	-	-	-	-	-	56.6
FL-A05-1.5'	11/20/19	1.5'	In-situ	-	-	-	-	-	-	-	50.4
NMOCD Closure Criteria				10	50	-	-	-	-	100	600

TABLE 2 Summary of Sampling Analytical Results (Confirmation Samples) Concentrations of BTEX, TPH, and/or Chloride in Soil											
Sample ID	Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					E 300
				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 ₃₅ (mg/kg)	TPH C ₆ -C ₃₅ (mg/kg)	Chloride (mg/kg)
FL-A06-1.5'	11/20/19	1.5'	In-situ	-	-	-	-	-	-	-	378
FL-A07-1.5'	11/20/19	1.5'	In-situ	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	147
FL-A08-1.5'	11/20/19	1.5'	In-situ								39.5
FL-A09-1.5'	11/20/19	1.5'	In-Situ	-	-	-	-	-	-	-	52.1
FL-B01-3.5'	11/20/19	3.5'	In-Situ	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	11.5
FL-B02-4.5'	11/20/19	4.5'	In-Situ	-	-	-	-	-	-	-	177
FL-B03-3.5'	11/20/19	3.5'	In-Situ	-	-	-	-	-	-	-	496
FL-B04-3.5'	11/20/19	3.5'	In-Situ	-	-	-	-	-	-	-	106
FL-B05-4.5'	11/20/19	4.5'	Excavated	<0.00202	<0.00202	<49.9	<49.9	<49.9	<49.9	<49.9	887
FL-B5-5'	11/21/19	5'	In-situ	-	-	-	-	-	-	-	51.8
FL-B06-3.5'	11/20/19	3.5'	In-Situ	-	-	-	-	-	-	-	354
FL-C1-2.5'	11/20/19	2.5'	In-Situ	-	-	-	-	-	-	-	271
FL-C2-2.5'	11/20/19	2.5'	In-Situ	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	337
FL-D1-1.5'	11/20/19	1.5'	In-Situ	-	-	-	-	-	-	-	<9.98
FL-D2-1.5'	11/20/19	1.5'	Excavated	-	-	-	-	-	-	-	818
FL-D2-2'	11/21/19	2'	In-situ	-	-	-	-	-	-	-	<9.98
NMOCD Closure Criteria				10	50	-	-	-	-	100	600



LEGEND

● Site Location

BASEMAP FROM USGS 7.5 MINUTE
TOPOGRAPHIC QUADRANGLE SERIES
- RED BLUFF, NM.



0 0.5 1
MILE

1" = 1 MILE

1:63,360



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

TRC - GIS

PROJECT:

**SRO STATE 504H and 505H
EDDY COUNTY, NM**

TITLE:

TOPOGRAPHIC MAP

DRAWN BY: MHORN

CHECKED BY: JSTOFFEL

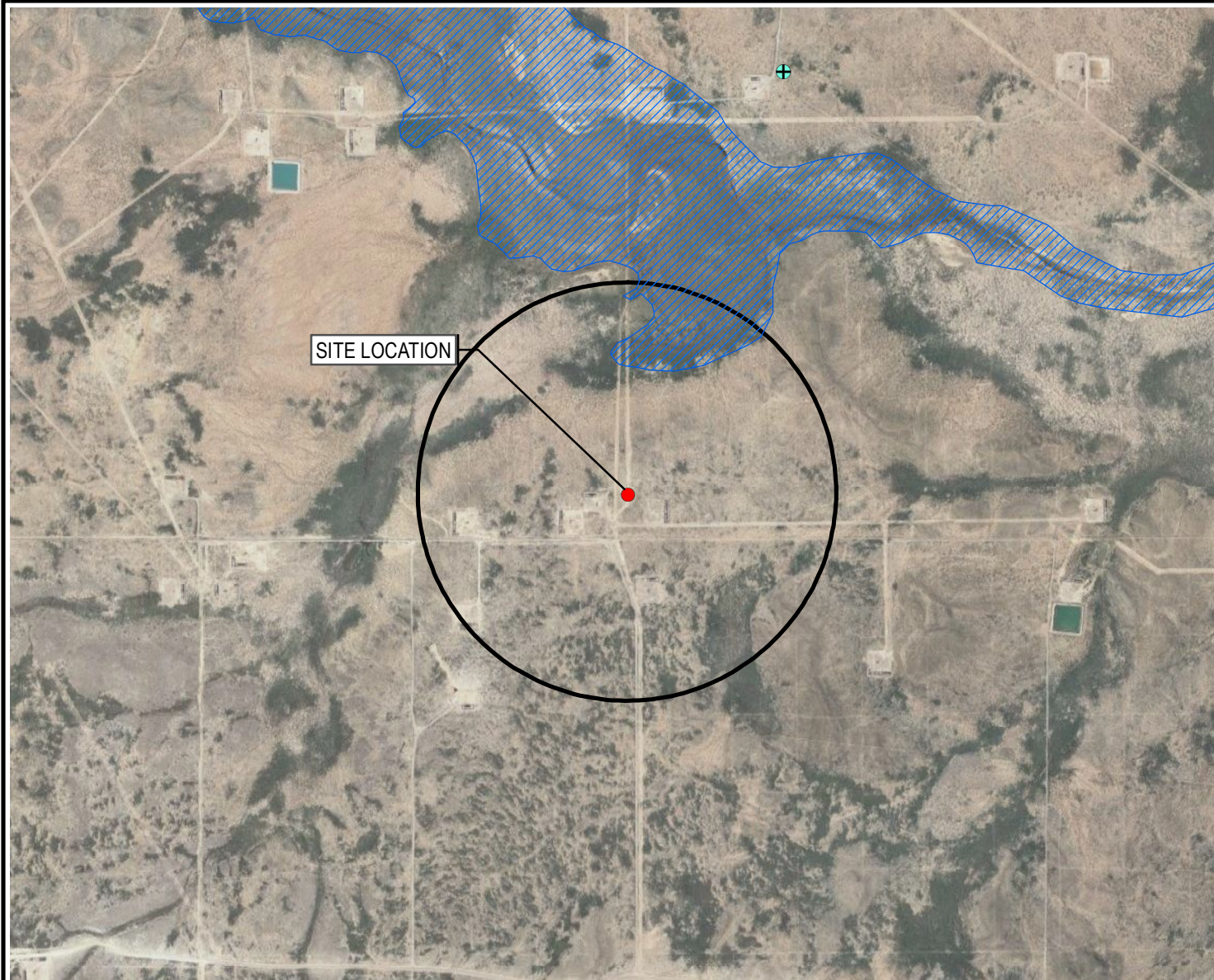
APPROVED BY:

DATE: SEPTEMBER 2019

PROJ. NO.: 362462

FILE: 362462_1.mxd

FIGURE 1



LEGEND

- Site Location
- ⊕ Water Well
- 1/2 Mile Radius
- ▨ 100-Year - Floodplain (FEMA)

SOURCES:
BASEMAP FROM GOOGLE EARTH PRO AND
THEIR DATA PARTNERS (2/21/2019);
FEMA FLOOD PLAIN (2019);
OSE POINTS OF DIVERSION (2019).



0 2,000 4,000
FT

1" = 2,000 FEET
1:24,000



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

TRC - GIS

PROJECT:

**SRO STATE 504H and 505H
EDDY COUNTY, NM**

TITLE:

AERIAL MAP

DRAWN BY: MHORN

CHECKED BY: JSTOFFEL

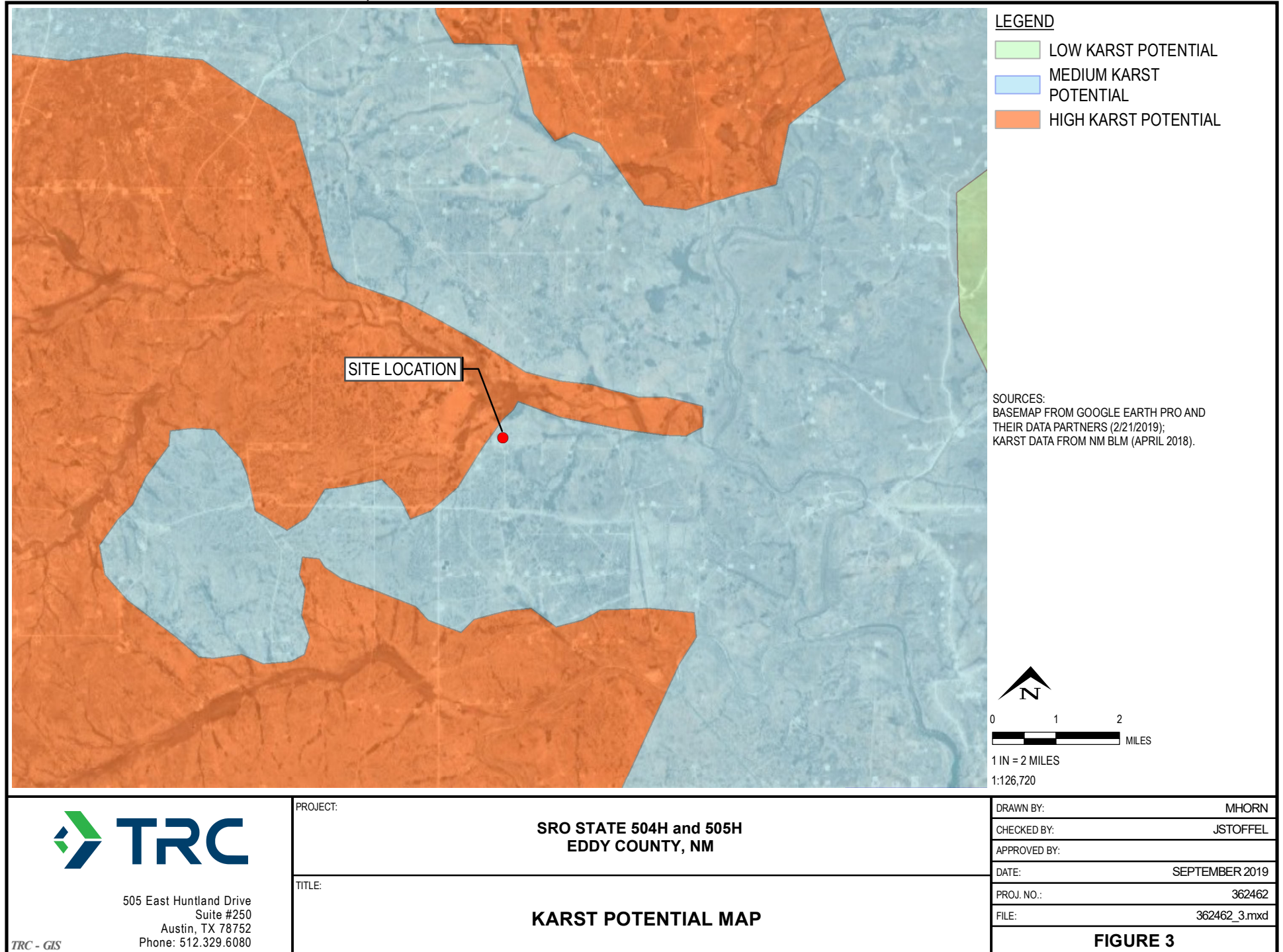
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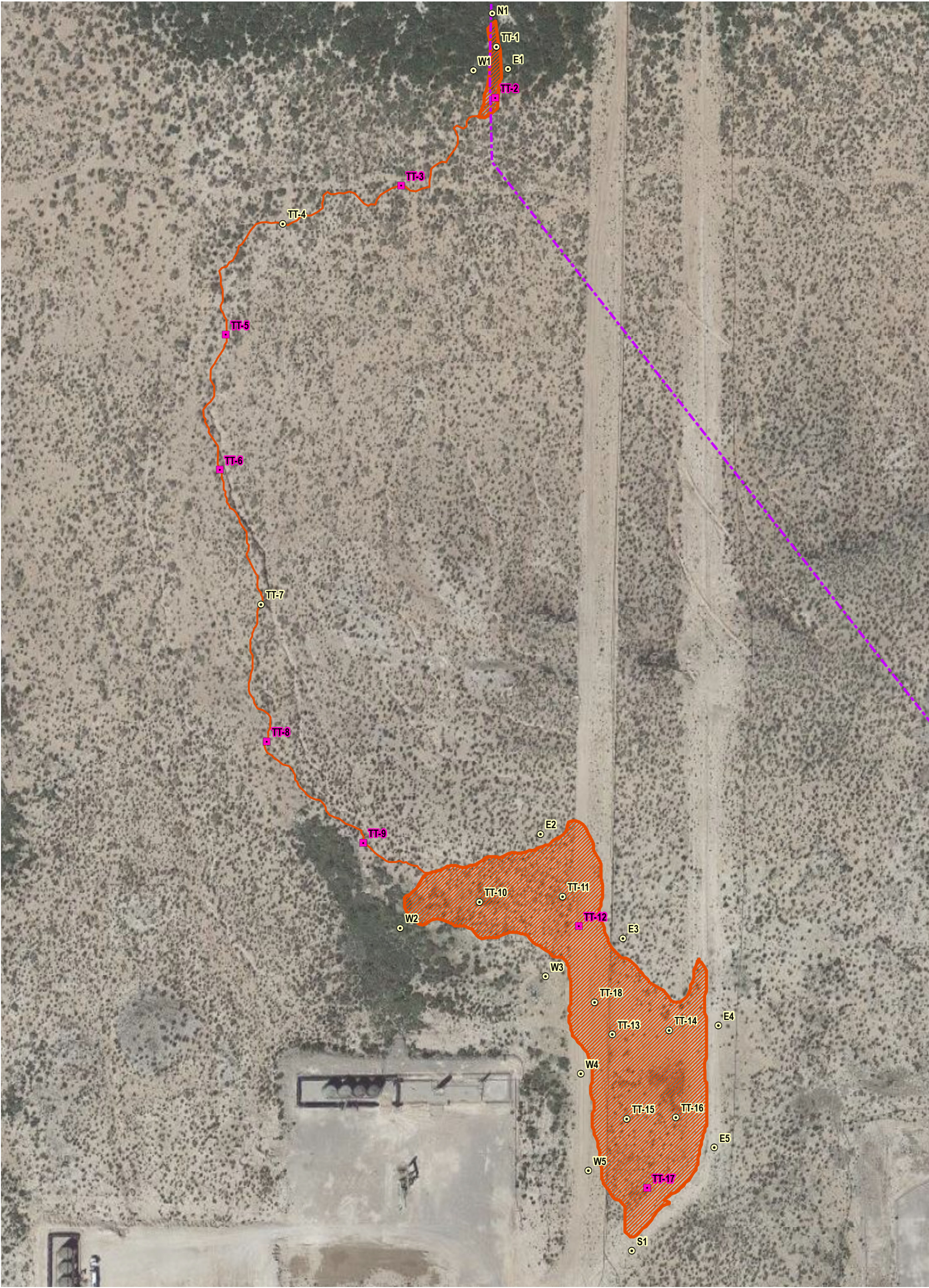
DATE: SEPTEMBER 2019

PROJ. NO.: 362462

FILE: 362462_2.mxd

FIGURE 2

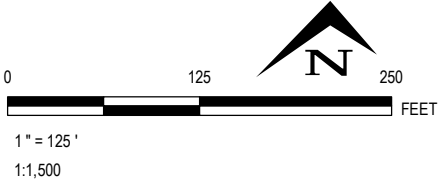




LEGEND

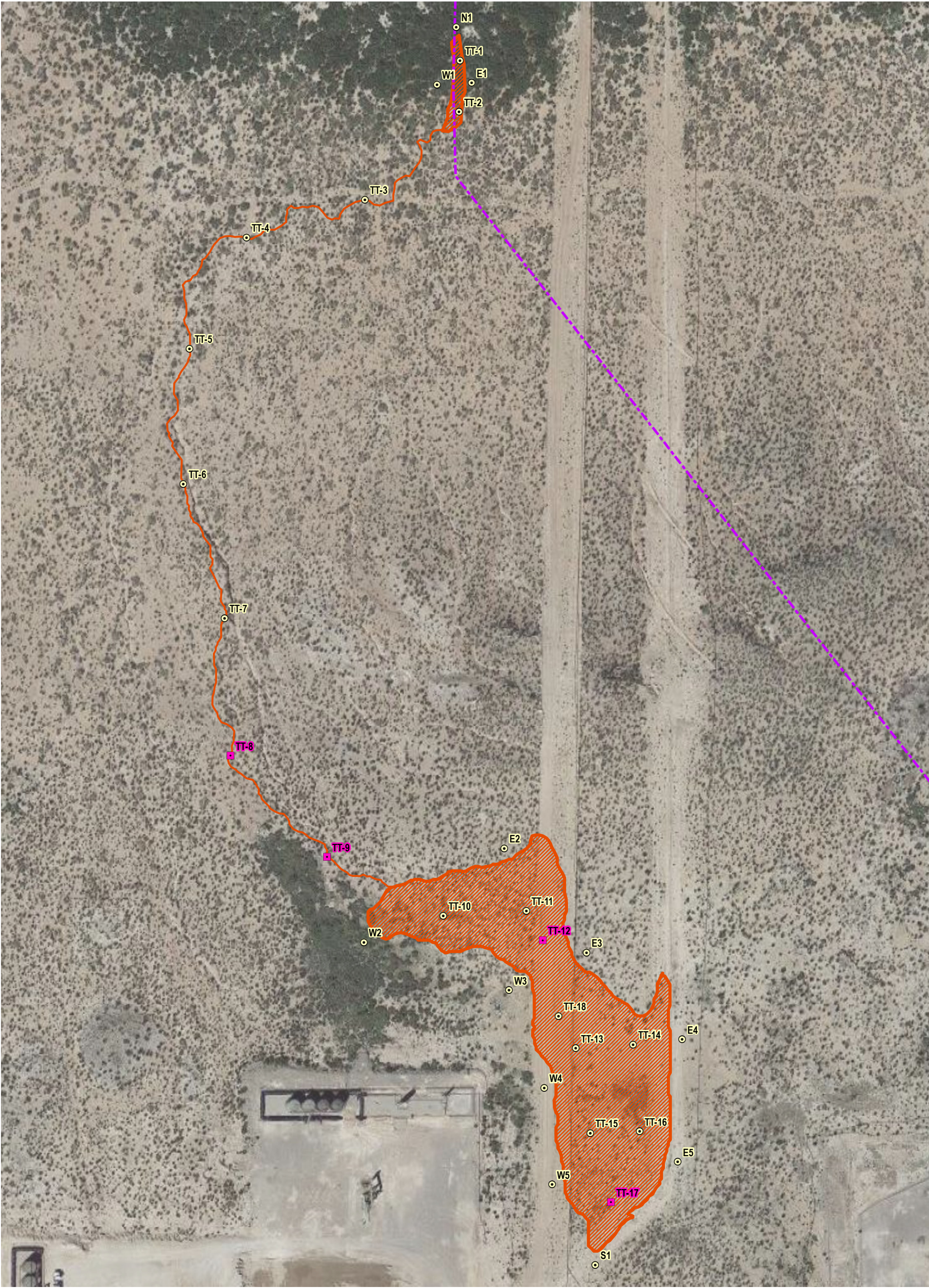
- Sample Locations Impacted Above NMOCD Regulatory Guidelines
- Sample Locations Not Impacted Above NMOCD Regulatory Guidelines
- ▨

 Release Area
- Crestwood 20" High Pressure Pipeline



BASEMAP FROM GOOGLE EARTH PRO AND THEIR DATA PARTNERS (2/21/2019);

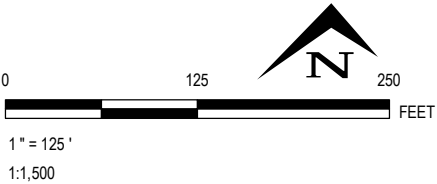
TRC 505 East Huntland Drive Suite #250 Austin, TX 78752 Phone: 512.329.6080	PROJECT:	SRO STATE 504H and 505H EDDY COUNTY, NM	DRAWN BY: SRAY
	TITLE:	RELEASE AREA AND DELINEATION SAMPLE LOCATION MAP - PRIOR TO RAIN EVENTS	CHECKED BY: JSTOFFEL
			APPROVED BY: JSTOFFEL
			DATE: FEBRUARY 2020
			PROJ. NO.: 362462
			FILE: 362462_4.mxd
			FIGURE 4



LEGEND

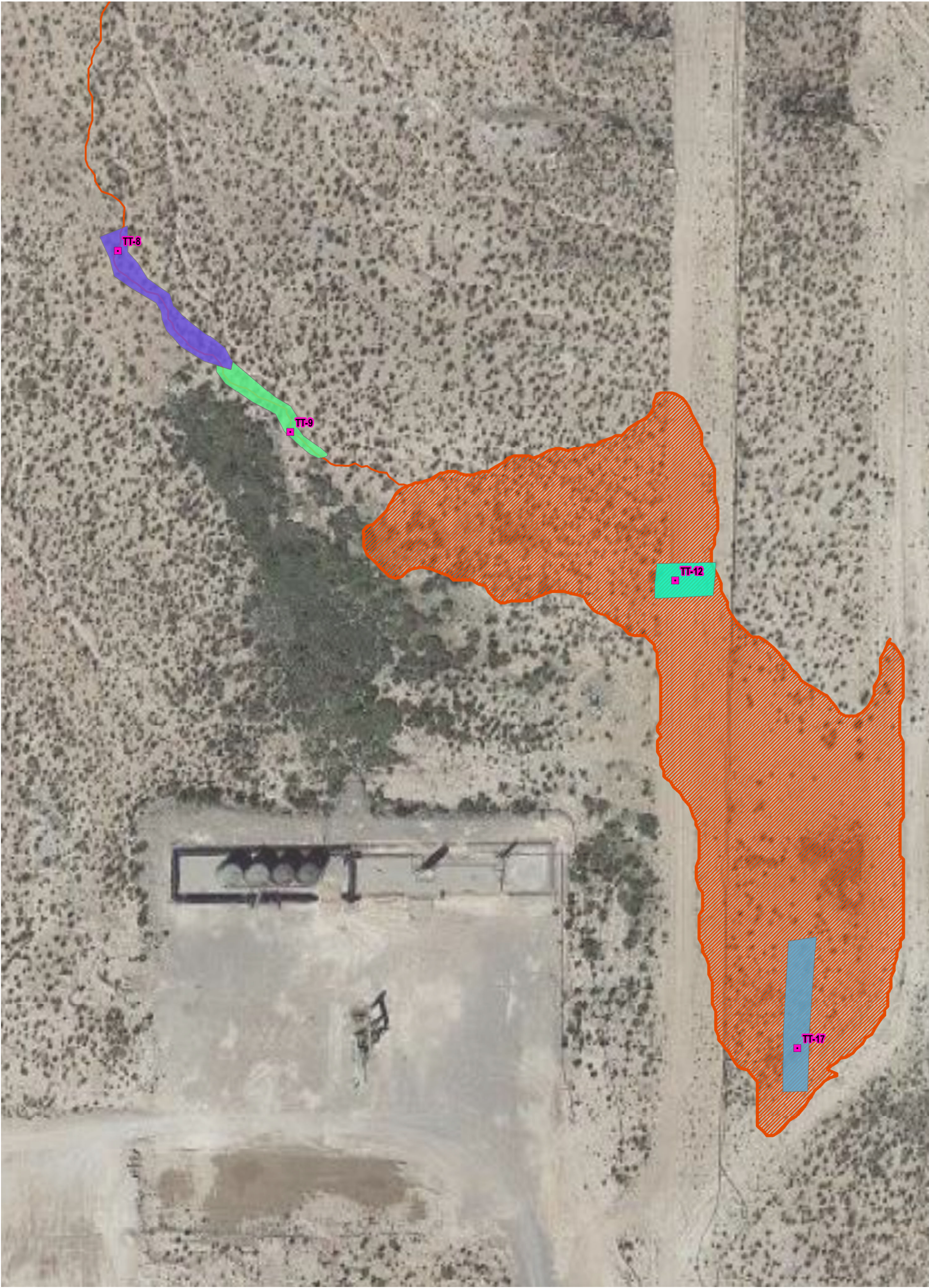
- Crestwood 20" High Pressure Pipeline
- Sample Locations Impacted Above NMOCD Regulatory Guidelines
- Sample Locations Not Impacted Above NMOCD Regulatory Guidelines

Release Area



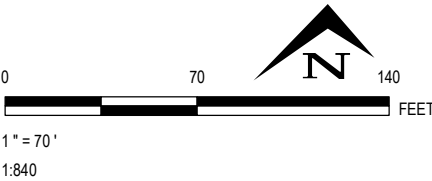
BASEMAP FROM GOOGLE EARTH PRO AND THEIR DATA PARTNERS (2/21/2019);

TRC 505 East Huntland Drive Suite #250 Austin, TX 78752 Phone: 512.329.6080	PROJECT:	SRO STATE 504H and 505H EDDY COUNTY, NM	DRAWN BY: SRAY
	TITLE:	RELEASE AREA AND DELINEATION SAMPLE LOCATION MAP - AFTER RAIN EVENTS	CHECKED BY: JSTOFFEL
			APPROVED BY: JSTOFFEL
			DATE: FEBRUARY 2020
			PROJ. NO.: 362462
			FILE: 362462_5.mxd
			FIGURE 5



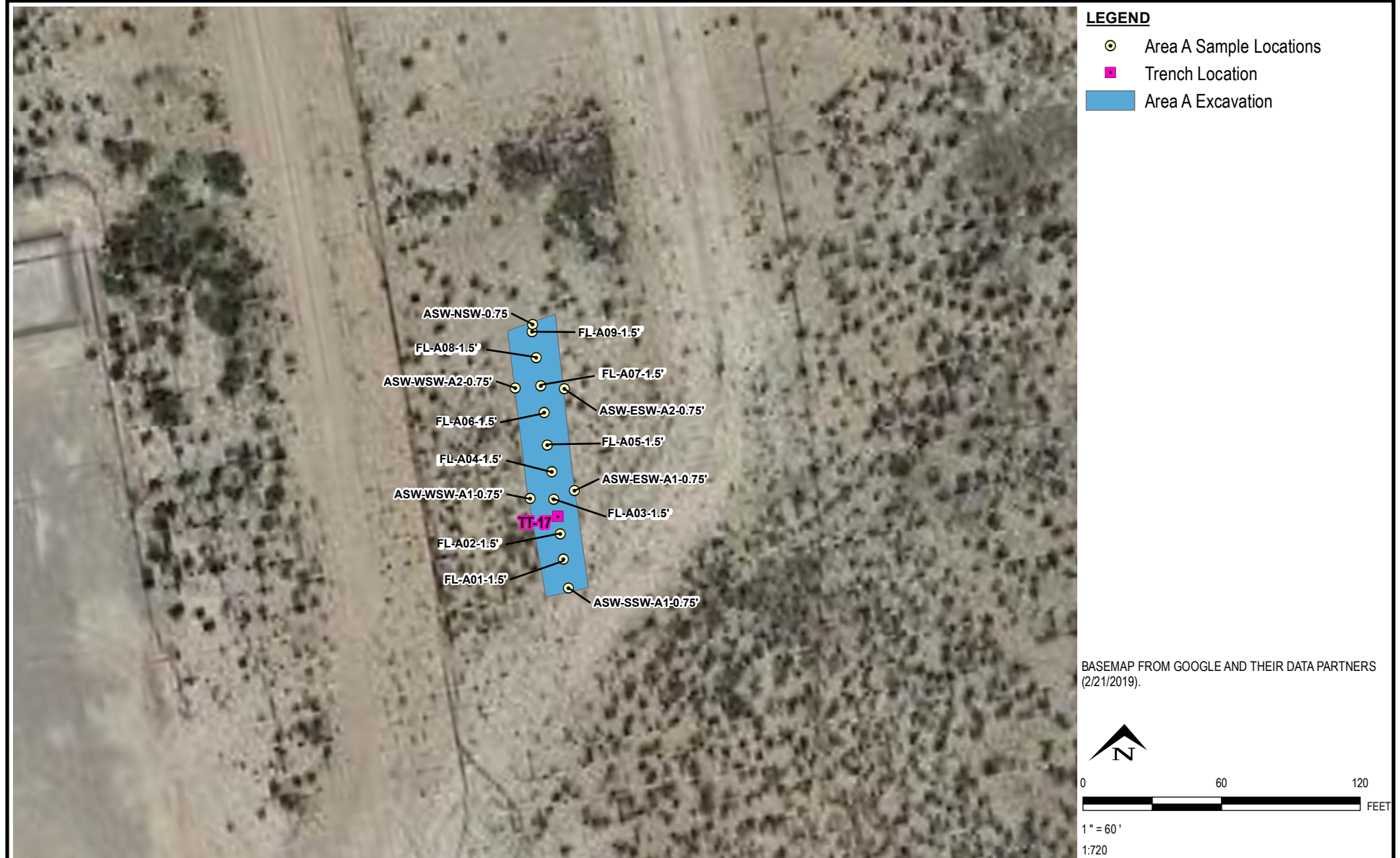
LEGEND

- Sample Locations Impacted Above NMOCD Regulatory Guidelines
- Area A Excavation
- Area C Excavation
- Release Area
- Area B Excavation
- Area D Excavation

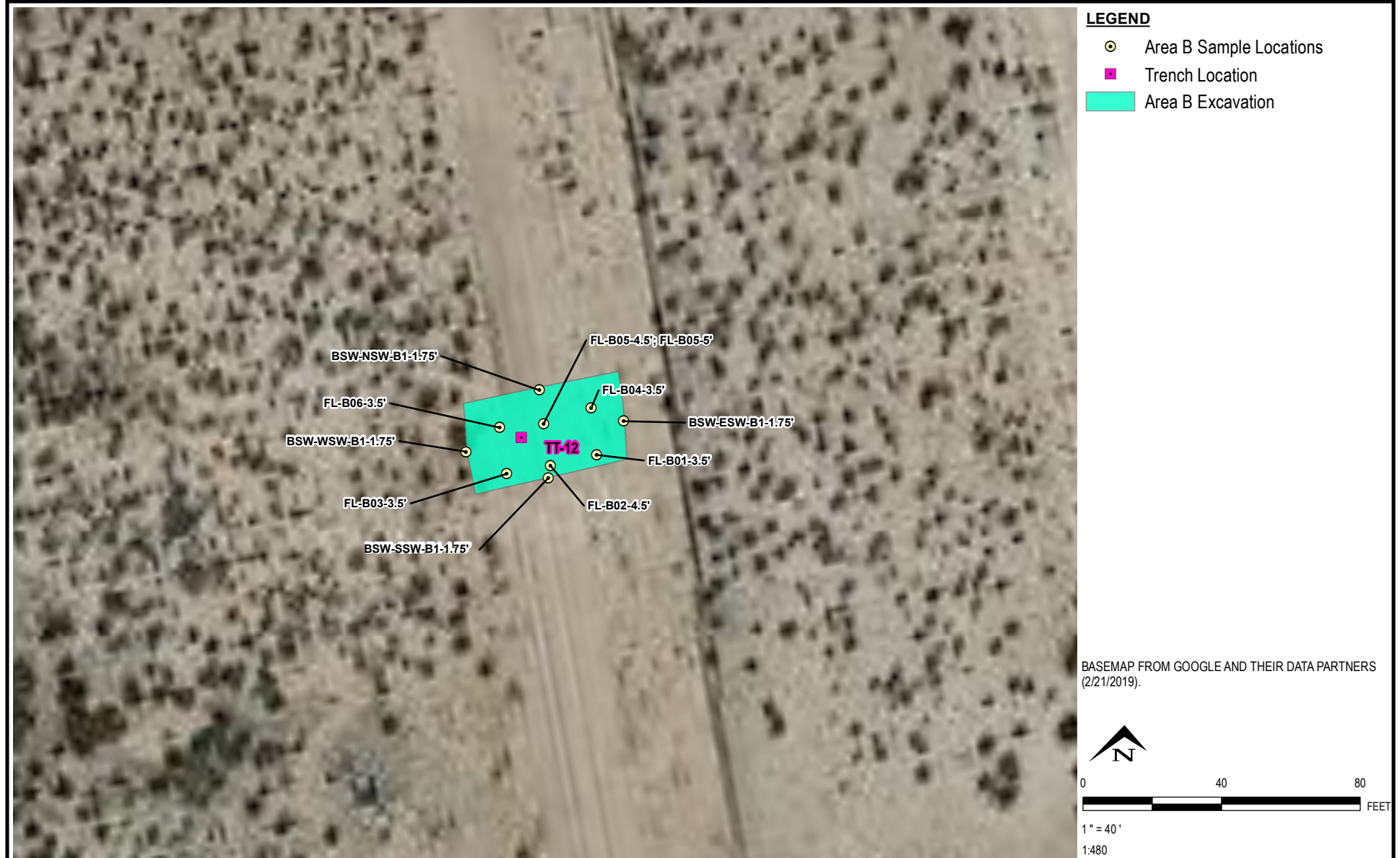


BASEMAP FROM GOOGLE EARTH PRO AND THEIR DATA PARTNERS (2/21/2019).

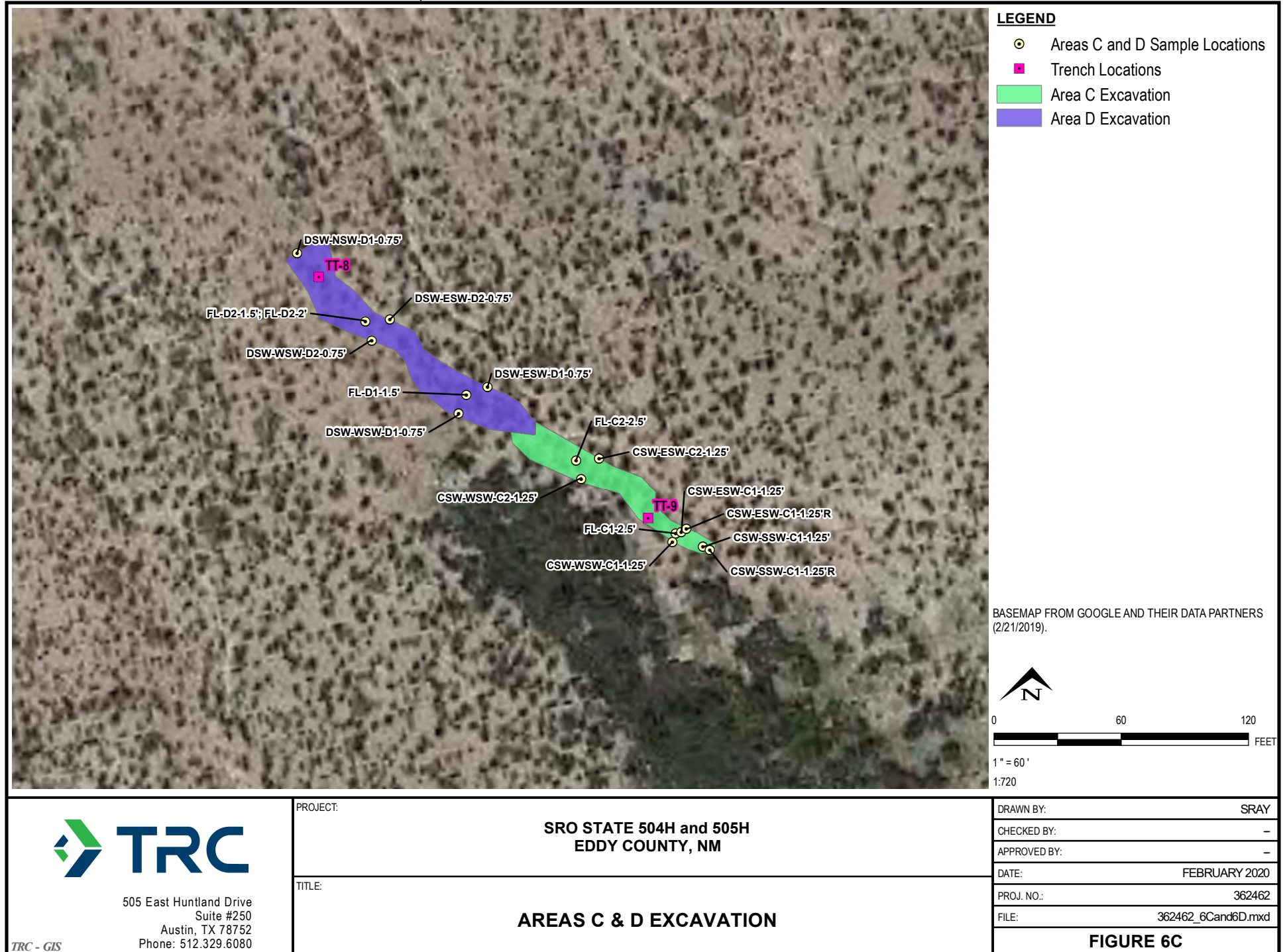
 505 East Huntland Drive Suite #250 Austin, TX 78752 Phone: 512.329.6080	PROJECT:	SRO STATE 504H and 505H EDDY COUNTY, NM	DRAWN BY:	SRAY	
	TITLE:		EXCAVATION OVERVIEW MAP	CHECKED BY:	-
				APPROVED BY:	-
		DATE:		FEBRUARY 2020	
		PROJ. NO.:		362462	
		FILE:	362462_6.mxd		
		FIGURE 6			



 505 East Huntland Drive Suite #250 Austin, TX 78752 Phone: 512.329.6080 TRC - GIS	PROJECT:	SRO STATE 504H and 505H EDDY COUNTY, NM	DRAWN BY:	SRAY
	TITLE:	AREA A EXCAVATION	CHECKED BY:	-
			APPROVED BY:	-
			DATE:	FEBRUARY 2020
			PROJ. NO.:	362462
			FILE:	362462_6A.mxd
			FIGURE 6A	



 505 East Huntland Drive Suite #250 Austin, TX 78752 Phone: 512.329.6080 TRC - GIS	PROJECT:	SRO STATE 504H and 505H EDDY COUNTY, NM	DRAWN BY: SRAY
	TITLE:	AREA B EXCAVATION	CHECKED BY: -
			APPROVED BY: -
			DATE: FEBRUARY 2020
			PROJ. NO.: 362462
			FILE: 362462_6B.mxd
			FIGURE 6B



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 **AQPW8-190822-C-1410**

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
AB			AB	

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>Delann Opreant</u>	Date: _____
email: _____	Telephone: _____
<u>OCD Only</u> Received by: _____ Date: _____	

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
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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?	<u>~90</u> (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.*

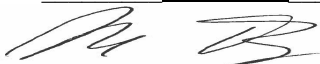
- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☐ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile 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

Incident ID	
District RP	
Facility ID	
Application ID	

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.

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: 3/2/2020

email: itavarez@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.

Printed Name: Ike Tavaréz Title: Senior HSE Supervisor

Signature:  Date: 3/2/2020

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

OCD Only

Received by: _____ Date: _____

Appendix B: Depth to Groundwater Data



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

No records found.

UTMNAD83 Radius Search (in meters):

Easting (X): 584867

Northing (Y): 3550180.34

Radius: 805



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 file.)

(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	POD Sub-		Source	q q q				X	Y	Distance	Start Date	Log File		Depth Well	Depth Water	Driller	License Number		
	Code	basin		County	64	16	4					Sec	Tws					Rng	Date
C 01278	C	ED		4	3	28	25S	28E	585470	3551338*		1270	04/04/1965	04/08/1965	05/27/1965	205	90 ABBOTT, MUNELL	46	
C 03836 POD1	C	ED	Shallow	2	2	4	29	25S	28E	584682	3551934		1726	04/06/2015	04/08/2015	04/16/2015	300	30 JOHN SIRMAN	1654
C 01573 POD1	C	ED	Shallow	3	1	4	20	25S	28E	584144	3553361		3226	01/15/1975	01/20/1975	01/23/1975	176	96 MURRELL ABBOTT	46

Record Count: 3

UTMNAD83 Radius Search (in meters):

Easting (X): 584871

Northing (Y): 3550218

Radius: 4024

*UTM location was derived from PLSS - see Help

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.



New Mexico Office of the State Engineer

Wells with Well Log Information

No wells found.

Basin/County Search:

County: Eddy

PLSS Search:

Section(s): 32

Township: 25S

Range: 28E



New Mexico Office of the State Engineer

Wells with Well Log Information

No wells found.

Basin/County Search:

County: Eddy

PLSS Search:

Section(s): 33

Township: 25S

Range: 28E

Appendix C: Photographic Documentation

Appendix C Photographs



Photo 1: Main body of the affected area viewed to the northwest.



Photo 2: Close up of the main body of the affected area viewed to the northwest.



Photo 3: Main body of the affected area viewed to the southeast.



Photo 4: Excavated area A.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
362462	Jared Stoffel	1 of 3	COG Operating	SRO 5 State 504H & 505H	

Appendix C Photographs



Photo 5: Backfilled area A.



Photo 6: Excavated area B.



Photo 7: Backfilled area B.



Photo 8: Excavated area C.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	TRC
362462	Jared Stoffel	2 of 3	COG Operating	SRO 5 State 504H & 505H	

Appendix C Photographs



Photo 9: Backfilled area C.



Photo 10: Excavated area D.



Photo 11: Backfilled area D.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
362462	Jared Stoffel	3 of 3	COG Operating	SRO 5 State 504H & 505H	

Appendix D: Analytical Laboratory Reports

Analytical Report 637038

for
TRC Solutions, Inc

Project Manager: Jared Stoffel

SRO 5 State Com

25-SEP-19

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142), North Carolina (681)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-21), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNi02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



25-SEP-19

Project Manager: **Jared Stoffel**
TRC Solutions, Inc
2057 Commerce
Midland, TX 79703

Reference: XENCO Report No(s): **637038**
SRO 5 State Com
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) 637038. 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. 637038 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,

Jessica Kramer
Project Assistant

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

TRC Solutions, Inc, Midland, TX

SRO 5 State Com

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Background-1 @ 0-1'	S	09-17-19 15:25	0 - 1 ft	637038-001
Background-1 @ 2'	S	09-17-19 15:30	2 ft	637038-002
Background-1 @ 3'	S	09-17-19 15:35	3 ft	637038-003
Background-1 @ 4'	S	09-17-19 15:40	4 ft	637038-004
Background-1 @ 5'	S	09-17-19 15:45	5 ft	637038-005
Background-1 @ 6'	S	09-17-19 15:50	6 ft	637038-006
Background-1 @ 7'	S	09-17-19 15:55	7 ft	637038-007
Background-1 @ 8'	S	09-17-19 16:00	8 ft	637038-008
Background-1 @ 9'	S	09-17-19 16:05	9 ft	637038-009
Background-1 @ 10'	S	09-17-19 16:10	10 ft	637038-010
Background-1 @ 11'	S	09-17-19 16:15	11 ft	637038-011
Background-1 @ 12'	S	09-17-19 16:20	12 ft	637038-012
Background-2 @ 0-1'	S	09-17-19 09:15	0 - 1 ft	637038-013
Background-2 @ 2'	S	09-17-19 09:20	2 ft	637038-014
Background-2 @ 3'	S	09-17-19 09:25	3 ft	637038-015
Background-2 @ 4'	S	09-17-19 09:30	4 ft	637038-016
Background-2 @ 5'	S	09-17-19 09:35	5 ft	637038-017
Background-2 @ 6'	S	09-17-19 09:40	6 ft	637038-018
Background-2 @ 7'	S	09-17-19 09:45	7 ft	637038-019
Background-2 @ 8'	S	09-17-19 09:50	8 ft	637038-020
Background-2 @ 9'	S	09-17-19 09:55	9 ft	637038-021
Background-2 @ 10'	S	09-17-19 10:00	10 ft	637038-022
Background-2 @ 11'	S	09-17-19 10:05	11 ft	637038-023
Background-2 @ 12'	S	09-17-19 10:10	12 ft	637038-024
Background-3 @ 0-1'	S	09-17-19 13:00	0 - 1 ft	637038-025
Background-3 @ 2'	S	09-17-19 13:05	2 ft	637038-026
Background-3 @ 3'	S	09-17-19 13:10	3 ft	637038-027
Background-3 @ 4'	S	09-17-19 13:15	4 ft	637038-028
Background-3 @ 5'	S	09-17-19 13:20	5 ft	637038-029
Background-3 @ 6'	S	09-17-19 13:30	6 ft	637038-030
Background-3 @ 7'	S	09-17-19 13:35	7 ft	637038-031
Background-3 @ 8'	S	09-17-19 13:40	8 ft	637038-032
Background-3 @ 9'	S	09-17-19 13:45	9 ft	637038-033
Background-3 @ 10'	S	09-17-19 13:50	10 ft	637038-034
Background-3 @ 11'	S	09-17-19 13:55	11 ft	637038-035
Background-3 @ 12'	S	09-17-19 10:55	12 ft	637038-036
Background-4 @ 0-1'	S	09-17-19 11:00	0 - 1 ft	637038-037
Background-4 @ 2'	S	09-17-19 11:00	2 ft	637038-038
Background-4 @ 3'	S	09-17-19 11:05	3 ft	637038-039
Background-4 @ 4'	S	09-17-19 11:10	4 ft	637038-040
Background-4 @ 5'	S	09-17-19 11:15	5 ft	637038-041
Background-4 @ 6'	S	09-17-19 11:20	6 ft	637038-042
Background-4 @ 7'	S	09-17-19 11:25	7 ft	637038-043

TRC Solutions, Inc, Midland, TX

SRO 5 State Com

Background-4 @ 8'	S	09-17-19 11:30	8 ft	637038-044
Background-4 @ 9'	S	09-17-19 11:35	9 ft	637038-045
Background-4 @ 10'	S	09-17-19 11:40	10 ft	637038-046
Background-4 @ 11'	S	09-17-19 11:45	11 ft	637038-047
Background-4 @ 12'	S	09-17-19 11:50	12 ft	637038-048
Background-5 @ 0-1'	S	09-17-19 16:35	0 - 1 ft	637038-049
Background-5 @ 2'	S	09-17-19 16:40	2 ft	637038-050
Background-5 @ 3'	S	09-17-19 16:45	3 ft	637038-051
Background-5 @ 4'	S	09-17-19 16:50	4 ft	637038-052
Background-5 @ 5'	S	09-17-19 16:55	5 ft	637038-053
Background-5 @ 6'	S	09-17-19 17:00	6 ft	637038-054
Background-5 @ 7'	S	09-17-19 17:05	7 ft	637038-055
Background-5 @ 8'	S	09-17-19 17:10	8 ft	637038-056
Background-5 @ 9'	S	09-17-19 17:15	9 ft	637038-057
Background-5 @ 10'	S	09-17-19 17:20	10 ft	637038-058
Background-5 @ 11'	S	09-17-19 17:25	11 ft	637038-059
Background-5 @ 12'	S	09-17-19 17:30	12 ft	637038-060



CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: SRO 5 State Com

Project ID:
Work Order Number(s): 637038

Report Date: 25-SEP-19
Date Received: 09/18/2019

Sample receipt non conformances and comments:

Per clients email corrected typo on sample 060 to read Background-5 @ 12'. NEW VERSION
GENERATED JK 09/25/19

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3101890 Chloride by EPA 300

Lab Sample ID 637038-028 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 637038-021, -022, -023, -024, -025, -026, -027, -028, -029, -030, -031, -032, -033, -034, -035, -036, -037, -038, -039, -040.

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



Certificate of Analysis Summary 637038

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State Com



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Wed Sep-18-19 10:04 am

Report Date: 25-SEP-19

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	637038-001	637038-002	637038-003	637038-004	637038-005	637038-006
	<i>Field Id:</i>	Background-1 @ 0-1'	Background-1 @ 2'	Background-1 @ 3'	Background-1 @ 4'	Background-1 @ 5'	Background-1 @ 6'
	<i>Depth:</i>	0-1 ft	2- ft	3- ft	4- ft	5- ft	6- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Sep-17-19 15:25	Sep-17-19 15:30	Sep-17-19 15:35	Sep-17-19 15:40	Sep-17-19 15:45	Sep-17-19 15:50
Chloride by EPA 300	<i>Extracted:</i>	Sep-18-19 13:05	Sep-18-19 13:05	Sep-18-19 13:05	Sep-18-19 13:05	Sep-18-19 13:05	Sep-18-19 13:05
	<i>Analyzed:</i>	Sep-18-19 15:36	Sep-18-19 15:54	Sep-18-19 16:00	Sep-18-19 16:06	Sep-18-19 16:12	Sep-18-19 16:30
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		39.0 5.01	358 4.96	427 5.00	722 5.03	916 5.05	982 5.05

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 Assistant



Certificate of Analysis Summary 637038

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State Com



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Wed Sep-18-19 10:04 am

Report Date: 25-SEP-19

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	637038-007	637038-008	637038-009	637038-010	637038-011	637038-012
	<i>Field Id:</i>	Background-1 @ 7'	Background-1 @ 8'	Background-1 @ 9'	Background-1 @ 10'	Background-1 @ 11'	Background-1 @ 12'
	<i>Depth:</i>	7- ft	8- ft	9- ft	10- ft	11- ft	12- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Sep-17-19 15:55	Sep-17-19 16:00	Sep-17-19 16:05	Sep-17-19 16:10	Sep-17-19 16:15	Sep-17-19 16:20
Chloride by EPA 300	<i>Extracted:</i>	Sep-18-19 13:05	Sep-18-19 13:05	Sep-18-19 13:05	Sep-18-19 13:05	Sep-18-19 13:05	Sep-18-19 13:05
	<i>Analyzed:</i>	Sep-18-19 16:36	Sep-18-19 16:42	Sep-18-19 16:48	Sep-18-19 16:54	Sep-18-19 17:17	Sep-18-19 17:23
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		391 49.8	777 49.7	817 50.0	1040 50.0	1150 49.9	1620 50.0

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

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

Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 637038

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State Com



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Wed Sep-18-19 10:04 am

Report Date: 25-SEP-19

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	637038-013	637038-014	637038-015	637038-016	637038-017	637038-018
	<i>Field Id:</i>	Background-2 @ 0-1'	Background-2 @ 2'	Background-2' @ 3'	Background-2 @ 4'	Background-2 @ 5'	Background-2 @ 6'
	<i>Depth:</i>	0-1 ft	2- ft	3- ft	4- ft	5- ft	6- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Sep-17-19 09:15	Sep-17-19 09:20	Sep-17-19 09:25	Sep-17-19 09:30	Sep-17-19 09:35	Sep-17-19 09:40
Chloride by EPA 300	<i>Extracted:</i>	Sep-18-19 13:05	Sep-18-19 13:05	Sep-18-19 13:05	Sep-18-19 13:05	Sep-18-19 13:05	Sep-18-19 13:05
	<i>Analyzed:</i>	Sep-18-19 17:00	Sep-18-19 17:41	Sep-18-19 17:47	Sep-18-19 17:53	Sep-18-19 17:59	Sep-18-19 18:05
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		24.6 4.99	41.6 4.97	46.4 4.96	305 5.02	1020 50.0	1240 50.0

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Jessica Kramer
Project Assistant



Certificate of Analysis Summary 637038

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State Com



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Wed Sep-18-19 10:04 am

Report Date: 25-SEP-19

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	637038-019	637038-020	637038-021	637038-022	637038-023	637038-024
	<i>Field Id:</i>	Background-2' @ 7'	Background-2 @ 8'	Background-2 @ 9'	Background-2 @ 10'	Background-2 @ 11'	Background-2 @ 12'
	<i>Depth:</i>	7- ft	8- ft	9- ft	10- ft	11- ft	12- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Sep-17-19 09:45	Sep-17-19 09:50	Sep-17-19 09:55	Sep-17-19 10:00	Sep-17-19 10:05	Sep-17-19 10:10
Chloride by EPA 300	<i>Extracted:</i>	Sep-18-19 13:05	Sep-18-19 13:05	Sep-18-19 13:20	Sep-18-19 13:20	Sep-18-19 13:20	Sep-18-19 13:20
	<i>Analyzed:</i>	Sep-18-19 18:11	Sep-18-19 18:17	Sep-18-19 16:14	Sep-18-19 16:20	Sep-18-19 16:26	Sep-18-19 16:32
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		1650 50.2	3770 100	292 50.1	152 50.0	992 50.0	610 50.0

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Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 637038

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State Com



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Wed Sep-18-19 10:04 am

Report Date: 25-SEP-19

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	637038-025	637038-026	637038-027	637038-028	637038-029	637038-030
	<i>Field Id:</i>	Background-3 @ 0-1'	Background-3 @ 2'	Background-3 @ 3'	Background-3 @ 4'	Background-3 @ 5'	Background-3 @ 6'
	<i>Depth:</i>	0-1 ft	2- ft	3- ft	4- ft	5- ft	6- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Sep-17-19 13:00	Sep-17-19 13:05	Sep-17-19 13:10	Sep-17-19 13:15	Sep-17-19 13:20	Sep-17-19 13:30
Chloride by EPA 300	<i>Extracted:</i>	Sep-18-19 13:20	Sep-18-19 13:20	Sep-18-19 13:20	Sep-18-19 13:20	Sep-18-19 13:20	Sep-18-19 13:20
	<i>Analyzed:</i>	Sep-18-19 15:56	Sep-18-19 17:20	Sep-18-19 17:26	Sep-18-19 17:49	Sep-18-19 17:31	Sep-18-19 17:37
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		8.99 4.98	11.2 5.02	9.04 4.97	25.8 5.04	553 50.1	100 50.5

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Jessica Kramer
Project Assistant



Certificate of Analysis Summary 637038

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State Com



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Wed Sep-18-19 10:04 am

Report Date: 25-SEP-19

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	637038-031	637038-032	637038-033	637038-034	637038-035	637038-036
	<i>Field Id:</i>	Background-3 @ 7'	Background-3 @ 8'	Background-3 @ 9'	Background-3 @ 10'	Background-3 @ 11'	Background-3 @ 12'
	<i>Depth:</i>	7- ft	8- ft	9- ft	10- ft	11- ft	12- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Sep-17-19 13:35	Sep-17-19 13:40	Sep-17-19 13:45	Sep-17-19 13:50	Sep-17-19 13:55	Sep-17-19 10:55
Chloride by EPA 300	<i>Extracted:</i>	Sep-18-19 13:20	Sep-18-19 13:20	Sep-18-19 13:20	Sep-18-19 13:20	Sep-18-19 13:20	Sep-18-19 13:20
	<i>Analyzed:</i>	Sep-18-19 17:43	Sep-18-19 18:06	Sep-18-19 18:12	Sep-18-19 18:30	Sep-18-19 18:36	Sep-18-19 18:41
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		140 50.5	199 50.3	235 50.5	251 50.5	280 50.0	146 50.0

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Jessica Kramer
Project Assistant



Certificate of Analysis Summary 637038

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State Com



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Wed Sep-18-19 10:04 am

Report Date: 25-SEP-19

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	637038-037	637038-038	637038-039	637038-040	637038-041	637038-042
	<i>Field Id:</i>	Background-4 @ 0-1'	Background-4 @ 2'	Background-4 @ 3'	Background-4 @ 4'	Background-4 @ 5'	Background-4 @ 6'
	<i>Depth:</i>	0-1 ft	2- ft	3- ft	4- ft	5- ft	6- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Sep-17-19 11:00	Sep-17-19 11:00	Sep-17-19 11:05	Sep-17-19 11:10	Sep-17-19 11:15	Sep-17-19 11:20
Chloride by EPA 300	<i>Extracted:</i>	Sep-18-19 13:20	Sep-18-19 13:20	Sep-18-19 13:20	Sep-18-19 13:20	Sep-18-19 14:00	Sep-18-19 14:00
	<i>Analyzed:</i>	Sep-18-19 18:47	Sep-18-19 18:53	Sep-18-19 18:59	Sep-18-19 19:05	Sep-19-19 08:52	Sep-18-19 19:02
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		8.44 5.03	17.1 4.98	105 5.01	306 25.2	384 50.2	489 50.0

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Jessica Kramer
Project Assistant



Certificate of Analysis Summary 637038

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State Com



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Wed Sep-18-19 10:04 am

Report Date: 25-SEP-19

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	637038-043	637038-044	637038-045	637038-046	637038-047	637038-048
	<i>Field Id:</i>	Background-4 @ 7'	Background-4 @ 8'	Background-4 @ 9'	Background-4 @ 10'	Background-4 @ 11'	Background-4 @ 12'
	<i>Depth:</i>	7- ft	8- ft	9- ft	10- ft	11- ft	12- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Sep-17-19 11:25	Sep-17-19 11:30	Sep-17-19 11:35	Sep-17-19 11:40	Sep-17-19 11:45	Sep-17-19 11:50
Chloride by EPA 300	<i>Extracted:</i>	Sep-18-19 14:00	Sep-18-19 14:00	Sep-18-19 14:00	Sep-18-19 14:00	Sep-18-19 14:00	Sep-18-19 14:00
	<i>Analyzed:</i>	Sep-18-19 19:09	Sep-18-19 19:15	Sep-18-19 19:42	Sep-18-19 19:48	Sep-18-19 19:55	Sep-18-19 20:01
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		379 50.0	561 49.6	359 49.7	422 50.1	318 50.0	679 50.4

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Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 637038

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State Com



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Wed Sep-18-19 10:04 am

Report Date: 25-SEP-19

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	637038-049	637038-050	637038-051	637038-052	637038-053	637038-054
	<i>Field Id:</i>	Background-5 @ 0-1'	Background-5 @ 2'	Background-5 @ 3'	Background-5 @ 4'	Background-5 @ 5'	Background-5 @ 6'
	<i>Depth:</i>	0-1 ft	2- ft	3- ft	4- ft	5- ft	6- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Sep-17-19 16:35	Sep-17-19 16:40	Sep-17-19 16:45	Sep-17-19 16:50	Sep-17-19 16:55	Sep-17-19 17:00
Chloride by EPA 300	<i>Extracted:</i>	Sep-18-19 14:00	Sep-18-19 14:00	Sep-18-19 14:00	Sep-18-19 14:00	Sep-18-19 14:00	Sep-18-19 14:00
	<i>Analyzed:</i>	Sep-19-19 08:46	Sep-18-19 20:08	Sep-19-19 08:59	Sep-18-19 20:41	Sep-18-19 21:07	Sep-18-19 21:14
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		10.3 5.05	50.7 49.9	59.8 50.4	114 50.3	388 50.0	461 49.6

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Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 637038

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State Com



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Wed Sep-18-19 10:04 am

Report Date: 25-SEP-19

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	637038-055	637038-056	637038-057	637038-058	637038-059	637038-060
	<i>Field Id:</i>	Background-5 @ 7'	Background-5 @ 8'	Background-5 @ 9'	Background-5 @ 10'	Background-5 @ 11'	Background-5 @ 12'
	<i>Depth:</i>	7- ft	8- ft	9- ft	10- ft	11- ft	12- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Sep-17-19 17:05	Sep-17-19 17:10	Sep-17-19 17:15	Sep-17-19 17:20	Sep-17-19 17:25	Sep-17-19 17:30
Chloride by EPA 300	<i>Extracted:</i>	Sep-18-19 14:00	Sep-18-19 14:00	Sep-18-19 14:00	Sep-18-19 14:00	Sep-18-19 14:00	Sep-18-19 14:00
	<i>Analyzed:</i>	Sep-18-19 21:20	Sep-18-19 21:27	Sep-18-19 21:33	Sep-18-19 21:40	Sep-18-19 21:46	Sep-18-19 20:14
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		587 50.2	643 50.3	911 49.9	769 49.9	1220 50.4	639 4.96

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Jessica Kramer

Jessica Kramer
Project Assistant

- 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



BS / BSD Recoveries



Project Name: SRO 5 State Com

Work Order #: 637038, 637038

Analyst: CHE

Date Prepared: 09/18/2019

Project ID:

Date Analyzed: 09/18/2019

Lab Batch ID: 3101881

Sample: 7686433-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Chloride	<0.858	250	259	104	250	259	104	0	90-110	20	

Analyst: CHE

Date Prepared: 09/18/2019

Date Analyzed: 09/18/2019

Lab Batch ID: 3101894

Sample: 7686434-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Chloride	<0.858	250	248	99	250	247	99	0	90-110	20	

Analyst: CHE

Date Prepared: 09/18/2019

Date Analyzed: 09/18/2019

Lab Batch ID: 3101894

Sample: 7686435-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Chloride	<0.858	250	248	99	250	245	98	1	90-110	20	

Relative Percent Difference RPD = $200 * |(C-F)/(C+F)|$

Blank Spike Recovery [D] = $100 * (C)/[B]$

Blank Spike Duplicate Recovery [G] = $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



Form 3 - MS / MSD Recoveries



Project Name: SRO 5 State Com

Work Order # : 637038

Project ID:

Lab Batch ID: 3101881

QC- Sample ID: 637038-001 S

Batch #: 1 Matrix: Soil

Date Analyzed: 09/18/2019

Date Prepared: 09/18/2019

Analyst: CHE

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	39.0	251	303	105	251	305	106	1	90-110	20	

Lab Batch ID: 3101881

QC- Sample ID: 637038-013 S

Batch #: 1 Matrix: Soil

Date Analyzed: 09/18/2019

Date Prepared: 09/18/2019

Analyst: CHE

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	24.6	250	286	105	250	288	105	1	90-110	20	

Lab Batch ID: 3101890

QC- Sample ID: 637038-025 S

Batch #: 1 Matrix: Soil

Date Analyzed: 09/18/2019

Date Prepared: 09/18/2019

Analyst: CHE

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	8.99	249	295	115	249	292	114	1	90-110	20	X

Matrix Spike Percent Recovery $[D] = 100 \times (C-A)/B$
Relative Percent Difference $RPD = 200 \times |(C-F)/(C+F)|$

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A)/E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable

N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Form 3 - MS / MSD Recoveries



Project Name: SRO 5 State Com

Work Order # : 637038

Project ID:

Lab Batch ID: 3101890

QC- Sample ID: 637038-028 S

Batch #: 1 Matrix: Soil

Date Analyzed: 09/18/2019

Date Prepared: 09/18/2019

Analyst: CHE

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	25.8	252	280	101	252	281	101	0	90-110	20	

Lab Batch ID: 3101894

QC- Sample ID: 637038-049 S

Batch #: 1 Matrix: Soil

Date Analyzed: 09/18/2019

Date Prepared: 09/18/2019

Analyst: CHE

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	10.3	253	274	104	253	272	103	1	90-110	20	

Lab Batch ID: 3101894

QC- Sample ID: 637038-060 S

Batch #: 1 Matrix: Soil

Date Analyzed: 09/18/2019

Date Prepared: 09/18/2019

Analyst: CHE

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	639	248	868	92	248	866	92	0	90-110	20	

Matrix Spike Percent Recovery $[D] = 100 * (C - A) / B$
Relative Percent Difference $RPD = 200 * |(C - F) / (C + F)|$

Matrix Spike Duplicate Percent Recovery $[G] = 100 * (F - A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



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1.001





Chain of Custody

Work Order No:

1037038

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
Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

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Page 3 of 6

Project Manager:	Jared Stoffel	Bill to: (if different)	Ike Tavares
Company Name:	TRC	Company Name:	COG
Address:	10 Desta Dr., STE 150E	Address:	
City, State ZIP:	Midland, Texas 79705	City, State ZIP:	
Phone:	432-238-3003	Email:	istoffel@trccompanies.itavares@concho.com

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:	SRO 5 State Com	Turn Around	
Project Number:		Routine ☐	
P.O. Number:		Rush: 24 hour	
Sampler's Name:	Tania Babu/Braedon Billings	Due Date:	

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Samples	TPH (8015)	BTEX (8021B)	Chlorides (E300)											Sample Comments
Background-2 @ 9'	S	9/17/2019	0955	9'	1			X											
Background-2 @ 10'	S	9/17/2019	1000	10'	1			X											
Background-2 @ 11'	S	9/17/2019	1005	11'	1			X											
Background-2 @ 12'	S	9/17/2019	1010	12'	1			X											
Background-3 @ 0-1'	S	9/17/2019	1300	0-1'	1			X											
Background-3 @ 2'	S	9/17/2019	1305	2'	1			X											
Background-3 @ 3'	S	9/17/2019	1310	3'	1			X											
Background-3 @ 4'	S	9/17/2019	1315	4'	1			X											
Background-3 @ 5'	S	9/17/2019	1320	5'	1			X											
Background-3 @ 6'	S	9/17/2019	1325	6'	1			X											

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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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		2			
2		4			
3		6			
4					
5					



Chain of Custody

Work Order No:

1037036

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
Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

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Page 4 of 6

Project Manager:	Jared Stoffel	Bill to: (if different)	Ike Tavaraz
Company Name:	TRC	Company Name:	COG
Address:	10 Desta Dr., STE 150E	Address:	
City, State ZIP:	Midland, Texas 79705	City, State ZIP:	
Phone:	432-238-3003	Email:	jstoffel@trccompanies, itavaraz@concho.com

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:	SRO 5 State Com	Turn Around	☐	
Project Number:		Routine	☐	
P.O. Number:		Rush: 24 hour		
Sampler's Name:	Tania Babu/Braedon Billings	Due Date:		
SAMPLE RECEIPT	Temp Blank:	Yes	No	
Temperature (°C):		Wet Ice:	Yes	No
Received Intact:	Yes	No	Thermometer ID	
Cooler Custody Seals:	Yes	No	Correction Factor:	
Sample Custody Seals:	Yes	No	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (8015)	BTEX (8021B)	Chlorides (E300)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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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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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			2		
3			4		
5			6		



Chain of Custody

Work Order No: 10351038

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
Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

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Project Manager:	Jared Stoffel	Bill to: (if different)	Ike Tavaraz
Company Name:	TRC	Company Name:	COG
Address:	10 Desta Dr., STE 150E	Address:	
City, State ZIP:	Midland, Texas 79705	City, State ZIP:	
Phone:	432-238-3003	Email:	istoffel@trccompanies, itavaraz@concho.com

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

Project Name:	SRO 5 State Com	Turn Around	☐
Project Number:		Routine	☐
P.O. Number:		Rush: 24 hour	
Sampler's Name:	Tania Babu/Braedon Billings	Due Date:	

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Samples	TPH (8015)	BTEX (8021B)	Chlorides (E300)											Sample Comments
Background-4 @ 5'	S	9/17/2019	1115	5'	1			X											
Background-4 @ 6'	S	9/17/2019	1120	6'	1			X											
Background-4 @ 7'	S	9/17/2019	1125	7'	1			X											
Background-4 @ 8'	S	9/17/2019	1130	8'	1			X											
Background-4 @ 9'	S	9/17/2019	1135	9'	1			X											
Background-4 @ 10'	S	9/17/2019	1140	10'	1			X											
Background-4 @ 11'	S	9/17/2019	1145	11'	1			X											
Background-4 @ 12'	S	9/17/2019	1150	12'	1			X											
Background-5 @ 0-1'	S	9/17/2019	1635	0-1'	1			X											
Background-5 @ 2'	S	9/17/2019	1640	2'	1			X											

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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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		2			
3		4			
5		6			



Chain of Custody

Work Order No: 1631245

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 508-3334
Midland, TX (432-704-5440) EL Paso, TX (915)585-3443 Lubbock, TX (806)794-1296
Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

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Project Manager:	Jared Stoffel	Bill to: (if different)	like Tavaraz
Company Name:	TRC	Company Name:	COG
Address:	10 Desta Dr., STE 150E	Address:	
City, State ZIP:	Midland, Texas 79705	City, State ZIP:	
Phone:	432-238-3003	Email:	jstoffel@trccompanies.com

Project Name:	SRO 5 State Court	Turn Around	☐ Routine ☐ Rush: 24 hour	
Project Number:		Due Date:		
P.O. Number:				
Sampler's Name:	Tania Babu/Braedon Billings			
SAMPLE RECEIPT	Temp Blank:	Yes	No	
Temperature (°C):		Wet Ice:	Yes	No
Received intact:	Yes	No		
Cooler Custody Seals:	Yes	No	Correction Factor:	
Sample Custody Seals:	Yes	No	Total Containers:	

Project Name:		SRO 5 State Com			Turn Around		ANALYSIS REQUEST												Work Order Notes										
Project Number:					Routine ☐														If TPH > 100 mg/kg, Total BTEX > 50 mg/kg and/or Benzene > 10 mg/kg, please run next deeper sample										
P.O. Number:					Rush: 24 hour																								
Sampler's Name:		Tania Babu/Braedon Bilings			Due Date:																								
SAMPLE RECEIPT		Temp Blank:		Yes	No	Wet Ice:		Yes	No																				
Temperature (°C):				Thermometer ID																									
Received Intact:		Yes		No																									
Cooler Custody Seals:		Yes		No	Correction Factor:																								
Sample Custody Seals:		Yes		No	Total Containers:																								
Sample Identification		Matrix		Date Sampled		Time Sampled		Depth		Number of Containers																			
Background-5 @ 3'		S		9/17/2019		1645		3'		1		TPH (8015)		BTEX (8021B)		Chlorides (E300)													
Background-5 @ 4'		S		9/17/2019		1650		4'		1		X																	
Background-5 @ 5'		S		9/17/2019		1655		5'		1		X																	
Background-5 @ 6'		S		9/17/2019		1700		6'		1		X																	
Background-5 @ 7'		S		9/17/2019		1705		7'		1		X																	
Background-5 @ 8'		S		9/17/2019		1710		8'		1		X																	
Background-5 @ 9'		S		9/17/2019		1715		9'		1		X																	
Background-5 @ 10'		S		9/17/2019		1720		10'		1		X																	
Background-5 @ 11'		S		9/17/2019		1725		11'		1		X																	
Background-5 @ 12'		S		9/17/2019		1730		12		1		X																	
										TAT starts the day received by the lab, if received by 4:30pm												Sample Comments							

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1. <u>[Signature]</u>		2			
3. <u>[Signature]</u>		4			
5. <u>[Signature]</u>		6			



XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In



Client: TRC Solutions, Inc

Date/ Time Received: 09/18/2019 10:04:00 AM

Work Order #: 637038

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2.1
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	N/A
#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:

Brianna Teel

Brianna Teel

Date: 09/18/2019

Checklist reviewed by:

Jessica Kramer

Jessica Kramer

Date: 09/18/2019



Certificate of Analysis Summary 637219

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State Com 504/505H (8/9/19)



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Wed Sep-18-19 10:04 am

Report Date: 19-SEP-19

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	637219-001	637219-002	637219-003	637219-004	637219-005	637219-006
	<i>Field Id:</i>	TT-1 @ 0-1'	TT-1 @ 2'	TT-1 @ 3'	TT-1 @ 4'	TT-2 @ 0-1'	TT-2 @ 2'
	<i>Depth:</i>	0-1 ft	2- ft	3- ft	4- ft	0-1 ft	2- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Sep-17-19 11:30	Sep-17-19 11:35	Sep-17-19 11:40	Sep-17-19 11:45	Sep-17-19 11:55	Sep-17-19 12:00
BTEX by EPA 8021B	<i>Extracted:</i>	Sep-18-19 12:15				Sep-18-19 12:15	
	<i>Analyzed:</i>	Sep-18-19 21:37				Sep-18-19 21:57	
	<i>Units/RL:</i>	mg/kg RL				mg/kg RL	
Benzene		<0.00199 0.00199				<0.00201 0.00201	
Toluene		<0.00199 0.00199				<0.00201 0.00201	
Ethylbenzene		<0.00199 0.00199				<0.00201 0.00201	
m,p-Xylenes		<0.00398 0.00398				<0.00402 0.00402	
o-Xylene		<0.00199 0.00199				<0.00201 0.00201	
Total Xylenes		<0.00199 0.00199				<0.00201 0.00201	
Total BTEX		<0.00199 0.00199				<0.00201 0.00201	
Chloride by EPA 300	<i>Extracted:</i>	Sep-18-19 11:40	Sep-18-19 11:40	Sep-18-19 11:40	Sep-18-19 11:40	Sep-18-19 11:40	Sep-18-19 11:40
	<i>Analyzed:</i>	Sep-18-19 14:55	Sep-18-19 15:01	Sep-18-19 12:32	Sep-18-19 12:38	Sep-18-19 12:44	Sep-18-19 13:02
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		17.6 5.00	13.5 5.02	5.55 4.96	38.5 4.95	2260 24.8	135 4.95
TPH by SW8015 Mod	<i>Extracted:</i>	Sep-18-19 12:00				Sep-18-19 12:00	
	<i>Analyzed:</i>	Sep-18-19 16:56				Sep-18-19 17:18	
	<i>Units/RL:</i>	mg/kg RL				mg/kg RL	
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8				<49.8 49.8	
Diesel Range Organics (DRO)		<49.8 49.8				<49.8 49.8	
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8				<49.8 49.8	
Total TPH		<49.8 49.8				<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.

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

Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 637219

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State Com 504/505H (8/9/19)



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Wed Sep-18-19 10:04 am

Report Date: 19-SEP-19

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	637219-007	637219-008	637219-009	637219-010	637219-011	637219-012
	<i>Field Id:</i>	TT-2 @ 3'	TT-2 @ 4'	N1 @ 0-1'	N1 @ 2'	E1 @ 0-1'	E1 @ 2'
	<i>Depth:</i>	3- ft	4- ft	0-1 ft	2- ft	0-1 ft	2- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Sep-17-19 12:05	Sep-17-19 12:10	Sep-17-19 13:00	Sep-17-19 13:05	Sep-17-19 13:30	Sep-17-19 13:35
Chloride by EPA 300	<i>Extracted:</i>	Sep-18-19 11:40	Sep-18-19 11:40	Sep-18-19 11:40	Sep-18-19 11:40	Sep-18-19 11:40	Sep-18-19 11:40
	<i>Analyzed:</i>	Sep-18-19 13:08	Sep-18-19 13:14	Sep-18-19 13:20	Sep-18-19 13:26	Sep-18-19 13:31	Sep-18-19 08:44
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		71.3 4.95	19.0 5.03	9.46 4.99	<5.01 5.01	10.1 4.95	<5.02 5.02

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

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 637219

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State Com 504/505H (8/9/19)



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Wed Sep-18-19 10:04 am

Report Date: 19-SEP-19

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	637219-013	637219-014	637219-015	637219-016	637219-017	637219-018
	<i>Field Id:</i>	W1 @ 0-1'	W1 @ 2'	TT-3 @ 0-1'	TT-3 @ 2'	TT-3 @ 3'	TT-3 @ 4'
	<i>Depth:</i>	0-1 ft	2- ft	0-1 ft	2- ft	3- ft	4- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Sep-17-19 13:45	Sep-17-19 13:50	Sep-17-19 14:00	Sep-17-19 14:05	Sep-17-19 14:10	Sep-17-19 14:15
BTEX by EPA 8021B	<i>Extracted:</i>			Sep-18-19 12:15			
	<i>Analyzed:</i>			Sep-18-19 22:17			
	<i>Units/RL:</i>			mg/kg RL			
Benzene				<0.00202 0.00202			
Toluene				<0.00202 0.00202			
Ethylbenzene				<0.00202 0.00202			
m,p-Xylenes				<0.00403 0.00403			
o-Xylene				<0.00202 0.00202			
Total Xylenes				<0.00202 0.00202			
Total BTEX				<0.00202 0.00202			
Chloride by EPA 300	<i>Extracted:</i>	Sep-18-19 11:40	Sep-18-19 11:40	Sep-18-19 11:40	Sep-18-19 11:40	Sep-18-19 11:40	Sep-18-19 11:40
	<i>Analyzed:</i>	Sep-18-19 13:55	Sep-18-19 14:13	Sep-18-19 14:19	Sep-18-19 14:25	Sep-18-19 14:31	Sep-18-19 14:37
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		11.6 4.96	<4.99 4.99	1360 5.00	40.6 5.04	20.5 4.98	22.5 5.02
TPH by SW8015 Mod	<i>Extracted:</i>			Sep-18-19 12:00			
	<i>Analyzed:</i>			Sep-18-19 17:40			
	<i>Units/RL:</i>			mg/kg RL			
Gasoline Range Hydrocarbons (GRO)				<50.0 50.0			
Diesel Range Organics (DRO)				<50.0 50.0			
Motor Oil Range Hydrocarbons (MRO)				<50.0 50.0			
Total TPH				<50 50			

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Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 637219

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State Com 504/505H (8/9/19)



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Wed Sep-18-19 10:04 am

Report Date: 19-SEP-19

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	637219-019	637219-020	637219-021	637219-022	637219-023	637219-024
	Field Id:	TT-6 @ 0-1'	TT-6 @ 2'	TT-6 @ 3'	TT-6 @ 4'	TT-5 @ 0-1'	TT-5 @ 2'
	Depth:	0-1 ft	2- ft	3- ft	4- ft	0-1 ft	2- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Sep-17-19 14:30	Sep-17-19 14:35	Sep-17-19 14:40	Sep-17-19 14:45	Sep-17-19 15:00	Sep-17-19 15:05
BTEX by EPA 8021B	Extracted:	Sep-18-19 12:15				Sep-18-19 12:15	
	Analyzed:	Sep-18-19 22:37				Sep-18-19 22:58	
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:	Sep-18-19 11:40	Sep-18-19 11:40	Sep-18-19 12:00	Sep-18-19 12:00	Sep-18-19 12:00	Sep-18-19 12:00
	Analyzed:	Sep-18-19 14:43	Sep-18-19 14:49	Sep-18-19 12:28	Sep-18-19 12:47	Sep-18-19 12:53	Sep-18-19 12:59
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		1870 25.0	59.5 4.97	54.3 5.03	274 5.05	1130 25.0	33.7 5.00
TPH by SW8015 Mod	Extracted:	Sep-18-19 12:00				Sep-18-19 12:00	
	Analyzed:	Sep-18-19 18:23				Sep-18-19 18:44	
	Units/RL:	mg/kg RL				mg/kg RL	
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9				<50.0 50.0	
Diesel Range Organics (DRO)		<49.9 49.9				<50.0 50.0	
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9				<50.0 50.0	
Total TPH		<49.9 49.9				<50 50	

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Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 637219

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State Com 504/505H (8/9/19)



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Wed Sep-18-19 10:04 am

Report Date: 19-SEP-19

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	637219-025	637219-026	637219-027	637219-028	637219-029	637219-030
	<i>Field Id:</i>	TT-5 @ 3'	TT-5 @ 4'	TT-4 @ 0-1'	TT-4 @ 2'	TT-4 @ 3'	TT-4 @ 4'
	<i>Depth:</i>	3- ft	4- ft	0-1 ft	2- ft	0-1 ft	4- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Sep-17-19 15:10	Sep-17-19 15:15	Sep-17-19 15:25	Sep-17-19 15:30	Sep-17-19 15:35	Sep-17-19 15:40
BTEX by EPA 8021B	<i>Extracted:</i>			Sep-18-19 12:15			
	<i>Analyzed:</i>			Sep-18-19 23:18			
	<i>Units/RL:</i>			mg/kg RL			
Benzene				<0.00200 0.00200			
Toluene				<0.00200 0.00200			
Ethylbenzene				<0.00200 0.00200			
m,p-Xylenes				<0.00400 0.00400			
o-Xylene				<0.00200 0.00200			
Total Xylenes				<0.002 0.002			
Total BTEX				<0.002 0.002			
Chloride by EPA 300	<i>Extracted:</i>	Sep-18-19 12:00	Sep-18-19 12:00	Sep-18-19 12:00	Sep-18-19 12:00	Sep-18-19 12:00	Sep-18-19 12:00
	<i>Analyzed:</i>	Sep-18-19 13:06	Sep-18-19 14:16	Sep-18-19 14:29	Sep-18-19 14:35	Sep-18-19 14:42	Sep-18-19 14:54
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		12.4 5.02	34.9 4.96	400 5.00	13.2 4.97	7.28 4.99	17.1 5.00
TPH by SW8015 Mod	<i>Extracted:</i>			Sep-18-19 12:00			
	<i>Analyzed:</i>			Sep-18-19 19:06			
	<i>Units/RL:</i>			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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Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 637219

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State Com 504/505H (8/9/19)



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Wed Sep-18-19 10:04 am

Report Date: 19-SEP-19

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	637219-031	637219-032	637219-033	637219-034	637219-035	637219-036
	<i>Field Id:</i>	TT-8 @ 0-1'	TT-8 @ 2'	TT-8 @3'R	TT-9 @ 0-1'	TT-9 @ 2'	TT-9 @ 3'
	<i>Depth:</i>	0-1 ft	2- ft	3- ft	0-1 ft	2- ft	3- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Sep-17-19 16:20	Sep-17-19 16:25	Sep-17-19 16:30	Sep-17-19 16:35	Sep-17-19 16:45	Sep-17-19 16:50
BTEX by EPA 8021B	<i>Extracted:</i>	Sep-18-19 12:15			Sep-18-19 12:15		
	<i>Analyzed:</i>	Sep-19-19 00:36			Sep-19-19 00:56		
	<i>Units/RL:</i>	mg/kg RL			mg/kg RL		
Benzene		<0.00201 0.00201			<0.00200 0.00200		
Toluene		<0.00201 0.00201			<0.00200 0.00200		
Ethylbenzene		<0.00201 0.00201			<0.00200 0.00200		
m,p-Xylenes		<0.00402 0.00402			<0.00400 0.00400		
o-Xylene		<0.00201 0.00201			<0.00200 0.00200		
Total Xylenes		<0.00201 0.00201			<0.002 0.002		
Total BTEX		<0.00201 0.00201			<0.002 0.002		
Chloride by EPA 300	<i>Extracted:</i>	Sep-18-19 12:00	Sep-18-19 12:00	Sep-18-19 12:00	Sep-18-19 12:00	Sep-18-19 12:00	Sep-18-19 12:00
	<i>Analyzed:</i>	Sep-18-19 14:48	Sep-19-19 10:13	Sep-18-19 15:20	Sep-18-19 17:17	Sep-18-19 17:24	Sep-18-19 17:30
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		1190 5.02	66.6 50.4	69.3 24.8	2330 24.9	42.2 5.04	73.6 5.00
TPH by SW8015 Mod	<i>Extracted:</i>	Sep-18-19 12:00			Sep-18-19 12:00		
	<i>Analyzed:</i>	Sep-18-19 19:27			Sep-18-19 19:48		
	<i>Units/RL:</i>	mg/kg RL			mg/kg RL		
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8			<50.0 50.0		
Diesel Range Organics (DRO)		<49.8 49.8			<50.0 50.0		
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8			<50.0 50.0		
Total TPH		<49.8 49.8			<50 50		

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Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 637219

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State Com 504/505H (8/9/19)



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Wed Sep-18-19 10:04 am

Report Date: 19-SEP-19

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	637219-037					
	Field Id:	TT-9 @ 3.5'R					
	Depth:	3.5- ft					
	Matrix:	SOIL					
	Sampled:	Sep-17-19 16:55					
Chloride by EPA 300	Extracted:	Sep-18-19 12:00					
	Analyzed:	Sep-18-19 17:37					
	Units/RL:	mg/kg RL					
Chloride		6.44 5.00					

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Jessica Kramer
Project Assistant

Analytical Report 637219

for
TRC Solutions, Inc

Project Manager: Jared Stoffel
SRO 5 State Com 504/505H (8/9/19)

19-SEP-19

Collected By: Client



1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142), North Carolina (681)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



19-SEP-19

Project Manager: **Jared Stoffel**

TRC Solutions, Inc

2057 Commerce

Midland, TX 79703

Reference: XENCO Report No(s): **637219**

SRO 5 State Com 504/505H (8/9/19)

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) 637219. 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. 637219 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,

Jessica Kramer

Project Assistant

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TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
TT-1 @ 0-1'	S	09-17-19 11:30	0 - 1 ft	637219-001
TT-1 @ 2'	S	09-17-19 11:35	2 ft	637219-002
TT-1 @ 3'	S	09-17-19 11:40	3 ft	637219-003
TT-1 @ 4'	S	09-17-19 11:45	4 ft	637219-004
TT-2 @ 0-1'	S	09-17-19 11:55	0 - 1 ft	637219-005
TT-2 @ 2'	S	09-17-19 12:00	2 ft	637219-006
TT-2 @ 3'	S	09-17-19 12:05	3 ft	637219-007
TT-2 @ 4'	S	09-17-19 12:10	4 ft	637219-008
N1 @ 0-1'	S	09-17-19 13:00	0 - 1 ft	637219-009
N1 @ 2'	S	09-17-19 13:05	2 ft	637219-010
E1 @ 0-1'	S	09-17-19 13:30	0 - 1 ft	637219-011
E1 @ 2'	S	09-17-19 13:35	2 ft	637219-012
W1 @ 0-1'	S	09-17-19 13:45	0 - 1 ft	637219-013
W1 @ 2'	S	09-17-19 13:50	2 ft	637219-014
TT-3 @ 0-1'	S	09-17-19 14:00	0 - 1 ft	637219-015
TT-3 @ 2'	S	09-17-19 14:05	2 ft	637219-016
TT-3 @ 3'	S	09-17-19 14:10	3 ft	637219-017
TT-3 @ 4'	S	09-17-19 14:15	4 ft	637219-018
TT-6 @ 0-1'	S	09-17-19 14:30	0 - 1 ft	637219-019
TT-6 @ 2'	S	09-17-19 14:35	2 ft	637219-020
TT-6 @ 3'	S	09-17-19 14:40	3 ft	637219-021
TT-6 @ 4'	S	09-17-19 14:45	4 ft	637219-022
TT-5 @ 0-1'	S	09-17-19 15:00	0 - 1 ft	637219-023
TT-5 @ 2'	S	09-17-19 15:05	2 ft	637219-024
TT-5 @ 3'	S	09-17-19 15:10	3 ft	637219-025
TT-5 @ 4'	S	09-17-19 15:15	4 ft	637219-026
TT-4 @ 0-1'	S	09-17-19 15:25	0 - 1 ft	637219-027
TT-4 @ 2'	S	09-17-19 15:30	2 ft	637219-028
TT-4 @ 3'	S	09-17-19 15:35	0 - 1 ft	637219-029
TT-4 @ 4'	S	09-17-19 15:40	4 ft	637219-030
TT-8 @ 0-1'	S	09-17-19 16:20	0 - 1 ft	637219-031
TT-8 @ 2'	S	09-17-19 16:25	2 ft	637219-032
TT-8 @ 3'R	S	09-17-19 16:30	3 ft	637219-033
TT-9 @ 0-1'	S	09-17-19 16:35	0 - 1 ft	637219-034
TT-9 @ 2'	S	09-17-19 16:45	2 ft	637219-035
TT-9 @ 3'	S	09-17-19 16:50	3 ft	637219-036
TT-9 @ 3.5'R	S	09-17-19 16:55	3.5 ft	637219-037



CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: SRO 5 State Com 504/505H (8/9/19)

Project ID:

Work Order Number(s): 637219

Report Date: 19-SEP-19

Date Received: 09/18/2019

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3101869 BTEX by EPA 8021B

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



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **TT-1 @ 0-1'**

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-001

Date Collected: 09.17.19 11.30

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 11.40

Basis: Wet Weight

Seq Number: 3101888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	17.6	5.00	mg/kg	09.18.19 14.55		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 09.18.19 12.00

Basis: Wet Weight

Seq Number: 3101920

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.18.19 16.56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.18.19 16.56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.18.19 16.56	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.18.19 16.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	123	%	70-135	09.18.19 16.56	
o-Terphenyl	84-15-1	116	%	70-135	09.18.19 16.56	



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **TT-1 @ 0-1'**

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-001

Date Collected: 09.17.19 11.30

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.18.19 12.15

Basis: Wet Weight

Seq Number: 3101869

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.18.19 21.37	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.18.19 21.37	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.18.19 21.37	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.18.19 21.37	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.18.19 21.37	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.18.19 21.37	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.18.19 21.37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	70-130	09.18.19 21.37		
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.18.19 21.37		



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: TT-1 @ 2'

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-002

Date Collected: 09.17.19 11.35

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 11.40

Basis: Wet Weight

Seq Number: 3101888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	13.5	5.02	mg/kg	09.18.19 15.01		1



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: TT-1 @ 3'

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-003

Date Collected: 09.17.19 11.40

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 11.40

Basis: Wet Weight

Seq Number: 3101888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5.55	4.96	mg/kg	09.18.19 12.32		1



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **TT-1 @ 4'**

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-004

Date Collected: 09.17.19 11.45

Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 11.40

Basis: Wet Weight

Seq Number: 3101888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	38.5	4.95	mg/kg	09.18.19 12.38		1



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **TT-2 @ 0-1'**

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-005

Date Collected: 09.17.19 11.55

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 11.40

Basis: Wet Weight

Seq Number: 3101888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2260	24.8	mg/kg	09.18.19 12.44		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 09.18.19 12.00

Basis: Wet Weight

Seq Number: 3101920

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.18.19 17.18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.18.19 17.18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.18.19 17.18	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.18.19 17.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-135	09.18.19 17.18	
o-Terphenyl	84-15-1	120	%	70-135	09.18.19 17.18	



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **TT-2 @ 0-1'**

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-005

Date Collected: 09.17.19 11.55

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.18.19 12.15

Basis: Wet Weight

Seq Number: 3101869

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.18.19 21.57	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.18.19 21.57	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.18.19 21.57	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.18.19 21.57	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.18.19 21.57	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.18.19 21.57	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.18.19 21.57	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	108	%	70-130	09.18.19 21.57		
1,4-Difluorobenzene	540-36-3	87	%	70-130	09.18.19 21.57		



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: TT-2 @ 2'

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-006

Date Collected: 09.17.19 12.00

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 11.40

Basis: Wet Weight

Seq Number: 3101888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	135	4.95	mg/kg	09.18.19 13.02		1



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: TT-2 @ 3'

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-007

Date Collected: 09.17.19 12.05

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 11.40

Basis: Wet Weight

Seq Number: 3101888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	71.3	4.95	mg/kg	09.18.19 13.08		1



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

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

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-008

Date Collected: 09.17.19 12.10

Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 11.40

Basis: Wet Weight

Seq Number: 3101888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	19.0	5.03	mg/kg	09.18.19 13.14		1



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **N1 @ 0-1'**

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-009

Date Collected: 09.17.19 13.00

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 11.40

Basis: Wet Weight

Seq Number: 3101888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9.46	4.99	mg/kg	09.18.19 13.20		1



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: N1 @ 2'
Lab Sample Id: 637219-010

Matrix: Soil
Date Collected: 09.17.19 13.05

Date Received: 09.18.19 10.04
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3101888

Date Prep: 09.18.19 11.40

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.01	5.01	mg/kg	09.18.19 13.26	U	1



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **E1 @ 0-1'**

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-011

Date Collected: 09.17.19 13.30

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 11.40

Basis: Wet Weight

Seq Number: 3101888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.1	4.95	mg/kg	09.18.19 13.31		1



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: E1@ 2'
Lab Sample Id: 637219-012

Matrix: Soil
Date Collected: 09.17.19 13.35

Date Received: 09.18.19 10.04
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3101888

Date Prep: 09.18.19 11.40

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.02	5.02	mg/kg	09.19.19 08.44	U	1



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **W1 @ 0-1'**

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-013

Date Collected: 09.17.19 13.45

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 11.40

Basis: Wet Weight

Seq Number: 3101888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.6	4.96	mg/kg	09.18.19 13.55		1



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **W1 @ 2'**
Lab Sample Id: 637219-014

Matrix: Soil
Date Collected: 09.17.19 13.50

Date Received: 09.18.19 10.04
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3101888

Date Prep: 09.18.19 11.40

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.99	4.99	mg/kg	09.18.19 14.13	U	1



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **TT-3 @ 0-1'**

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-015

Date Collected: 09.17.19 14.00

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 11.40

Basis: Wet Weight

Seq Number: 3101888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1360	5.00	mg/kg	09.18.19 14.19		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 09.18.19 12.00

Basis: Wet Weight

Seq Number: 3101920

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.18.19 17.40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.18.19 17.40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.18.19 17.40	U	1
Total TPH	PHC635	<50	50	mg/kg	09.18.19 17.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-135	09.18.19 17.40	
o-Terphenyl	84-15-1	117	%	70-135	09.18.19 17.40	



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **TT-3 @ 0-1'**

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-015

Date Collected: 09.17.19 14.00

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.18.19 12.15

Basis: Wet Weight

Seq Number: 3101869

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.18.19 22.17	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.18.19 22.17	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.18.19 22.17	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	09.18.19 22.17	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.18.19 22.17	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.18.19 22.17	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.18.19 22.17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	09.18.19 22.17		
1,4-Difluorobenzene	540-36-3	98	%	70-130	09.18.19 22.17		



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

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

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-016

Date Collected: 09.17.19 14.05

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 11.40

Basis: Wet Weight

Seq Number: 3101888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	40.6	5.04	mg/kg	09.18.19 14.25		1



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **TT-3 @ 3'**

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-017

Date Collected: 09.17.19 14.10

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 11.40

Basis: Wet Weight

Seq Number: 3101888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	20.5	4.98	mg/kg	09.18.19 14.31		1



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **TT-3 @ 4'**

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-018

Date Collected: 09.17.19 14.15

Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 11.40

Basis: Wet Weight

Seq Number: 3101888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	22.5	5.02	mg/kg	09.18.19 14.37		1



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **TT-6 @ 0-1'**

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-019

Date Collected: 09.17.19 14.30

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 11.40

Basis: Wet Weight

Seq Number: 3101888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1870	25.0	mg/kg	09.18.19 14.43		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 09.18.19 12.00

Basis: Wet Weight

Seq Number: 3101920

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.18.19 18.23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.18.19 18.23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.18.19 18.23	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.18.19 18.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	125	%	70-135	09.18.19 18.23	
o-Terphenyl	84-15-1	121	%	70-135	09.18.19 18.23	



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **TT-6 @ 0-1'**

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-019

Date Collected: 09.17.19 14.30

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.18.19 12.15

Basis: Wet Weight

Seq Number: 3101869

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.18.19 22.37	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.18.19 22.37	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.18.19 22.37	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.18.19 22.37	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.18.19 22.37	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.18.19 22.37	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.18.19 22.37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	09.18.19 22.37		
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.18.19 22.37		



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

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

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-020

Date Collected: 09.17.19 14.35

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 11.40

Basis: Wet Weight

Seq Number: 3101888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	59.5	4.97	mg/kg	09.18.19 14.49		1



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **TT-6 @ 3'**

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-021

Date Collected: 09.17.19 14.40

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 12.00

Basis: Wet Weight

Seq Number: 3101891

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	54.3	5.03	mg/kg	09.18.19 12.28		1



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **TT-6 @ 4'**

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-022

Date Collected: 09.17.19 14.45

Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 12.00

Basis: Wet Weight

Seq Number: 3101891

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	274	5.05	mg/kg	09.18.19 12.47		1



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **TT-5 @ 0-1'**

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-023

Date Collected: 09.17.19 15.00

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 12.00

Basis: Wet Weight

Seq Number: 3101891

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1130	25.0	mg/kg	09.18.19 12.53		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 09.18.19 12.00

Basis: Wet Weight

Seq Number: 3101920

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.18.19 18.44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.18.19 18.44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.18.19 18.44	U	1
Total TPH	PHC635	<50	50	mg/kg	09.18.19 18.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-135	09.18.19 18.44	
o-Terphenyl	84-15-1	121	%	70-135	09.18.19 18.44	



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **TT-5 @ 0-1'**

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-023

Date Collected: 09.17.19 15.00

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.18.19 12.15

Basis: Wet Weight

Seq Number: 3101869

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.18.19 22.58	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.18.19 22.58	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.18.19 22.58	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	09.18.19 22.58	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.18.19 22.58	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.18.19 22.58	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.18.19 22.58	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	70-130	09.18.19 22.58		
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.18.19 22.58		



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: TT-5 @ 2'

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-024

Date Collected: 09.17.19 15.05

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 12.00

Basis: Wet Weight

Seq Number: 3101891

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	33.7	5.00	mg/kg	09.18.19 12.59		1



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: TT-5 @ 3'

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-025

Date Collected: 09.17.19 15.10

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 12.00

Basis: Wet Weight

Seq Number: 3101891

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.4	5.02	mg/kg	09.18.19 13.06		1



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **TT-5 @ 4'**

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-026

Date Collected: 09.17.19 15.15

Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 12.00

Basis: Wet Weight

Seq Number: 3101891

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	34.9	4.96	mg/kg	09.18.19 14.16		1



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **TT-4 @ 0-1'**

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-027

Date Collected: 09.17.19 15.25

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 12.00

Basis: Wet Weight

Seq Number: 3101891

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	400	5.00	mg/kg	09.18.19 14.29		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 09.18.19 12.00

Basis: Wet Weight

Seq Number: 3101920

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.18.19 19.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.18.19 19.06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.18.19 19.06	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.18.19 19.06	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	120	%	70-135	09.18.19 19.06		
o-Terphenyl	84-15-1	121	%	70-135	09.18.19 19.06		



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **TT-4 @ 0-1'**

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-027

Date Collected: 09.17.19 15.25

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.18.19 12.15

Basis: Wet Weight

Seq Number: 3101869

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.18.19 23.18	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.18.19 23.18	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.18.19 23.18	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.18.19 23.18	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.18.19 23.18	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	09.18.19 23.18	U	1
Total BTEX		<0.002	0.002	mg/kg	09.18.19 23.18	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.18.19 23.18		
4-Bromofluorobenzene	460-00-4	107	%	70-130	09.18.19 23.18		



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

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

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-028

Date Collected: 09.17.19 15.30

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 12.00

Basis: Wet Weight

Seq Number: 3101891

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	13.2	4.97	mg/kg	09.18.19 14.35		1



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **TT-4 @ 3'**

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-029

Date Collected: 09.17.19 15.35

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 12.00

Basis: Wet Weight

Seq Number: 3101891

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7.28	4.99	mg/kg	09.18.19 14.42		1



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **TT-4 @ 4'**

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-030

Date Collected: 09.17.19 15.40

Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 12.00

Basis: Wet Weight

Seq Number: 3101891

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	17.1	5.00	mg/kg	09.18.19 14.54		1



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **TT-8 @ 0-1'**

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-031

Date Collected: 09.17.19 16.20

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 12.00

Basis: Wet Weight

Seq Number: 3101891

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1190	5.02	mg/kg	09.18.19 14.48		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 09.18.19 12.00

Basis: Wet Weight

Seq Number: 3101920

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.18.19 19.27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.18.19 19.27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.18.19 19.27	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.18.19 19.27	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	120	%	70-135	09.18.19 19.27		
o-Terphenyl	84-15-1	119	%	70-135	09.18.19 19.27		



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **TT-8 @ 0-1'**

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-031

Date Collected: 09.17.19 16.20

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.18.19 12.15

Basis: Wet Weight

Seq Number: 3101869

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.19.19 00.36	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.19.19 00.36	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.19.19 00.36	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.19.19 00.36	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.19.19 00.36	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.19.19 00.36	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.19.19 00.36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	105	%	70-130	09.19.19 00.36		
1,4-Difluorobenzene	540-36-3	91	%	70-130	09.19.19 00.36		



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

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

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-032

Date Collected: 09.17.19 16.25

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 12.00

Basis: Wet Weight

Seq Number: 3101891

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	66.6	50.4	mg/kg	09.19.19 10.13		10



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **TT-8 @3'R**

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-033

Date Collected: 09.17.19 16.30

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 12.00

Basis: Wet Weight

Seq Number: 3101891

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	69.3	24.8	mg/kg	09.18.19 15.20		5



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **TT-9 @ 0-1'**

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-034

Date Collected: 09.17.19 16.35

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 12.00

Basis: Wet Weight

Seq Number: 3101891

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2330	24.9	mg/kg	09.18.19 17.17		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 09.18.19 12.00

Basis: Wet Weight

Seq Number: 3101920

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.18.19 19.48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.18.19 19.48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.18.19 19.48	U	1
Total TPH	PHC635	<50	50	mg/kg	09.18.19 19.48	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	127	%	70-135	09.18.19 19.48		
o-Terphenyl	84-15-1	122	%	70-135	09.18.19 19.48		



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **TT-9 @ 0-1'**

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-034

Date Collected: 09.17.19 16.35

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.18.19 12.15

Basis: Wet Weight

Seq Number: 3101869

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.19.19 00.56	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.19.19 00.56	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.19.19 00.56	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.19.19 00.56	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.19.19 00.56	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	09.19.19 00.56	U	1
Total BTEX		<0.002	0.002	mg/kg	09.19.19 00.56	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	95	%	70-130	09.19.19 00.56		
4-Bromofluorobenzene	460-00-4	98	%	70-130	09.19.19 00.56		



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

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

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-035

Date Collected: 09.17.19 16.45

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 12.00

Basis: Wet Weight

Seq Number: 3101891

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	42.2	5.04	mg/kg	09.18.19 17.24		1



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **TT-9 @ 3'**

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-036

Date Collected: 09.17.19 16.50

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 12.00

Basis: Wet Weight

Seq Number: 3101891

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	73.6	5.00	mg/kg	09.18.19 17.30		1



Certificate of Analytical Results 637219



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505H (8/9/19)

Sample Id: **TT-9 @ 3.5'R**

Matrix: Soil

Date Received: 09.18.19 10.04

Lab Sample Id: 637219-037

Date Collected: 09.17.19 16.55

Sample Depth: 3.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.18.19 12.00

Basis: Wet Weight

Seq Number: 3101891

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6.44	5.00	mg/kg	09.18.19 17.37		1

- 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



QC Summary 637219

TRC Solutions, Inc
SRO 5 State Com 504/505H (8/9/19)

Analytical Method: Chloride by EPA 300

Seq Number: 3101888

MB Sample Id: 7686412-1-BLK

Matrix: Solid

LCS Sample Id: 7686412-1-BKS

Prep Method: E300P

Date Prep: 09.18.19

LCSD Sample Id: 7686412-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	255	102	255	102	90-110	0	20	mg/kg	09.18.19 11:58	

Analytical Method: Chloride by EPA 300

Seq Number: 3101891

MB Sample Id: 7686413-1-BLK

Matrix: Solid

LCS Sample Id: 7686413-1-BKS

Prep Method: E300P

Date Prep: 09.18.19

LCSD Sample Id: 7686413-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	238	95	247	99	90-110	4	20	mg/kg	09.18.19 12:15	

Analytical Method: Chloride by EPA 300

Seq Number: 3101888

Parent Sample Id: 637219-001

Matrix: Soil

MS Sample Id: 637219-001 S

Prep Method: E300P

Date Prep: 09.18.19

MSD Sample Id: 637219-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	17.6	250	276	103	276	103	90-110	0	20	mg/kg	09.18.19 12:15	

Analytical Method: Chloride by EPA 300

Seq Number: 3101888

Parent Sample Id: 637219-011

Matrix: Soil

MS Sample Id: 637219-011 S

Prep Method: E300P

Date Prep: 09.18.19

MSD Sample Id: 637219-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	10.1	248	271	105	273	106	90-110	1	20	mg/kg	09.18.19 13:37	

Analytical Method: Chloride by EPA 300

Seq Number: 3101891

Parent Sample Id: 637219-030

Matrix: Soil

MS Sample Id: 637219-030 S

Prep Method: E300P

Date Prep: 09.18.19

MSD Sample Id: 637219-030 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	17.1	250	257	96	268	100	90-110	4	20	mg/kg	09.18.19 15:01	

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



QC Summary 637219

TRC Solutions, Inc
SRO 5 State Com 504/505H (8/9/19)

Analytical Method: TPH by SW8015 Mod

Seq Number: 3101920

MB Sample Id: 7686313-1-BLK

Matrix: Solid

LCS Sample Id: 7686313-1-BKS

Prep Method: SW8015P

Date Prep: 09.17.19

LCSD Sample Id: 7686313-1-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)	<15.0	1000	1170	117	1140	114	70-135	3	20	mg/kg	09.18.19 13:01	
Diesel Range Organics (DRO)	<15.0	1000	1130	113	1100	110	70-135	3	20	mg/kg	09.18.19 13:01	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane	126		121		120		70-135	%	09.18.19 13:01			
o-Terphenyl	130		125		124		70-135	%	09.18.19 13:01			

Analytical Method: TPH by SW8015 Mod

Seq Number: 3101920

Parent Sample Id: 636983-001

Matrix: Soil

MS Sample Id: 636983-001 S

Prep Method: SW8015P

Date Prep: 09.17.19

MSD Sample Id: 636983-001 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)	<14.9	996	1010	101	1050	105	70-135	4	20	mg/kg	09.18.19 14:05	
Diesel Range Organics (DRO)	<14.9	996	987	99	1050	105	70-135	6	20	mg/kg	09.18.19 14:05	
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane			123		127		70-135	%	09.18.19 14:05			
o-Terphenyl			118		129		70-135	%	09.18.19 14:05			

Analytical Method: BTEX by EPA 8021B

Seq Number: 3101869

MB Sample Id: 7686420-1-BLK

Matrix: Solid

LCS Sample Id: 7686420-1-BKS

Prep Method: SW5030B

Date Prep: 09.18.19

LCSD Sample Id: 7686420-1-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	0.0991	99	0.106	106	70-130	7	35	mg/kg	09.18.19 18:17	
Toluene	<0.00200	0.100	0.0969	97	0.103	103	70-130	6	35	mg/kg	09.18.19 18:17	
Ethylbenzene	<0.00200	0.100	0.102	102	0.108	108	70-130	6	35	mg/kg	09.18.19 18:17	
m,p-Xylenes	<0.00400	0.200	0.198	99	0.209	105	70-130	5	35	mg/kg	09.18.19 18:17	
o-Xylene	<0.00200	0.100	0.102	102	0.107	107	70-130	5	35	mg/kg	09.18.19 18:17	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
1,4-Difluorobenzene	98		98		99		70-130	%	09.18.19 18:17			
4-Bromofluorobenzene	92		105		105		70-130	%	09.18.19 18:17			

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
SRO 5 State Com 504/505H (8/9/19)

Analytical Method: BTEX by EPA 8021B

Seq Number: 3101869

Parent Sample Id: 637051-001

Matrix: Soil

MS Sample Id: 637051-001 S

Prep Method: SW5030B

Date Prep: 09.18.19

MSD Sample Id: 637051-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0741	73	0.0914	92	70-130	21	35	mg/kg	09.18.19 18:57	
Toluene	<0.00202	0.101	0.0726	72	0.0893	90	70-130	21	35	mg/kg	09.18.19 18:57	
Ethylbenzene	<0.00202	0.101	0.0744	74	0.0941	95	70-130	23	35	mg/kg	09.18.19 18:57	
m,p-Xylenes	<0.00403	0.202	0.144	71	0.183	92	70-130	24	35	mg/kg	09.18.19 18:57	
o-Xylene	<0.00202	0.101	0.0736	73	0.0955	96	70-130	26	35	mg/kg	09.18.19 18:57	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		101		70-130	%	09.18.19 18:57
4-Bromofluorobenzene	107		111		70-130	%	09.18.19 18:57

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: 037219

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
Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

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Project Manager:	Jared Stoffel	Bill to: (if different)	Ike Tavaréz
Company Name:	TRC	Company Name:	COG
Address:	10 Desta Dr., STE 150E	Address:	
City, State ZIP:	Midland, Texas 79705	City, State ZIP:	
Phone:	432-238-3003	Email:	jstoffel@trccompanies, itavaréz@concho.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:	SRO 5 State Com 504/505H (8/9/19)	Turn Around	ANALYSIS REQUEST																Work Order Notes		
Project Number:		Routine ☐																	If TPH > 100 mg/kg, Total BTEX > 50 mg/kg and/or Benzene > 10 mg/kg, please run next deeper sample TAT starts the day received by the lab, if received by 4:30pm		
P.O. Number:		Rush: 24 hour																			
Sampler's Name:	Tania Babu/Braedon Billings	Due Date:																			
SAMPLE RECEIPT			Temp Blank:	Yes ☒ No ☐	Wet Ice:	Yes ☒ No ☐															
Temperature (°C):	23.1	Thermometer ID:																			
Received Intact:	Yes ☒ No ☐	Correction Factor:	-0.2																		
Cooler Custody Seals:	Yes ☒ No ☐	Total Containers:																			
Sample Custody Seals:	Yes ☒ No ☐																				
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers																Sample Comments
TT-1 @ 0-1'	S	9/17/2019	1130	0-1'	1	X	X	X													
TT-1 @ 2'	S	9/17/2019	1135	2'	1			X													
TT-1 @ 3'	S	9/17/2019	1140	3'	1			X													
TT-1 @ 4'	S	9/17/2019	1145	4'	1			X													
TT-2 @ 0-1'	S	9/17/2019	1155	0-1'	1	X	X	X													
TT-2 @ 2'	S	9/17/2019	1200	2'	1			X													
TT-2 @ 3'	S	9/17/2019	1205	3'	1			X													
TT-2 @ 4'	S	9/17/2019	1210	4'	1			X													
N1 @ 0-1'	S	9/17/2019	1300	0-1'	1			X													
N1 @ 2'	S	9/17/2019	1305	2'	1			X													

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
<u>[Signature]</u>	<u>[Signature]</u>	9/18/19			



Chain of Custody

Work Order No:

1037219

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

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Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

Project Manager:	Jared Stoffel	Bill to: (if different)	Ike Tavarez
Company Name:	TRC	Company Name:	COG
Address:	10 Desta Dr., STE 150E	Address:	
City, State ZIP:	Midland, Texas 79705	City, State ZIP:	
Phone:	432-238-3003	Email:	jstoffel@trccompanies.com

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

Project Name:	SRO 5 State Com 504/505H (8/9/19)	Turn Around	☐ Routine ☐ Rush: 24 hour
Project Number:		Due Date:	
P.O. Number:		Due Date:	
Sampler's Name:	Tania Babu/Braedon Billings		
SAMPLE RECEIPT			
Temperature (°C):	23.5	Temp Blank:	Yes ☒ No ☐
Received In tact:	Yes ☒ No ☐	Wet Ice:	Yes ☒ No ☐
Cooler Custody Seals:	Yes ☒ No ☐	Correction Factor:	0.2
Sample Custody Seals:	Yes ☒ No ☐	Total Containers:	
Sample Identification	Matrix	Date Sampled	Time Sampled
E1 @ 0-1'	S	9/17/2019	1330
E1 @ 2'	S	9/17/2019	1335
W1 @ 0-1'	S	9/17/2019	1345
W1 @ 2'	S	9/17/2019	1350
TT-3 @ 0-1'	S	9/17/2019	1400
TT-3 @ 2'	S	9/17/2019	1405
TT-3 @ 3'	S	9/17/2019	1410
TT-3 @ 4'	S	9/17/2019	1415
TT-6 @ 0-1'	S	9/17/2019	1430
TT-6 @ 2'	S	9/17/2019	1435
ANALYSIS REQUEST			
Number of Containers			
TPH (8015)			
BTEX (8021B)			
Chlorides (E300)			
Work Order Notes			
If TPH > 100 mg/kg, Total BTEX > 50 mg/kg and/or Benzene > 10 mg/kg, please run next deeper sample			
TAT starts the day received by the lab, if received by 4:30pm			
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

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		9/18/19	2		
3		10/4	4		
5			6		



Chain of Custody

Work Order No:

10371219

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

Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

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Project Manager:	Jared Stoffel	Bill to: (if different)	Ike Tavarez
Company Name:	TRC	Company Name:	COG
Address:	10 Desta Dr., STE 150E	Address:	
City, State ZIP:	Midland, Texas 79705	City, State ZIP:	
Phone:	432-238-3003	Email:	jstoeffel@trccompanies.iketavarez@concho.com

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

Project Name:	SRO 5 State Com 504/505H (8/9/19)	Turn Around	
Project Number:		Routine ☐	
P.O. Number:		Rush: 24 hour	
Sampler's Name:	Tania Babu/Braedon Billings	Due Date:	
SAMPLE RECEIPT			
Temperature (°C):	2.5/1.1	Temp Blank:	Yes ☒ No ☐
Received In tact:	Yes ☒ No ☐	Wet Ice:	Yes ☒ No ☐
Cooler Custody Seals:	Yes ☒ No ☐	Thermometer ID	UC
Sample Custody Seals:	Yes ☒ No ☐	Correction Factor:	UC
		Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	ANALYSIS REQUEST											Work Order Notes
					Number of Containers	TPH (8015)	BTEX (8021B)	Chlorides (E300)								
TT-6 @ 3'	S	9/17/2019	1440	3'	1			X								If TPH > 100 mg/kg, Total BTEX > 50 mg/kg and/or Benzene > 10 mg/kg, please run next deeper sample TAT starts the day received by the lab, if received by 4:30pm Sample Comments
TT-6 @ 4'	S	9/17/2019	1445	4'	1			X								
TT-5 @ 0-1'	S	9/17/2019	1500	0-1'	1	X		X								
TT-5 @ 2'	S	9/17/2019	1505	2'	1			X								
TT-5 @ 3'	S	9/17/2019	1510	3'	1			X								
TT-5 @ 4'	S	9/17/2019	1515	4'	1			X								
TT-4 @ 0-1'	S	9/17/2019	1525	0-1'	1	X		X								
TT-4 @ 2'	S	9/17/2019	1530	2'	1			X								
TT-4 @ 3'	S	9/17/2019	1535	3'	1			X								
TT-4 @ 4'	S	9/17/2019	1540	4'	1			X								

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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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>[Signature]</i>	<i>[Signature]</i>	9/18/19			2
3 <i>[Signature]</i>		10/1			4
5					6



Chain of Custody

Work Order No: 1037219

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
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Project Manager:	Jared Stoffel	Bill to: (if different)	Ike Tavaraz
Company Name:	TRC	Company Name:	COG
Address:	10 Desta Dr., STE 150E	Address:	
City, State ZIP:	Midland, Texas 79705	City, State ZIP:	
Phone:	432-238-3003	Email:	istoffel@trccompanies.com

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:	SRO 5 State Com 504/505H (8/9/19)	Turn Around	
Project Number:		Routine ☐	
P.O. Number:		Rush: 24 hour	
Sampler's Name:	Tania Babu/Braedon Billings	Due Date:	

SAMPLE RECEIPT		Temp Blank:	Yes ☒ No ☐	Wet Ice:	Yes ☒ No ☐
Temperature (°C):	2.3/2.1	Thermometer ID:	UC		
Received intact:	Yes ☒ No ☐	Correction Factor:	-0.1		
Cooler Custody Seals:	Yes ☒ No ☐	Total Containers:			
Sample Custody Seals:	Yes ☒ No ☐				

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	ANALYSIS REQUEST										Work Order Notes
					Number of Containers	TPH (8015)	BTEX (8021B)	Chlorides (E300)							
TT-8 @ 0-1'	S	9/17/2019	1620		1	X	X	X							
TT-8 @ 2'	S	9/17/2019	1625		1			X							
TT-8 @ 3R	S	9/17/2019	1630		1			X							
TT-9 @ 0-1'	S	9/17/2019	1640		1	X	X	X							
TT-9 @ 2'	S	9/17/2019	1645		1			X							
TT-9 @ 3'	S	9/17/2019	1650		1			X							
TT-9 @ 3.5R	S	9/17/2019	1655		1			X							

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
<u>[Signature]</u>	<u>[Signature]</u>	9/18/19			
		1004			



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In



Client: TRC Solutions, Inc

Date/ Time Received: 09/18/2019 10:04:00 AM

Work Order #: 637219

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	2.1
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	N/A
#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:

Brianna Teel

Brianna Teel

Date: 09/18/2019

Checklist reviewed by:

Jessica Kramer

Jessica Kramer

Date: 09/18/2019



Certificate of Analysis Summary 637358

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State 504-505H (8/9/19)



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Thu Sep-19-19 09:58 am

Report Date: 20-SEP-19

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	637358-001	637358-002	637358-003	637358-004	637358-005	637358-006
	<i>Field Id:</i>	TT-7 @ 0-1'	TT-7 @ 2'	TT-7 @ 3'	TT-7 @ 4'	TT-10 @ 0-1'	TT-10 @ 2'
	<i>Depth:</i>	0-1 ft	2- ft	3- ft	4- ft	0-1 ft	2- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Sep-18-19 09:00	Sep-18-19 09:05	Sep-18-19 09:10	Sep-18-19 09:15	Sep-18-19 09:25	Sep-18-19 09:30
BTEX by EPA 8021B	<i>Extracted:</i>	Sep-19-19 10:30				Sep-19-19 10:30	
	<i>Analyzed:</i>	Sep-19-19 15:16				Sep-19-19 15:36	
	<i>Units/RL:</i>	mg/kg RL				mg/kg RL	
Benzene		<0.00199 0.00199				<0.00202 0.00202	
Toluene		<0.00199 0.00199				<0.00202 0.00202	
Ethylbenzene		<0.00199 0.00199				<0.00202 0.00202	
m,p-Xylenes		<0.00398 0.00398				<0.00404 0.00404	
o-Xylene		<0.00199 0.00199				<0.00202 0.00202	
Total Xylenes		<0.00199 0.00199				<0.00202 0.00202	
Total BTEX		<0.00199 0.00199				<0.00202 0.00202	
Chloride by EPA 300	<i>Extracted:</i>	Sep-19-19 14:00	Sep-19-19 14:00	Sep-19-19 14:00	Sep-19-19 14:00	Sep-19-19 14:00	Sep-19-19 14:00
	<i>Analyzed:</i>	Sep-19-19 14:30	Sep-19-19 14:48	Sep-19-19 17:31	Sep-19-19 17:37	Sep-19-19 15:06	Sep-19-19 15:23
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		9.08 4.98	29.4 4.99	44.9 4.96	20.1 5.05	10.4 4.99	102 5.03
TPH by SW8015 Mod	<i>Extracted:</i>	Sep-19-19 14:00				Sep-19-19 14:00	
	<i>Analyzed:</i>	Sep-20-19 03:52				Sep-20-19 04:14	
	<i>Units/RL:</i>	mg/kg RL				mg/kg RL	
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8				<50.0 50.0	
Diesel Range Organics (DRO)		<49.8 49.8				<50.0 50.0	
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8				<50.0 50.0	
Total TPH		<49.8 49.8				<50 50	

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Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 637358

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State 504-505H (8/9/19)



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Thu Sep-19-19 09:58 am

Report Date: 20-SEP-19

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	637358-007	637358-008	637358-009	637358-010	637358-011	637358-012
	Field Id:	TT-10 @3'	TT-10 @ 4'	TT-10 @ 5'	TT-11 @ 0-1'	TT-11 @ 2'	TT-11@ 3'
	Depth:	3- ft	4- ft	5- ft	0-1 ft	2- ft	3- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Sep-18-19 09:35	Sep-18-19 09:40	Sep-18-19 09:45	Sep-18-19 09:50	Sep-18-19 09:55	Sep-18-19 10:00
BTEX by EPA 8021B		Extracted:			Sep-19-19 10:30		
		Analyzed:			Sep-19-19 15:56		
		Units/RL:			mg/kg RL		
Benzene					<0.00198 0.00198		
Toluene					<0.00198 0.00198		
Ethylbenzene					<0.00198 0.00198		
m,p-Xylenes					<0.00397 0.00397		
o-Xylene					<0.00198 0.00198		
Total Xylenes					<0.00198 0.00198		
Total BTEX					<0.00198 0.00198		
Chloride by EPA 300		Extracted:	Sep-19-19 14:00	Sep-19-19 14:00	Sep-19-19 14:00	Sep-19-19 14:00	Sep-19-19 14:00
		Analyzed:	Sep-19-19 15:29	Sep-19-19 15:35	Sep-19-19 17:43	Sep-19-19 15:52	Sep-19-19 17:48
		Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride			157 5.01	162 49.7	44.1 5.00	13.0 5.00	97.1 24.8 33.3 5.02
TPH by SW8015 Mod		Extracted:			Sep-19-19 14:00		
		Analyzed:			Sep-20-19 04:35		
		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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Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 637358

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State 504-505H (8/9/19)



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Thu Sep-19-19 09:58 am

Report Date: 20-SEP-19

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	637358-013	637358-014	637358-015	637358-016	637358-017	637358-018
	<i>Field Id:</i>	TT-11 @ 4'	TT-11 @ 5'	TT-12@ 0-1'	TT-12 @ 2'	TT-12 @ 3'	TT-12@ 4'
	<i>Depth:</i>	4- ft	5- ft	0-1 ft	2- ft	3- ft	4- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Sep-18-19 10:05	Sep-18-19 10:10	Sep-18-19 10:15	Sep-18-19 10:20	Sep-18-19 10:25	Sep-18-19 10:30
BTEX by EPA 8021B	<i>Extracted:</i>			Sep-19-19 10:30			
	<i>Analyzed:</i>			Sep-19-19 16:16			
	<i>Units/RL:</i>			mg/kg RL			
Benzene				<0.00200 0.00200			
Toluene				<0.00200 0.00200			
Ethylbenzene				<0.00200 0.00200			
m,p-Xylenes				<0.00399 0.00399			
o-Xylene				<0.00200 0.00200			
Total Xylenes				<0.002 0.002			
Total BTEX				<0.002 0.002			
Chloride by EPA 300	<i>Extracted:</i>	Sep-19-19 14:00	Sep-19-19 14:00	Sep-19-19 14:00	Sep-19-19 14:00	Sep-19-19 14:00	Sep-19-19 14:00
	<i>Analyzed:</i>	Sep-19-19 16:15	Sep-19-19 17:54	Sep-19-19 16:39	Sep-19-19 18:00	Sep-19-19 18:06	Sep-19-19 18:12
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		5.11 4.99	35.2 5.05	1260 50.5	9.44 4.96	6.94 5.00	5.40 5.00
TPH by SW8015 Mod	<i>Extracted:</i>			Sep-19-19 14:00			
	<i>Analyzed:</i>			Sep-20-19 04:57			
	<i>Units/RL:</i>			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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Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 637358

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State 504-505H (8/9/19)



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Thu Sep-19-19 09:58 am

Report Date: 20-SEP-19

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	637358-019	637358-020	637358-021	637358-022	637358-023	637358-024
	<i>Field Id:</i>	TT-12 @ 5'	TT-18 @ 0-1'	TT-18 @ 2'	TT-18 @ 3'	TT-18 @ 4'	TT-18 @ 5'
	<i>Depth:</i>	5- ft	0-1 ft	2- ft	3- ft	4- ft	5- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Sep-18-19 10:35	Sep-18-19 10:40	Sep-18-19 10:45	Sep-18-19 10:50	Sep-18-19 10:55	Sep-18-19 11:00
BTEX by EPA 8021B	<i>Extracted:</i>		Sep-19-19 10:30				
	<i>Analyzed:</i>		Sep-19-19 16:36				
	<i>Units/RL:</i>		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	<i>Extracted:</i>	Sep-19-19 14:00	Sep-19-19 14:00	Sep-19-19 14:35	Sep-19-19 14:35	Sep-19-19 14:35	Sep-19-19 14:35
	<i>Analyzed:</i>	Sep-19-19 18:17	Sep-19-19 17:08	Sep-20-19 09:27	Sep-20-19 09:32	Sep-20-19 09:38	Sep-20-19 09:44
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		13.3 5.00	148 50.4	41.9 4.95	23.7 5.04	34.3 5.00	24.1 4.96
TPH by SW8015 Mod	<i>Extracted:</i>		Sep-19-19 14:00				
	<i>Analyzed:</i>		Sep-20-19 05:18				
	<i>Units/RL:</i>		mg/kg RL				
Gasoline Range Hydrocarbons (GRO)			<49.8 49.8				
Diesel Range Organics (DRO)			<49.8 49.8				
Motor Oil Range Hydrocarbons (MRO)			<49.8 49.8				
Total TPH			<49.8 49.8				

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Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 637358

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State 504-505H (8/9/19)



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Thu Sep-19-19 09:58 am

Report Date: 20-SEP-19

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	637358-025	637358-026	637358-027	637358-028	637358-029	637358-030
	<i>Field Id:</i>	TT-13@ 0-1'	TT-13 @ 2'	TT-13 @ 3'	TT-13 @ 4'	TT-13 @5'	TT-14 @ 0-1'
	<i>Depth:</i>	0-1 ft	2- ft	3- ft	4- ft	5- ft	0-1 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Sep-18-19 11:05	Sep-18-19 11:10	Sep-18-19 11:15	Sep-18-19 11:20	Sep-18-19 11:25	Sep-18-19 11:30
BTEX by EPA 8021B	<i>Extracted:</i>	Sep-19-19 10:30					Sep-19-19 10:30
	<i>Analyzed:</i>	Sep-19-19 16:56					Sep-19-19 17:16
	<i>Units/RL:</i>	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	<i>Extracted:</i>	Sep-19-19 14:35	Sep-19-19 14:35	Sep-19-19 14:35	Sep-19-19 14:35	Sep-19-19 14:35	Sep-19-19 14:35
	<i>Analyzed:</i>	Sep-19-19 22:05	Sep-19-19 22:57	Sep-19-19 23:03	Sep-19-19 23:09	Sep-19-19 23:14	Sep-19-19 23:20
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		95.4 5.00	35.2 5.02	94.9 24.8	195 49.5	193 24.8	12.1 4.95
TPH by SW8015 Mod	<i>Extracted:</i>	Sep-19-19 14:00					Sep-19-19 14:00
	<i>Analyzed:</i>	Sep-20-19 05:40					Sep-20-19 06:01
	<i>Units/RL:</i>	mg/kg RL					mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0					<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0					<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0					<50.0 50.0
Total TPH		<50 50					<50 50

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Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 637358

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State 504-505H (8/9/19)



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Thu Sep-19-19 09:58 am

Report Date: 20-SEP-19

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	637358-031	637358-032	637358-033	637358-034	637358-035	637358-036
	<i>Field Id:</i>	TT-14 @ 2'	TT-14 @ 3'	TT-14@ 4'	TT-14 @ 5'	TT-15 @ 0-1'	TT-15 @ 2'
	<i>Depth:</i>	2- ft	3- ft	4- ft	5- ft	0-1 ft	2- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Sep-18-19 11:35	Sep-18-19 11:40	Sep-18-19 11:45	Sep-18-19 11:50	Sep-18-19 11:55	Sep-18-19 12:00
BTEX by EPA 8021B	<i>Extracted:</i>					Sep-19-19 10:30	
	<i>Analyzed:</i>					Sep-19-19 17:36	
	<i>Units/RL:</i>					mg/kg RL	
Benzene						<0.00198 0.00198	
Toluene						<0.00198 0.00198	
Ethylbenzene						<0.00198 0.00198	
m,p-Xylenes						<0.00397 0.00397	
o-Xylene						<0.00198 0.00198	
Total Xylenes						<0.00198 0.00198	
Total BTEX						<0.00198 0.00198	
Chloride by EPA 300	<i>Extracted:</i>	Sep-19-19 14:35	Sep-19-19 14:35	Sep-19-19 14:35	Sep-19-19 14:35	Sep-19-19 14:35	Sep-19-19 14:35
	<i>Analyzed:</i>	Sep-19-19 23:26	Sep-19-19 23:44	Sep-19-19 23:49	Sep-20-19 00:07	Sep-20-19 00:13	Sep-20-19 00:18
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		66.3 5.05	96.6 4.98	183 49.5	177 50.3	23.9 4.97	292 25.0
TPH by SW8015 Mod	<i>Extracted:</i>					Sep-19-19 14:00	
	<i>Analyzed:</i>					Sep-20-19 06:23	
	<i>Units/RL:</i>					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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Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 637358

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State 504-505H (8/9/19)



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Thu Sep-19-19 09:58 am

Report Date: 20-SEP-19

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	637358-037	637358-038	637358-039	637358-040	637358-041	637358-042
	<i>Field Id:</i>	TT-15 @ 3'	TT-15 @ 4'	TT-15 @ 5'	TT-16 @ 0-1'	TT-16 @ 2'	TT-16 @ 3'
	<i>Depth:</i>	3- ft	4- ft	5- ft	0-1 ft	2- ft	3- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Sep-18-19 12:05	Sep-18-19 12:10	Sep-18-19 12:15	Sep-18-19 12:20	Sep-18-19 12:25	Sep-18-19 12:30
BTEX by EPA 8021B	<i>Extracted:</i>				Sep-19-19 10:30		
	<i>Analyzed:</i>				Sep-19-19 17:57		
	<i>Units/RL:</i>				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	<i>Extracted:</i>	Sep-19-19 14:35	Sep-19-19 14:35	Sep-19-19 14:35	Sep-19-19 14:35	Sep-19-19 14:20	Sep-19-19 14:20
	<i>Analyzed:</i>	Sep-20-19 00:24	Sep-20-19 00:30	Sep-20-19 00:36	Sep-20-19 00:42	Sep-19-19 18:52	Sep-19-19 19:10
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		100 50.2	283 49.8	354 50.0	16.9 5.04	24.8 5.00	59.9 49.8
TPH by SW8015 Mod	<i>Extracted:</i>				Sep-19-19 14:00		
	<i>Analyzed:</i>				Sep-20-19 06:44		
	<i>Units/RL:</i>				mg/kg RL		
Gasoline Range Hydrocarbons (GRO)					<50.0 50.0		
Diesel Range Organics (DRO)					<50.0 50.0		
Motor Oil Range Hydrocarbons (MRO)					<50.0 50.0		
Total TPH					<50 50		

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Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 637358

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State 504-505H (8/9/19)



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Thu Sep-19-19 09:58 am

Report Date: 20-SEP-19

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	637358-043	637358-044	637358-045	637358-046	637358-047	637358-048
	<i>Field Id:</i>	TT-16 @ 4'	TT-16 @ 5'	TT-17@ 0-1'	TT-17 @2'	TT-17 @ 3'	TT-17 @ 4'
	<i>Depth:</i>	4- ft	5- ft	0-1 ft	2- ft	3- ft	4- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Sep-18-19 12:35	Sep-18-19 12:40	Sep-18-19 12:45	Sep-18-19 12:50	Sep-18-19 12:55	Sep-18-19 13:00
BTEX by EPA 8021B	<i>Extracted:</i>			Sep-19-19 10:30			
	<i>Analyzed:</i>			Sep-19-19 18:17			
	<i>Units/RL:</i>			mg/kg RL			
Benzene				<0.00200 0.00200			
Toluene				<0.00200 0.00200			
Ethylbenzene				<0.00200 0.00200			
m,p-Xylenes				<0.00400 0.00400			
o-Xylene				<0.00200 0.00200			
Total Xylenes				<0.002 0.002			
Total BTEX				<0.002 0.002			
Chloride by EPA 300	<i>Extracted:</i>	Sep-19-19 14:20	Sep-19-19 14:20	Sep-19-19 14:20	Sep-19-19 14:20	Sep-19-19 14:20	Sep-19-19 14:20
	<i>Analyzed:</i>	Sep-19-19 19:16	Sep-19-19 19:22	Sep-19-19 19:27	Sep-19-19 19:45	Sep-19-19 19:51	Sep-19-19 19:57
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		77.9 50.2	66.7 50.5	676 5.04	123 5.01	317 4.99	471 5.00
TPH by SW8015 Mod	<i>Extracted:</i>			Sep-19-19 14:00			
	<i>Analyzed:</i>			Sep-20-19 07:06			
	<i>Units/RL:</i>			mg/kg RL			
Gasoline Range Hydrocarbons (GRO)				<50.0 50.0			
Diesel Range Organics (DRO)				<50.0 50.0			
Motor Oil Range Hydrocarbons (MRO)				<50.0 50.0			
Total TPH				<50 50			

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Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 637358

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State 504-505H (8/9/19)



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Thu Sep-19-19 09:58 am

Report Date: 20-SEP-19

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	637358-049	637358-050	637358-051	637358-052	637358-053	637358-054
	<i>Field Id:</i>	TT-17 @ 5'	S1 @ 0-1'	S2 @ 2'	W5 @ 0-1'	W5 @ 2'	W4 @ 0-1'
	<i>Depth:</i>	5- ft	0-1 ft	2- ft	0-1 ft	2- ft	0-1 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Sep-18-19 13:05	Sep-18-19 09:00	Sep-18-19 09:05	Sep-18-19 09:15	Sep-18-19 09:20	Sep-18-19 09:25
Chloride by EPA 300	<i>Extracted:</i>	Sep-19-19 14:20	Sep-19-19 14:20	Sep-19-19 14:20	Sep-19-19 14:20	Sep-19-19 14:20	Sep-19-19 14:20
	<i>Analyzed:</i>	Sep-19-19 20:02	Sep-19-19 20:08	Sep-19-19 20:14	Sep-19-19 20:31	Sep-19-19 20:37	Sep-19-19 20:55
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		434 5.03	11.4 4.97	7.08 4.96	26.0 5.00	75.6 5.04	23.0 5.01

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Version: 1.9%

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 637358

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State 504-505H (8/9/19)



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Thu Sep-19-19 09:58 am

Report Date: 20-SEP-19

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	637358-055	637358-056	637358-057	637358-058	637358-059	637358-060
	Field Id:	W4 @ 2'	E5 @ 0-1'	E5 @ 2'	E4 @ 0-1'	E4 @ 2'	E2 @ 0-1'
	Depth:	2- ft	0-1 ft	2- ft	0-1 ft	2- ft	0-1 ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Sep-18-19 09:30	Sep-18-19 09:35	Sep-18-19 09:40	Sep-18-19 09:45	Sep-18-19 09:50	Sep-18-19 10:20
Chloride by EPA 300	Extracted:	Sep-19-19 14:20	Sep-19-19 14:20	Sep-19-19 14:20	Sep-19-19 14:20	Sep-19-19 14:20	Sep-19-19 14:20
	Analyzed:	Sep-19-19 21:01	Sep-20-19 09:09	Sep-20-19 09:15	Sep-19-19 21:18	Sep-20-19 09:21	Sep-19-19 21:30
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		65.3 4.97	7.70 5.00	7.41 4.97	5.50 4.95	<5.03 5.03	5.98 5.01

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Version: 1.9%

Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 637358

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State 504-505H (8/9/19)



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Thu Sep-19-19 09:58 am

Report Date: 20-SEP-19

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	637358-061	637358-062	637358-063	637358-064	637358-065	637358-066
	<i>Field Id:</i>	E2 @ 2'	E3 @ 0-1'	E3 @ 2'	W2 @ 0-1'	W2 @2'	W3@ 0-1'
	<i>Depth:</i>	2- ft	0-1 ft	2- ft	0-1 ft	2- ft	0-1 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Sep-18-19 10:25	Sep-18-19 10:35	Sep-18-19 10:40	Sep-18-19 11:00	Sep-18-19 11:05	Sep-18-19 11:15
Chloride by EPA 300	<i>Extracted:</i>	Sep-19-19 14:30	Sep-19-19 14:30	Sep-19-19 14:30	Sep-19-19 14:30	Sep-19-19 14:30	Sep-19-19 14:30
	<i>Analyzed:</i>	Sep-19-19 14:45	Sep-19-19 15:02	Sep-19-19 15:07	Sep-19-19 15:13	Sep-19-19 15:19	Sep-19-19 15:36
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		<5.02 5.02	<4.96 4.96	<4.98 4.98	<5.00 5.00	<5.00 5.00	<5.00 5.00

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Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 637358

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State 504-505H (8/9/19)



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Thu Sep-19-19 09:58 am

Report Date: 20-SEP-19

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	637358-067					
	Field Id:	W3@ 2'					
	Depth:	2- ft					
	Matrix:	SOIL					
	Sampled:	Sep-18-19 11:20					
Chloride by EPA 300	Extracted:	Sep-19-19 14:30					
	Analyzed:	Sep-19-19 15:41					
	Units/RL:	mg/kg RL					
Chloride		16.3 5.03					

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Version: 1.0%

Jessica Kramer
Project Assistant

Analytical Report 637358

for
TRC Solutions, Inc

Project Manager: Jared Stoffel

SRO 5 State 504-505H (8/9/19)

20-SEP-19

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142), North Carolina (681)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



20-SEP-19

Project Manager: **Jared Stoffel**
TRC Solutions, Inc
2057 Commerce
Midland, TX 79703

Reference: XENCO Report No(s): **637358**
SRO 5 State 504-505H (8/9/19)
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) 637358. 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. 637358 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,

Jessica Kramer
Project Assistant

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TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
TT-7 @ 0-1'	S	09-18-19 09:00	0 - 1 ft	637358-001
TT-7 @ 2'	S	09-18-19 09:05	2 ft	637358-002
TT-7 @ 3'	S	09-18-19 09:10	3 ft	637358-003
TT-7 @ 4'	S	09-18-19 09:15	4 ft	637358-004
TT-10 @ 0-1'	S	09-18-19 09:25	0 - 1 ft	637358-005
TT-10 @ 2'	S	09-18-19 09:30	2 ft	637358-006
TT-10 @ 3'	S	09-18-19 09:35	3 ft	637358-007
TT-10 @ 4'	S	09-18-19 09:40	4 ft	637358-008
TT-10 @ 5'	S	09-18-19 09:45	5 ft	637358-009
TT-11 @ 0-1'	S	09-18-19 09:50	0 - 1 ft	637358-010
TT-11 @ 2'	S	09-18-19 09:55	2 ft	637358-011
TT-11 @ 3'	S	09-18-19 10:00	3 ft	637358-012
TT-11 @ 4'	S	09-18-19 10:05	4 ft	637358-013
TT-11 @ 5'	S	09-18-19 10:10	5 ft	637358-014
TT-12 @ 0-1'	S	09-18-19 10:15	0 - 1 ft	637358-015
TT-12 @ 2'	S	09-18-19 10:20	2 ft	637358-016
TT-12 @ 3'	S	09-18-19 10:25	3 ft	637358-017
TT-12 @ 4'	S	09-18-19 10:30	4 ft	637358-018
TT-12 @ 5'	S	09-18-19 10:35	5 ft	637358-019
TT-18 @ 0-1'	S	09-18-19 10:40	0 - 1 ft	637358-020
TT-18 @ 2'	S	09-18-19 10:45	2 ft	637358-021
TT-18 @ 3'	S	09-18-19 10:50	3 ft	637358-022
TT-18 @ 4'	S	09-18-19 10:55	4 ft	637358-023
TT-18 @ 5'	S	09-18-19 11:00	5 ft	637358-024
TT-13 @ 0-1'	S	09-18-19 11:05	0 - 1 ft	637358-025
TT-13 @ 2'	S	09-18-19 11:10	2 ft	637358-026
TT-13 @ 3'	S	09-18-19 11:15	3 ft	637358-027
TT-13 @ 4'	S	09-18-19 11:20	4 ft	637358-028
TT-13 @ 5'	S	09-18-19 11:25	5 ft	637358-029
TT-14 @ 0-1'	S	09-18-19 11:30	0 - 1 ft	637358-030
TT-14 @ 2'	S	09-18-19 11:35	2 ft	637358-031
TT-14 @ 3'	S	09-18-19 11:40	3 ft	637358-032
TT-14 @ 4'	S	09-18-19 11:45	4 ft	637358-033
TT-14 @ 5'	S	09-18-19 11:50	5 ft	637358-034
TT-15 @ 0-1'	S	09-18-19 11:55	0 - 1 ft	637358-035
TT-15 @ 2'	S	09-18-19 12:00	2 ft	637358-036
TT-15 @ 3'	S	09-18-19 12:05	3 ft	637358-037
TT-15 @ 4'	S	09-18-19 12:10	4 ft	637358-038
TT-15 @ 5'	S	09-18-19 12:15	5 ft	637358-039
TT-16 @ 0-1'	S	09-18-19 12:20	0 - 1 ft	637358-040
TT-16 @ 2'	S	09-18-19 12:25	2 ft	637358-041
TT-16 @ 3'	S	09-18-19 12:30	3 ft	637358-042
TT-16 @ 4'	S	09-18-19 12:35	4 ft	637358-043

TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

TT-16 @ 5'	S	09-18-19 12:40	5 ft	637358-044
TT-17@ 0-1'	S	09-18-19 12:45	0 - 1 ft	637358-045
TT-17 @2'	S	09-18-19 12:50	2 ft	637358-046
TT-17 @ 3'	S	09-18-19 12:55	3 ft	637358-047
TT-17 @ 4'	S	09-18-19 13:00	4 ft	637358-048
TT-17 @ 5'	S	09-18-19 13:05	5 ft	637358-049
S1 @ 0-1'	S	09-18-19 09:00	0 - 1 ft	637358-050
S2 @ 2'	S	09-18-19 09:05	2 ft	637358-051
W5 @ 0-1'	S	09-18-19 09:15	0 - 1 ft	637358-052
W5 @ 2'	S	09-18-19 09:20	2 ft	637358-053
W4 @ 0-1'	S	09-18-19 09:25	0 - 1 ft	637358-054
W4 @ 2'	S	09-18-19 09:30	2 ft	637358-055
E5 @ 0-1'	S	09-18-19 09:35	0 - 1 ft	637358-056
E5 @ 2'	S	09-18-19 09:40	2 ft	637358-057
E4 @ 0-1'	S	09-18-19 09:45	0 - 1 ft	637358-058
E4 @ 2'	S	09-18-19 09:50	2 ft	637358-059
E2 @ 0-1'	S	09-18-19 10:20	0 - 1 ft	637358-060
E2 @ 2'	S	09-18-19 10:25	2 ft	637358-061
E3 @ 0-1'	S	09-18-19 10:35	0 - 1 ft	637358-062
E3 @ 2'	S	09-18-19 10:40	2 ft	637358-063
W2 @ 0-1'	S	09-18-19 11:00	0 - 1 ft	637358-064
W2 @2'	S	09-18-19 11:05	2 ft	637358-065
W3@ 0-1'	S	09-18-19 11:15	0 - 1 ft	637358-066
W3@ 2'	S	09-18-19 11:20	2 ft	637358-067



CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: SRO 5 State 504-505H (8/9/19)

Project ID:

Work Order Number(s): 637358

Report Date: 20-SEP-19

Date Received: 09/19/2019

Sample receipt non conformance and comments:

None

Sample receipt non conformance and comments per sample:

None

Analytical non conformance and comments:

Batch: LBA-3101988 BTEX by EPA 8021B

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

Lab Sample ID 637358-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 637358-001, -005, -010, -015, -020, -025, -030, -035, -040, -045.

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

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

Samples in the analytical batch are: 637358-001, -005, -010, -015, -020, -025, -030, -035, -040, -045



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-7 @ 0-1'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-001

Date Collected: 09.18.19 09.00

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.00

Basis: Wet Weight

Seq Number: 3102001

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9.08	4.98	mg/kg	09.19.19 14.30		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 09.19.19 14.00

Basis: Wet Weight

Seq Number: 3101992

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.20.19 03.52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.20.19 03.52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.20.19 03.52	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.20.19 03.52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	94	%	70-135	09.20.19 03.52		
o-Terphenyl	84-15-1	97	%	70-135	09.20.19 03.52		



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-7 @ 0-1'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-001

Date Collected: 09.18.19 09.00

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.19.19 10.30

Basis: Wet Weight

Seq Number: 3101988

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.19.19 15.16	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.19.19 15.16	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.19.19 15.16	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.19.19 15.16	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.19.19 15.16	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.19.19 15.16	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.19.19 15.16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	09.19.19 15.16		
1,4-Difluorobenzene	540-36-3	100	%	70-130	09.19.19 15.16		



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

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

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-002

Date Collected: 09.18.19 09.05

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.00

Basis: Wet Weight

Seq Number: 3102001

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	29.4	4.99	mg/kg	09.19.19 14.48		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-7 @ 3'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-003

Date Collected: 09.18.19 09.10

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.00

Basis: Wet Weight

Seq Number: 3102001

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	44.9	4.96	mg/kg	09.19.19 17.31		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-7 @ 4'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-004

Date Collected: 09.18.19 09.15

Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.00

Basis: Wet Weight

Seq Number: 3102001

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	20.1	5.05	mg/kg	09.19.19 17.37		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-10 @ 0-1'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-005

Date Collected: 09.18.19 09.25

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.00

Basis: Wet Weight

Seq Number: 3102001

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.4	4.99	mg/kg	09.19.19 15.06		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 09.19.19 14.00

Basis: Wet Weight

Seq Number: 3101992

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.20.19 04.14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.20.19 04.14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.20.19 04.14	U	1
Total TPH	PHC635	<50	50	mg/kg	09.20.19 04.14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	104	%	70-135	09.20.19 04.14		
o-Terphenyl	84-15-1	109	%	70-135	09.20.19 04.14		



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-10 @ 0-1'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-005

Date Collected: 09.18.19 09.25

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.19.19 10.30

Basis: Wet Weight

Seq Number: 3101988

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.19.19 15.36	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.19.19 15.36	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.19.19 15.36	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	09.19.19 15.36	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.19.19 15.36	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.19.19 15.36	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.19.19 15.36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	101	%	70-130	09.19.19 15.36		
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.19.19 15.36		



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

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

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-006

Date Collected: 09.18.19 09.30

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.00

Basis: Wet Weight

Seq Number: 3102001

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	102	5.03	mg/kg	09.19.19 15.23		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-10 @3'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-007

Date Collected: 09.18.19 09.35

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.00

Basis: Wet Weight

Seq Number: 3102001

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	157	5.01	mg/kg	09.19.19 15.29		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-10 @ 4'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-008

Date Collected: 09.18.19 09.40

Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.00

Basis: Wet Weight

Seq Number: 3102001

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	162	49.7	mg/kg	09.19.19 15.35		10



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-10 @ 5'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-009

Date Collected: 09.18.19 09.45

Sample Depth: 5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.00

Basis: Wet Weight

Seq Number: 3102001

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	44.1	5.00	mg/kg	09.19.19 17.43		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-11 @ 0-1'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-010

Date Collected: 09.18.19 09.50

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.00

Basis: Wet Weight

Seq Number: 3102001

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	13.0	5.00	mg/kg	09.19.19 15.52		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 09.19.19 14.00

Basis: Wet Weight

Seq Number: 3101992

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.20.19 04.35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.20.19 04.35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.20.19 04.35	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.20.19 04.35	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	93	%	70-135	09.20.19 04.35		
o-Terphenyl	84-15-1	96	%	70-135	09.20.19 04.35		



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-11 @ 0-1'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-010

Date Collected: 09.18.19 09.50

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.19.19 10.30

Basis: Wet Weight

Seq Number: 3101988

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.19.19 15.56	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.19.19 15.56	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.19.19 15.56	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	09.19.19 15.56	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.19.19 15.56	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.19.19 15.56	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.19.19 15.56	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.19.19 15.56		
4-Bromofluorobenzene	460-00-4	99	%	70-130	09.19.19 15.56		



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

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

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-011

Date Collected: 09.18.19 09.55

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.00

Basis: Wet Weight

Seq Number: 3102001

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	97.1	24.8	mg/kg	09.19.19 15.46		5



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-11@ 3'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-012

Date Collected: 09.18.19 10.00

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.00

Basis: Wet Weight

Seq Number: 3102001

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	33.3	5.02	mg/kg	09.19.19 17.48		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-11 @ 4'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-013

Date Collected: 09.18.19 10.05

Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.00

Basis: Wet Weight

Seq Number: 3102001

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5.11	4.99	mg/kg	09.19.19 16.15		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-11 @ 5'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-014

Date Collected: 09.18.19 10.10

Sample Depth: 5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.00

Basis: Wet Weight

Seq Number: 3102001

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	35.2	5.05	mg/kg	09.19.19 17.54		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-12@ 0-1'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-015

Date Collected: 09.18.19 10.15

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.00

Basis: Wet Weight

Seq Number: 3102001

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1260	50.5	mg/kg	09.19.19 16.39		10

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 09.19.19 14.00

Basis: Wet Weight

Seq Number: 3101992

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.20.19 04.57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.20.19 04.57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.20.19 04.57	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.20.19 04.57	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	106	%	70-135	09.20.19 04.57		
o-Terphenyl	84-15-1	111	%	70-135	09.20.19 04.57		



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-12@ 0-1'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-015

Date Collected: 09.18.19 10.15

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.19.19 10.30

Basis: Wet Weight

Seq Number: 3101988

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.19.19 16.16	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.19.19 16.16	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.19.19 16.16	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.19.19 16.16	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.19.19 16.16	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	09.19.19 16.16	U	1
Total BTEX		<0.002	0.002	mg/kg	09.19.19 16.16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	103	%	70-130	09.19.19 16.16		
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.19.19 16.16		



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

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

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-016

Date Collected: 09.18.19 10.20

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.00

Basis: Wet Weight

Seq Number: 3102001

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9.44	4.96	mg/kg	09.19.19 18.00		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-12 @ 3'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-017

Date Collected: 09.18.19 10.25

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.00

Basis: Wet Weight

Seq Number: 3102001

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6.94	5.00	mg/kg	09.19.19 18.06		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-12@ 4'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-018

Date Collected: 09.18.19 10.30

Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.00

Basis: Wet Weight

Seq Number: 3102001

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5.40	5.00	mg/kg	09.19.19 18.12		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-12 @ 5'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-019

Date Collected: 09.18.19 10.35

Sample Depth: 5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.00

Basis: Wet Weight

Seq Number: 3102001

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	13.3	5.00	mg/kg	09.19.19 18.17		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-18 @ 0-1'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-020

Date Collected: 09.18.19 10.40

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.00

Basis: Wet Weight

Seq Number: 3102001

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	148	50.4	mg/kg	09.19.19 17.08		10

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 09.19.19 14.00

Basis: Wet Weight

Seq Number: 3101992

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.20.19 05.18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.20.19 05.18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.20.19 05.18	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.20.19 05.18	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	104	%	70-135	09.20.19 05.18		
o-Terphenyl	84-15-1	106	%	70-135	09.20.19 05.18		



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-18 @ 0-1'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-020

Date Collected: 09.18.19 10.40

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.19.19 10.30

Basis: Wet Weight

Seq Number: 3101988

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.19.19 16.36	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.19.19 16.36	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.19.19 16.36	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.19.19 16.36	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.19.19 16.36	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.19.19 16.36	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.19.19 16.36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	92	%	70-130	09.19.19 16.36		
4-Bromofluorobenzene	460-00-4	107	%	70-130	09.19.19 16.36		



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

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

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-021

Date Collected: 09.18.19 10.45

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.35

Basis: Wet Weight

Seq Number: 3102008

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	41.9	4.95	mg/kg	09.20.19 09.27		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-18 @ 3'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-022

Date Collected: 09.18.19 10.50

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.35

Basis: Wet Weight

Seq Number: 3102008

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	23.7	5.04	mg/kg	09.20.19 09.32		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-18 @ 4'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-023

Date Collected: 09.18.19 10.55

Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.35

Basis: Wet Weight

Seq Number: 3102008

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	34.3	5.00	mg/kg	09.20.19 09.38		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-18 @ 5'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-024

Date Collected: 09.18.19 11.00

Sample Depth: 5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.35

Basis: Wet Weight

Seq Number: 3102008

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	24.1	4.96	mg/kg	09.20.19 09.44		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-13@ 0-1'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-025

Date Collected: 09.18.19 11.05

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.35

Basis: Wet Weight

Seq Number: 3102008

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	95.4	5.00	mg/kg	09.19.19 22.05		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 09.19.19 14.00

Basis: Wet Weight

Seq Number: 3101992

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.20.19 05.40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.20.19 05.40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.20.19 05.40	U	1
Total TPH	PHC635	<50	50	mg/kg	09.20.19 05.40	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	92	%	70-135	09.20.19 05.40		
o-Terphenyl	84-15-1	94	%	70-135	09.20.19 05.40		



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-13@ 0-1'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-025

Date Collected: 09.18.19 11.05

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.19.19 10.30

Basis: Wet Weight

Seq Number: 3101988

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.19.19 16.56	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.19.19 16.56	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.19.19 16.56	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.19.19 16.56	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.19.19 16.56	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.19.19 16.56	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.19.19 16.56	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	100	%	70-130	09.19.19 16.56		
4-Bromofluorobenzene	460-00-4	105	%	70-130	09.19.19 16.56		



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

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

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-026

Date Collected: 09.18.19 11.10

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.35

Basis: Wet Weight

Seq Number: 3102008

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	35.2	5.02	mg/kg	09.19.19 22.57		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-13 @ 3'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-027

Date Collected: 09.18.19 11.15

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.35

Basis: Wet Weight

Seq Number: 3102008

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	94.9	24.8	mg/kg	09.19.19 23.03		5



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-13 @ 4'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-028

Date Collected: 09.18.19 11.20

Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.35

Basis: Wet Weight

Seq Number: 3102008

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	195	49.5	mg/kg	09.19.19 23.09		10



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-13 @5'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-029

Date Collected: 09.18.19 11.25

Sample Depth: 5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.35

Basis: Wet Weight

Seq Number: 3102008

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	193	24.8	mg/kg	09.19.19 23.14		5



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-14 @ 0-1'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-030

Date Collected: 09.18.19 11.30

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.35

Basis: Wet Weight

Seq Number: 3102008

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.1	4.95	mg/kg	09.19.19 23.20		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 09.19.19 14.00

Basis: Wet Weight

Seq Number: 3101992

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.20.19 06.01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.20.19 06.01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.20.19 06.01	U	1
Total TPH	PHC635	<50	50	mg/kg	09.20.19 06.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	09.20.19 06.01	
o-Terphenyl	84-15-1	95	%	70-135	09.20.19 06.01	



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-14 @ 0-1'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-030

Date Collected: 09.18.19 11.30

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.19.19 10.30

Basis: Wet Weight

Seq Number: 3101988

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.19.19 17.16	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.19.19 17.16	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.19.19 17.16	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	09.19.19 17.16	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.19.19 17.16	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.19.19 17.16	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.19.19 17.16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	113	%	70-130	09.19.19 17.16		
1,4-Difluorobenzene	540-36-3	98	%	70-130	09.19.19 17.16		



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

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

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-031

Date Collected: 09.18.19 11.35

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.35

Basis: Wet Weight

Seq Number: 3102008

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	66.3	5.05	mg/kg	09.19.19 23.26		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-14 @ 3'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-032

Date Collected: 09.18.19 11.40

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.35

Basis: Wet Weight

Seq Number: 3102008

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	96.6	4.98	mg/kg	09.19.19 23.44		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-14@ 4'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-033

Date Collected: 09.18.19 11.45

Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.35

Basis: Wet Weight

Seq Number: 3102008

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	183	49.5	mg/kg	09.19.19 23.49		10



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-14 @ 5'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-034

Date Collected: 09.18.19 11.50

Sample Depth: 5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.35

Basis: Wet Weight

Seq Number: 3102008

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	177	50.3	mg/kg	09.20.19 00.07		10



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-15 @ 0-1'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-035

Date Collected: 09.18.19 11.55

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.35

Basis: Wet Weight

Seq Number: 3102008

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	23.9	4.97	mg/kg	09.20.19 00.13		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 09.19.19 14.00

Basis: Wet Weight

Seq Number: 3101992

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.20.19 06.23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.20.19 06.23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.20.19 06.23	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.20.19 06.23	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	92	%	70-135	09.20.19 06.23		
o-Terphenyl	84-15-1	93	%	70-135	09.20.19 06.23		



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-15 @ 0-1'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-035

Date Collected: 09.18.19 11.55

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.19.19 10.30

Basis: Wet Weight

Seq Number: 3101988

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.19.19 17.36	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.19.19 17.36	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.19.19 17.36	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	09.19.19 17.36	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.19.19 17.36	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.19.19 17.36	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.19.19 17.36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	108	%	70-130	09.19.19 17.36		
1,4-Difluorobenzene	540-36-3	86	%	70-130	09.19.19 17.36		



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

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

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-036

Date Collected: 09.18.19 12.00

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.35

Basis: Wet Weight

Seq Number: 3102008

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	292	25.0	mg/kg	09.20.19 00.18		5



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-15 @ 3'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-037

Date Collected: 09.18.19 12.05

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.35

Basis: Wet Weight

Seq Number: 3102008

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	100	50.2	mg/kg	09.20.19 00.24		10



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-15 @ 4'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-038

Date Collected: 09.18.19 12.10

Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.35

Basis: Wet Weight

Seq Number: 3102008

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	283	49.8	mg/kg	09.20.19 00.30		10



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-15 @ 5'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-039

Date Collected: 09.18.19 12.15

Sample Depth: 5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.35

Basis: Wet Weight

Seq Number: 3102008

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	354	50.0	mg/kg	09.20.19 00.36		10



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-16 @ 0-1'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-040

Date Collected: 09.18.19 12.20

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.35

Basis: Wet Weight

Seq Number: 3102008

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16.9	5.04	mg/kg	09.20.19 00.42		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 09.19.19 14.00

Basis: Wet Weight

Seq Number: 3101992

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.20.19 06.44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.20.19 06.44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.20.19 06.44	U	1
Total TPH	PHC635	<50	50	mg/kg	09.20.19 06.44	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	107	%	70-135	09.20.19 06.44		
o-Terphenyl	84-15-1	112	%	70-135	09.20.19 06.44		



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-16 @ 0-1'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-040

Date Collected: 09.18.19 12.20

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.19.19 10.30

Basis: Wet Weight

Seq Number: 3101988

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.19.19 17.57	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.19.19 17.57	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.19.19 17.57	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.19.19 17.57	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.19.19 17.57	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.19.19 17.57	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.19.19 17.57	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	95	%	70-130	09.19.19 17.57		
4-Bromofluorobenzene	460-00-4	109	%	70-130	09.19.19 17.57		



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

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

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-041

Date Collected: 09.18.19 12.25

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.20

Basis: Wet Weight

Seq Number: 3102003

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	24.8	5.00	mg/kg	09.19.19 18.52		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-16 @ 3'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-042

Date Collected: 09.18.19 12.30

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.20

Basis: Wet Weight

Seq Number: 3102003

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	59.9	49.8	mg/kg	09.19.19 19.10		10



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-16 @ 4'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-043

Date Collected: 09.18.19 12.35

Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.20

Basis: Wet Weight

Seq Number: 3102003

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	77.9	50.2	mg/kg	09.19.19 19.16		10



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-16 @ 5'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-044

Date Collected: 09.18.19 12.40

Sample Depth: 5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.20

Basis: Wet Weight

Seq Number: 3102003

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	66.7	50.5	mg/kg	09.19.19 19.22		10



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-17@ 0-1'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-045

Date Collected: 09.18.19 12.45

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.20

Basis: Wet Weight

Seq Number: 3102003

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	676	5.04	mg/kg	09.19.19 19.27		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 09.19.19 14.00

Basis: Wet Weight

Seq Number: 3101992

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.20.19 07.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.20.19 07.06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.20.19 07.06	U	1
Total TPH	PHC635	<50	50	mg/kg	09.20.19 07.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	09.20.19 07.06	
o-Terphenyl	84-15-1	111	%	70-135	09.20.19 07.06	



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-17@ 0-1'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-045

Date Collected: 09.18.19 12.45

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.19.19 10.30

Basis: Wet Weight

Seq Number: 3101988

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.19.19 18.17	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.19.19 18.17	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.19.19 18.17	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.19.19 18.17	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.19.19 18.17	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	09.19.19 18.17	U	1
Total BTEX		<0.002	0.002	mg/kg	09.19.19 18.17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.19.19 18.17		
4-Bromofluorobenzene	460-00-4	111	%	70-130	09.19.19 18.17		



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

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

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-046

Date Collected: 09.18.19 12.50

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.20

Basis: Wet Weight

Seq Number: 3102003

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	123	5.01	mg/kg	09.19.19 19.45		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-17 @ 3'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-047

Date Collected: 09.18.19 12.55

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.20

Basis: Wet Weight

Seq Number: 3102003

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	317	4.99	mg/kg	09.19.19 19.51		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-17 @ 4'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-048

Date Collected: 09.18.19 13.00

Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.20

Basis: Wet Weight

Seq Number: 3102003

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	471	5.00	mg/kg	09.19.19 19.57		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **TT-17 @ 5'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-049

Date Collected: 09.18.19 13.05

Sample Depth: 5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.20

Basis: Wet Weight

Seq Number: 3102003

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	434	5.03	mg/kg	09.19.19 20.02		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **S1 @ 0-1'**

Lab Sample Id: 637358-050

Matrix: Soil

Date Collected: 09.18.19 09.00

Date Received: 09.19.19 09.58

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3102003

Date Prep: 09.19.19 14.20

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.4	4.97	mg/kg	09.19.19 20.08		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: S2 @ 2'
Lab Sample Id: 637358-051

Matrix: Soil
Date Collected: 09.18.19 09.05

Date Received: 09.19.19 09.58
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3102003

Date Prep: 09.19.19 14.20

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7.08	4.96	mg/kg	09.19.19 20.14		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **W5 @ 0-1'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-052

Date Collected: 09.18.19 09.15

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.20

Basis: Wet Weight

Seq Number: 3102003

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	26.0	5.00	mg/kg	09.19.19 20.31		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **W5 @ 2'**
Lab Sample Id: 637358-053

Matrix: Soil
Date Collected: 09.18.19 09.20

Date Received: 09.19.19 09.58
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.20

Basis: Wet Weight

Seq Number: 3102003

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	75.6	5.04	mg/kg	09.19.19 20.37		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **W4 @ 0-1'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-054

Date Collected: 09.18.19 09.25

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.20

Basis: Wet Weight

Seq Number: 3102003

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	23.0	5.01	mg/kg	09.19.19 20.55		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **W4 @ 2'**
Lab Sample Id: 637358-055

Matrix: Soil
Date Collected: 09.18.19 09.30

Date Received: 09.19.19 09.58
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3102003

Date Prep: 09.19.19 14.20

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	65.3	4.97	mg/kg	09.19.19 21.01		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **E5 @ 0-1'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-056

Date Collected: 09.18.19 09.35

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.20

Basis: Wet Weight

Seq Number: 3102003

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7.70	5.00	mg/kg	09.20.19 09.09		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: E5 @ 2'
Lab Sample Id: 637358-057

Matrix: Soil
Date Collected: 09.18.19 09.40

Date Received: 09.19.19 09.58
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.20

Basis: Wet Weight

Seq Number: 3102003

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7.41	4.97	mg/kg	09.20.19 09.15		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **E4 @ 0-1'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-058

Date Collected: 09.18.19 09.45

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.20

Basis: Wet Weight

Seq Number: 3102003

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5.50	4.95	mg/kg	09.19.19 21.18		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: E4 @ 2'
Lab Sample Id: 637358-059

Matrix: Soil
Date Collected: 09.18.19 09.50

Date Received: 09.19.19 09.58
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3102003

Date Prep: 09.19.19 14.20

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.03	5.03	mg/kg	09.20.19 09.21	U	1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **E2 @ 0-1'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-060

Date Collected: 09.18.19 10.20

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.20

Basis: Wet Weight

Seq Number: 3102003

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5.98	5.01	mg/kg	09.19.19 21.30		1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: E2 @ 2'
Lab Sample Id: 637358-061

Matrix: Soil
Date Collected: 09.18.19 10.25

Date Received: 09.19.19 09.58
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3102005

Date Prep: 09.19.19 14.30

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.02	5.02	mg/kg	09.19.19 14.45	U	1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **E3 @ 0-1'**

Lab Sample Id: 637358-062

Matrix: Soil

Date Collected: 09.18.19 10.35

Date Received: 09.19.19 09.58

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3102005

Date Prep: 09.19.19 14.30

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.96	4.96	mg/kg	09.19.19 15.02	U	1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: E3 @ 2'
Lab Sample Id: 637358-063

Matrix: Soil
Date Collected: 09.18.19 10.40

Date Received: 09.19.19 09.58
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3102005

Date Prep: 09.19.19 14.30

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.98	4.98	mg/kg	09.19.19 15.07	U	1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **W2 @ 0-1'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-064

Date Collected: 09.18.19 11.00

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.30

Basis: Wet Weight

Seq Number: 3102005

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	09.19.19 15.13	U	1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **W2 @2'**
Lab Sample Id: 637358-065

Matrix: Soil
Date Collected: 09.18.19 11.05

Date Received: 09.19.19 09.58
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.30

Basis: Wet Weight

Seq Number: 3102005

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	09.19.19 15.19	U	1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **W3@ 0-1'**

Matrix: Soil

Date Received: 09.19.19 09.58

Lab Sample Id: 637358-066

Date Collected: 09.18.19 11.15

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.30

Basis: Wet Weight

Seq Number: 3102005

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	09.19.19 15.36	U	1



Certificate of Analytical Results 637358



TRC Solutions, Inc, Midland, TX

SRO 5 State 504-505H (8/9/19)

Sample Id: **W3@ 2'**
Lab Sample Id: 637358-067

Matrix: Soil
Date Collected: 09.18.19 11.20

Date Received: 09.19.19 09.58
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.19.19 14.30

Basis: Wet Weight

Seq Number: 3102005

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16.3	5.03	mg/kg	09.19.19 15.41		1

- 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
SRO 5 State 504-505H (8/9/19)**Analytical Method: Chloride by EPA 300**

Seq Number: 3102001

MB Sample Id: 7686540-1-BLK

Matrix: Solid

LCS Sample Id: 7686540-1-BKS

Prep Method: E300P

Date Prep: 09.19.19

LCSD Sample Id: 7686540-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	254	102	252	101	90-110	1	20	mg/kg	09.19.19 14:19	

Analytical Method: Chloride by EPA 300

Seq Number: 3102003

MB Sample Id: 7686541-1-BLK

Matrix: Solid

LCS Sample Id: 7686541-1-BKS

Prep Method: E300P

Date Prep: 09.19.19

LCSD Sample Id: 7686541-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	250	100	254	102	90-110	2	20	mg/kg	09.19.19 18:41	

Analytical Method: Chloride by EPA 300

Seq Number: 3102005

MB Sample Id: 7686542-1-BLK

Matrix: Solid

LCS Sample Id: 7686542-1-BKS

Prep Method: E300P

Date Prep: 09.19.19

LCSD Sample Id: 7686542-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	236	94	236	94	90-110	0	20	mg/kg	09.19.19 14:34	

Analytical Method: Chloride by EPA 300

Seq Number: 3102008

MB Sample Id: 7686545-1-BLK

Matrix: Solid

LCS Sample Id: 7686545-1-BKS

Prep Method: E300P

Date Prep: 09.19.19

LCSD Sample Id: 7686545-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	248	99	249	100	90-110	0	20	mg/kg	09.19.19 21:53	

Analytical Method: Chloride by EPA 300

Seq Number: 3102001

Parent Sample Id: 637358-001

Matrix: Soil

MS Sample Id: 637358-001 S

Prep Method: E300P

Date Prep: 09.19.19

MSD Sample Id: 637358-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	9.08	249	273	106	280	109	90-110	3	20	mg/kg	09.19.19 14:36	

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



QC Summary 637358

TRC Solutions, Inc
SRO 5 State 504-505H (8/9/19)

Analytical Method: Chloride by EPA 300

Seq Number: 3102001

Parent Sample Id: 637358-010

Matrix: Soil

MS Sample Id: 637358-010 S

Prep Method: E300P

Date Prep: 09.19.19

MSD Sample Id: 637358-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	13.0	250	272	104	276	105	90-110	1	20	mg/kg	09.19.19 15:58	

Analytical Method: Chloride by EPA 300

Seq Number: 3102003

Parent Sample Id: 637358-041

Matrix: Soil

MS Sample Id: 637358-041 S

Prep Method: E300P

Date Prep: 09.19.19

MSD Sample Id: 637358-041 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	24.8	250	271	98	271	98	90-110	0	20	mg/kg	09.19.19 18:58	

Analytical Method: Chloride by EPA 300

Seq Number: 3102003

Parent Sample Id: 637358-051

Matrix: Soil

MS Sample Id: 637358-051 S

Prep Method: E300P

Date Prep: 09.19.19

MSD Sample Id: 637358-051 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	7.08	248	244	96	262	103	90-110	7	20	mg/kg	09.19.19 20:20	

Analytical Method: Chloride by EPA 300

Seq Number: 3102005

Parent Sample Id: 637051-002

Matrix: Soil

MS Sample Id: 637051-002 S

Prep Method: E300P

Date Prep: 09.19.19

MSD Sample Id: 637051-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	54.3	249	309	102	310	103	90-110	0	20	mg/kg	09.19.19 16:10	

Analytical Method: Chloride by EPA 300

Seq Number: 3102005

Parent Sample Id: 637358-061

Matrix: Soil

MS Sample Id: 637358-061 S

Prep Method: E300P

Date Prep: 09.19.19

MSD Sample Id: 637358-061 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2.21	251	249	98	251	99	90-110	1	20	mg/kg	09.19.19 14:50	

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

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



QC Summary 637358

TRC Solutions, Inc
SRO 5 State 504-505H (8/9/19)

Analytical Method: Chloride by EPA 300

Seq Number: 3102008

Parent Sample Id: 637358-025

Matrix: Soil

MS Sample Id: 637358-025 S

Prep Method: E300P

Date Prep: 09.19.19

MSD Sample Id: 637358-025 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	95.4	250	352	103	353	103	90-110	0	20	mg/kg	09.19.19 22:10	

Analytical Method: Chloride by EPA 300

Seq Number: 3102008

Parent Sample Id: 637358-031

Matrix: Soil

MS Sample Id: 637358-031 S

Prep Method: E300P

Date Prep: 09.19.19

MSD Sample Id: 637358-031 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	66.3	253	327	103	322	101	90-110	2	20	mg/kg	09.19.19 23:32	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3101992

MB Sample Id: 7686536-1-BLK

Matrix: Solid

LCS Sample Id: 7686536-1-BKS

Prep Method: SW8015P

Date Prep: 09.19.19

LCSD Sample Id: 7686536-1-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)	<15.0	1000	952	95	951	95	70-135	0	20	mg/kg	09.19.19 22:30	
Diesel Range Organics (DRO)	<15.0	1000	957	96	925	93	70-135	3	20	mg/kg	09.19.19 22:30	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	104		107		110		70-135	%	09.19.19 22:30
o-Terphenyl	108		105		111		70-135	%	09.19.19 22:30

Analytical Method: TPH by SW8015 Mod

Seq Number: 3101992

Parent Sample Id: 637188-061

Matrix: Soil

MS Sample Id: 637188-061 S

Prep Method: SW8015P

Date Prep: 09.19.19

MSD Sample Id: 637188-061 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)	<14.9	996	874	88	1010	101	70-135	14	20	mg/kg	09.19.19 23:35	
Diesel Range Organics (DRO)	<14.9	996	884	89	1030	103	70-135	15	20	mg/kg	09.19.19 23:35	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	96		110		70-135	%	09.19.19 23:35
o-Terphenyl	91		106		70-135	%	09.19.19 23:35

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

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

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

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



QC Summary 637358

TRC Solutions, Inc
SRO 5 State 504-505H (8/9/19)

Analytical Method: BTEX by EPA 8021B

Seq Number: 3101988

MB Sample Id: 7686490-1-BLK

Matrix: Solid

LCS Sample Id: 7686490-1-BKS

Prep Method: SW5030B

Date Prep: 09.19.19

LCSD Sample Id: 7686490-1-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	0.103	103	70-130	2	35	mg/kg	09.19.19 13:16	
Toluene	<0.00200	0.100	0.103	103	0.101	101	70-130	2	35	mg/kg	09.19.19 13:16	
Ethylbenzene	<0.00200	0.100	0.111	111	0.107	107	70-130	4	35	mg/kg	09.19.19 13:16	
m,p-Xylenes	<0.00400	0.200	0.218	109	0.211	106	70-130	3	35	mg/kg	09.19.19 13:16	
o-Xylene	<0.00200	0.100	0.111	111	0.108	108	70-130	3	35	mg/kg	09.19.19 13:16	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		99		100		70-130	%	09.19.19 13:16
4-Bromofluorobenzene	94		106		110		70-130	%	09.19.19 13:16

Analytical Method: BTEX by EPA 8021B

Seq Number: 3101988

Parent Sample Id: 637358-001

Matrix: Soil

MS Sample Id: 637358-001 S

Prep Method: SW5030B

Date Prep: 09.19.19

MSD Sample Id: 637358-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.0874	87	0.0444	44	70-130	65	35	mg/kg	09.19.19 13:56	XF
Toluene	<0.00201	0.100	0.0856	86	0.0424	42	70-130	68	35	mg/kg	09.19.19 13:56	XF
Ethylbenzene	<0.00201	0.100	0.0894	89	0.0397	39	70-130	77	35	mg/kg	09.19.19 13:56	XF
m,p-Xylenes	<0.00402	0.201	0.175	87	0.0761	38	70-130	79	35	mg/kg	09.19.19 13:56	XF
o-Xylene	<0.00201	0.100	0.0899	90	0.0390	39	70-130	79	35	mg/kg	09.19.19 13:56	XF

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		101		70-130	%	09.19.19 13:56
4-Bromofluorobenzene	111		107		70-130	%	09.19.19 13:56

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

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

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

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

Chain of Custody

Work Order No: 001250

Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

Page 7 of 5

Project Manager:		Jared Stoffel	Bill to: (if different)	Ike Tavaraz
Company Name:		TRC Environmental	Company Name:	COG
Address:		10 Desta Dr. STE 150E	Address:	
City, State ZIP:		Midland, Tx 790705	City, State ZIP:	
Phone:		(432) 520-7720	Email:	jstoffel@trccompanies.com, itavaraz@concho.com

Work Order Comments Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐ State of Project: Reporting Level I ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐ Deliverables: EDD ☐ ADaPT ☐ Other:	
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[illegible][illegible][illegible]

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
					



1

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: ☐

Work Order Notes

If TPH > 100 mg/kg, Total
BTEX > 50 mg/kg and/or
Benzene > 10 mg/kg, please
run next deeper sample

TAT starts the day received by the

Sample Comments

1631 / 245.1 / 7470 / 7471 : Hg

Revised Date 051418 Rev. 2018.1



Chain of Custody

Work Order No:

W37358

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

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Project Manager:	Jared Stoffel	Bill to: (if different)	Ike Tavaraz
Company Name:	TRC Environmental	Company Name:	COG
Address:	10 Desta Dr. STE 150E	Address:	
City, State ZIP:	Midland, TX 790705	City, State ZIP:	
Phone:	(432) 520-7720	Email:	jstoffer@trccompanies.com, ltavaraz@concho.com

Project Name:	SRO 5 State 504 & 505H (P/9/14)	Turn Around	
Project Number:		Routine	☐
P.O. Number:		Rush: 24hrs	
Sampler's Name:	Braedon Billings/Tania Babu	Due Date:	

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

ANALYSIS REQUEST

Work Order Notes

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
	Received Intact:	Yes	No	Thermometer ID		
	Coder Custody Seals:	Yes	No	N/A	Correction Factor:	
	Sample Custody Seals:	Yes	No	N/A	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers										ANALYSIS REQUEST										Work Order Notes											
TT-14 @ 2'	SS	9/18/2019	1135	2'	1	X																					If TPH > 100 mg/kg, Total BTEX > 50 mg/kg and/or Benzene > 10 mg/kg, please run next deeper sample									
TT-14 @ 3'	SS	9/18/2019	1140	3'	1	X																					TAT starts the day received by the lab, if received by 4:30pm									
TT-14 @ 4'	SS	9/18/2019	1145	4'	1	X																														
TT-14 @ 5'	SS	9/18/2019	1150	5'	1	X																														
TT-15 @ 0-1'	SS	9/18/2019	1155	0-1'	1	X																														
TT-15 @ 2'	SS	9/18/2019	1200	2'	1	X																														
TT-15 @ 3'	SS	9/18/2019	1205	3'	1	X																														
TT-15 @ 4'	SS	9/18/2019	1210	4'	1	X																														
TT-15 @ 5'	SS	9/18/2019	1215	5'	1	X																														
TT-16 @ 0-1'	SS	9/18/2019	1220	0-1'	1	X																														

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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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			2		
3			4		
5			6		



Chain of Custody

Work Order No:

0371558

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

www.xenco.com Page 5 of 5

Project Manager:	Jared Stoffel	Bill to: (if different)	Ike Tavarez
Company Name:	TRC Environmental	Company Name:	COG
Address:	10 Desta Dr. STE 150E	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	(432) 520-7720	Email:	ustoffel@trccompanies.com, ltavarez@concho.com

Project Name:	SRO 5 State 504 & 505H (8/9/19)	Turn Around	Routine ☐ Rush: 24hrs ☐ Due Date:
Project Number:			
P.O. Number:	Braedon Billings/Tania Babu		
Sampler's Name:			
SAMPLE RECEIPT			
Temperature (°C):	Temp Blank:	Yes No	Wet Ice: Yes No
Received In tact:	Yes No	Thermometer ID	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	
Sample Custody Seals:	Yes No N/A	Total Containers:	

ANALYSIS REQUEST

Work Order Notes

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth
TT-16 @ 2'	SS	9/18/2019	1225	2'
TT-16 @ 3'	SS	9/18/2019	1230	3'
TT-16 @ 4'	SS	9/18/2019	1235	4'
TT-16 @ 5'	SS	9/18/2019	1240	5'
TT-17 @ 0-1'	SS	9/18/2019	1245	0-1'
TT-17 @ 2'	SS	9/18/2019	1250	2'
TT-17 @ 3'	SS	9/18/2019	1255	3'
TT-17 @ 4'	SS	9/18/2019	1300	4'
TT-17 @ 5'	SS	9/18/2019	1305	5'

Number of Containers

Chlorides (E300)
TPH (8015)
BTEX (8021B)

Sample Comments

If TPH > 100 mg/kg, Total BTEX > 50 mg/kg and/or Benzene > 10 mg/kg, please run next deeper sample
TAT starts the day received by the lab, if received by 4:30pm

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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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1					
3					
5					

Page 10 of 27

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: ☐

[illegible]

Final 1.000



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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: _____

ANALYSIS REQUEST								Work Order Notes
								If TPH > 100 mg/kg, Total BTEX > 50 mg/kg and/or Benzene > 10 mg/kg, please run next deeper sample TAT starts the day received by the lab, if received by 4:30pm
of Containers								
\$ (E300)								

[illegible]

Total	200.7 / 6010	200.8 / 6020:
Circle Method(s) and Metal(s) to be analyzed	8RCRA TCLP / SPLP 6010:	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn 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
1 		2			
3		4			
5		6			



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In



Client: TRC Solutions, Inc

Date/ Time Received: 09/19/2019 09:58:00 AM

Work Order #: 637358

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

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

Brianna Teel

Brianna Teel

Date: 09/19/2019

Checklist reviewed by:

Kelsey Brooks

Kelsey Brooks

Date: 09/19/2019



Certificate of Analysis Summary 641169

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State Com 504/505



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Fri Oct-25-19 03:10 pm

Report Date: 04-NOV-19

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	641169-001	641169-002	641169-003	641169-004	641169-005	641169-006
	<i>Field Id:</i>	TT-2A @ 0-1'	TT-2A @ 2'	TT-3A @ 0-1'	TT-3A @ 2'	TT-5A @ 0-1'	TT-5A @ 2'
	<i>Depth:</i>	0-1 ft	2- ft	0-1 ft	2- ft	0-1 ft	2- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Oct-17-19 11:30	Oct-17-19 11:35	Oct-17-19 11:45	Oct-17-19 11:50	Oct-17-19 12:00	Oct-17-19 12:05
Chloride by EPA 300	<i>Extracted:</i>	Oct-28-19 14:50	Oct-28-19 14:50	Oct-28-19 14:50	Oct-28-19 14:50	Oct-28-19 14:50	Oct-28-19 14:50
	<i>Analyzed:</i>	Oct-28-19 16:54	Oct-28-19 17:58	Oct-28-19 17:00	Oct-28-19 17:05	Oct-28-19 17:11	Oct-28-19 17:29
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		11.7 4.99	<4.97 4.97	7.50 4.97	8.40 5.00	51.4 4.95	132 5.02

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

Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 641169

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State Com 504/505



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Fri Oct-25-19 03:10 pm

Report Date: 04-NOV-19

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	641169-007	641169-008	641169-009	641169-010	641169-011	641169-012
	Field Id:	TT-5A @ 3'	TT-5A @ 4'	TT-6A @ 0-1'	TT-6A @ 2'	TT-8A @ 0-1'	TT-8A @ 2'
	Depth:	3- ft	4- ft	0-1 ft	2- ft	0-1 ft	2- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Oct-17-19 14:00	Oct-17-19 14:05	Oct-17-19 12:15	Oct-17-19 12:20	Oct-17-19 12:30	Oct-17-19 12:35
Chloride by EPA 300	Extracted:	Oct-28-19 14:50	Oct-28-19 14:50	Oct-28-19 14:50	Oct-28-19 14:50	Oct-28-19 15:10	Oct-28-19 15:10
	Analyzed:	Oct-28-19 17:35	Oct-28-19 17:40	Oct-28-19 17:46	Oct-28-19 16:36	Oct-28-19 18:10	Oct-28-19 18:25
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		13.8 4.99	10.8 4.97	11.0 4.95	10.8 4.96	1810 25.3	284 5.00

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

Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 641169

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State Com 504/505



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Fri Oct-25-19 03:10 pm

Report Date: 04-NOV-19

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	641169-013	641169-014	641169-015	641169-016	641169-017	641169-018
	<i>Field Id:</i>	TT-9A @ 0-1'	TT-9A @ 2'	TT-9A @ 3'	TT-9A @ 4'	TT-17A @ 0-1'	TT-17A @ 2'
	<i>Depth:</i>	0-1 ft	2- ft	3- ft	4- ft	0-1 ft	2- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Oct-17-19 12:45	Oct-17-19 12:50	Oct-17-19 14:30	Oct-17-19 14:35	Oct-17-19 13:15	Oct-17-19 13:20
Chloride by EPA 300	<i>Extracted:</i>	Oct-28-19 15:10	Oct-28-19 15:10	Oct-28-19 15:10	Oct-28-19 15:10	Oct-28-19 15:10	Oct-28-19 15:10
	<i>Analyzed:</i>	Oct-28-19 18:30	Oct-28-19 18:36	Oct-28-19 18:41	Oct-28-19 18:51	Oct-29-19 08:41	Oct-28-19 19:06
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		588 5.04	2460 25.1	40.7 4.96	33.2 5.00	1950 25.0	211 5.03

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

Jessica Kramer

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 641169

TRC Solutions, Inc, Midland, TX

Project Name: SRO 5 State Com 504/505



Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Fri Oct-25-19 03:10 pm

Report Date: 04-NOV-19

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	641169-019	641169-020	641169-021	641169-022	641169-023	
	<i>Field Id:</i>	SB-12A @ 0-1'	SB-12A @ 2'	SB-12A @ 3'	SB-12A @ 4'	SB-12A @ 5'	
	<i>Depth:</i>	0-1 ft	2- ft	3- ft	4- ft	5- ft	
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	
	<i>Sampled:</i>	Oct-24-19 15:00	Oct-24-19 15:05	Oct-24-19 15:10	Oct-24-19 15:15	Oct-24-19 15:20	
Chloride by EPA 300	<i>Extracted:</i>	Oct-28-19 15:10	Oct-28-19 15:10	Oct-31-19 08:15	Oct-31-19 08:15	Oct-31-19 08:15	
	<i>Analyzed:</i>	Oct-28-19 19:12	Oct-28-19 19:27	Oct-31-19 10:08	Oct-31-19 10:28	Oct-31-19 12:34	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Chloride		2870 49.7	3620 49.6	778 50.0	321 50.0	53.3 5.02	

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 Assistant

Analytical Report 641169

for
TRC Solutions, Inc

Project Manager: Jared Stoffel

SRO 5 State Com 504/505

04-NOV-19

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142), North Carolina (681)

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-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)



04-NOV-19

Project Manager: **Jared Stoffel**
TRC Solutions, Inc
2057 Commerce
Midland, TX 79703

Reference: XENCO Report No(s): **641169**
SRO 5 State Com 504/505
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) 641169. 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. 641169 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,

Jessica Kramer
Project Assistant

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

TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
TT-2A @ 0-1'	S	10-17-19 11:30	0 - 1 ft	641169-001
TT-2A @ 2'	S	10-17-19 11:35	2 ft	641169-002
TT-3A @ 0-1'	S	10-17-19 11:45	0 - 1 ft	641169-003
TT-3A @ 2'	S	10-17-19 11:50	2 ft	641169-004
TT-5A @ 0-1'	S	10-17-19 12:00	0 - 1 ft	641169-005
TT-5A @ 2'	S	10-17-19 12:05	2 ft	641169-006
TT-5A @ 3'	S	10-17-19 14:00	3 ft	641169-007
TT-5A @ 4'	S	10-17-19 14:05	4 ft	641169-008
TT-6A @ 0-1'	S	10-17-19 12:15	0 - 1 ft	641169-009
TT-6A @ 2'	S	10-17-19 12:20	2 ft	641169-010
TT-8A @ 0-1'	S	10-17-19 12:30	0 - 1 ft	641169-011
TT-8A @ 2'	S	10-17-19 12:35	2 ft	641169-012
TT-9A @ 0-1'	S	10-17-19 12:45	0 - 1 ft	641169-013
TT-9A @ 2'	S	10-17-19 12:50	2 ft	641169-014
TT-9A @ 3'	S	10-17-19 14:30	3 ft	641169-015
TT-9A @ 4'	S	10-17-19 14:35	4 ft	641169-016
TT-17A @ 0-1'	S	10-17-19 13:15	0 - 1 ft	641169-017
TT-17A @ 2'	S	10-17-19 13:20	2 ft	641169-018
SB-12A @ 0-1'	S	10-24-19 15:00	0 - 1 ft	641169-019
SB-12A @ 2'	S	10-24-19 15:05	2 ft	641169-020
SB-12A @ 3'	S	10-24-19 15:10	3 ft	641169-021
SB-12A @ 4'	S	10-24-19 15:15	4 ft	641169-022
SB-12A @ 5'	S	10-24-19 15:20	5 ft	641169-023
SB-12A @ 6'	S	10-24-19 15:25	6 ft	Not Analyzed
SB-12A @ 7'	S	10-24-19 15:30	7 ft	Not Analyzed
SB-12A @ 8'	S	10-24-19 15:35	8 ft	Not Analyzed
SB-12A @ 9'	S	10-24-19 15:40	9 ft	Not Analyzed
SB-12A @ 10'	S	10-24-19 15:45	10 ft	Not Analyzed
SB-12A @ 11'	S	10-24-19 15:50	11 ft	Not Analyzed
SB-12A @ 12'	S	10-24-19 15:55	12 ft	Not Analyzed
SB-12A @ 13'	S	10-24-19 16:00	13 ft	Not Analyzed
SB-12A @ 14'	S	10-24-19 16:05	14 ft	Not Analyzed
SB-12A @ 15'	S	10-24-19 16:10	15 ft	Not Analyzed



CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: SRO 5 State Com 504/505

Project ID:

Work Order Number(s): 641169

Report Date: 04-NOV-19

Date Received: 10/25/2019

Sample receipt non conformances and comments:

Corrected project name to match COC. NEW VERSION GENERATED JK 11/04/19

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 641169



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505

Sample Id: **TT-2A @ 0-1'**

Matrix: Soil

Date Received: 10.25.19 15.10

Lab Sample Id: 641169-001

Date Collected: 10.17.19 11.30

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 10.28.19 14.50

Basis: Wet Weight

Seq Number: 3105649

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.7	4.99	mg/kg	10.28.19 16.54		1



Certificate of Analytical Results 641169



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505

Sample Id: **TT-2A @ 2'**

Matrix: Soil

Date Received: 10.25.19 15.10

Lab Sample Id: 641169-002

Date Collected: 10.17.19 11.35

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 10.28.19 14.50

Basis: Wet Weight

Seq Number: 3105649

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.97	4.97	mg/kg	10.28.19 17.58	U	1



Certificate of Analytical Results 641169



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505

Sample Id: **TT-3A @ 0-1'**

Matrix: Soil

Date Received: 10.25.19 15.10

Lab Sample Id: 641169-003

Date Collected: 10.17.19 11.45

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 10.28.19 14.50

Basis: Wet Weight

Seq Number: 3105649

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7.50	4.97	mg/kg	10.28.19 17.00		1



Certificate of Analytical Results 641169



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505

Sample Id: **TT-3A @ 2'**

Matrix: Soil

Date Received: 10.25.19 15.10

Lab Sample Id: 641169-004

Date Collected: 10.17.19 11.50

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 10.28.19 14.50

Basis: Wet Weight

Seq Number: 3105649

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8.40	5.00	mg/kg	10.28.19 17.05		1



Certificate of Analytical Results 641169



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505

Sample Id: TT-5A @ 0-1'

Matrix: Soil

Date Received: 10.25.19 15.10

Lab Sample Id: 641169-005

Date Collected: 10.17.19 12.00

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 10.28.19 14.50

Basis: Wet Weight

Seq Number: 3105649

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	51.4	4.95	mg/kg	10.28.19 17.11		1



Certificate of Analytical Results 641169



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505

Sample Id: **TT-5A @ 2'**

Matrix: Soil

Date Received: 10.25.19 15.10

Lab Sample Id: 641169-006

Date Collected: 10.17.19 12.05

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 10.28.19 14.50

Basis: Wet Weight

Seq Number: 3105649

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	132	5.02	mg/kg	10.28.19 17.29		1



Certificate of Analytical Results 641169



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505

Sample Id: **TT-5A @ 3'**

Matrix: Soil

Date Received: 10.25.19 15.10

Lab Sample Id: 641169-007

Date Collected: 10.17.19 14.00

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 10.28.19 14.50

Basis: Wet Weight

Seq Number: 3105649

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	13.8	4.99	mg/kg	10.28.19 17.35		1



Certificate of Analytical Results 641169



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505

Sample Id: **TT-5A @ 4'**

Matrix: Soil

Date Received: 10.25.19 15.10

Lab Sample Id: 641169-008

Date Collected: 10.17.19 14.05

Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 10.28.19 14.50

Basis: Wet Weight

Seq Number: 3105649

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.8	4.97	mg/kg	10.28.19 17.40		1



Certificate of Analytical Results 641169



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505

Sample Id: **TT-6A @ 0-1'**

Matrix: Soil

Date Received: 10.25.19 15.10

Lab Sample Id: 641169-009

Date Collected: 10.17.19 12.15

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 10.28.19 14.50

Basis: Wet Weight

Seq Number: 3105649

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.0	4.95	mg/kg	10.28.19 17.46		1



Certificate of Analytical Results 641169



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505

Sample Id: **TT-6A @ 2'**

Matrix: Soil

Date Received: 10.25.19 15.10

Lab Sample Id: 641169-010

Date Collected: 10.17.19 12.20

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 10.28.19 14.50

Basis: Wet Weight

Seq Number: 3105649

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.8	4.96	mg/kg	10.28.19 16.36		1



Certificate of Analytical Results 641169



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505

Sample Id: **TT-8A @ 0-1'**

Matrix: Soil

Date Received: 10.25.19 15.10

Lab Sample Id: 641169-011

Date Collected: 10.17.19 12.30

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 10.28.19 15.10

Basis: Wet Weight

Seq Number: 3105662

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1810	25.3	mg/kg	10.28.19 18.10		5



Certificate of Analytical Results 641169



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505

Sample Id: **TT-8A @ 2'**

Matrix: Soil

Date Received: 10.25.19 15.10

Lab Sample Id: 641169-012

Date Collected: 10.17.19 12.35

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 10.28.19 15.10

Basis: Wet Weight

Seq Number: 3105662

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	284	5.00	mg/kg	10.28.19 18.25		1



Certificate of Analytical Results 641169



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505

Sample Id: **TT-9A @ 0-1'**

Matrix: Soil

Date Received: 10.25.19 15.10

Lab Sample Id: 641169-013

Date Collected: 10.17.19 12.45

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 10.28.19 15.10

Basis: Wet Weight

Seq Number: 3105662

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	588	5.04	mg/kg	10.28.19 18.30		1



Certificate of Analytical Results 641169



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505

Sample Id: **TT-9A @ 2'**

Matrix: Soil

Date Received: 10.25.19 15.10

Lab Sample Id: 641169-014

Date Collected: 10.17.19 12.50

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 10.28.19 15.10

Basis: Wet Weight

Seq Number: 3105662

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2460	25.1	mg/kg	10.28.19 18.36		5



Certificate of Analytical Results 641169



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505

Sample Id: **TT-9A @ 3'**

Matrix: Soil

Date Received: 10.25.19 15.10

Lab Sample Id: 641169-015

Date Collected: 10.17.19 14.30

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 10.28.19 15.10

Basis: Wet Weight

Seq Number: 3105662

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	40.7	4.96	mg/kg	10.28.19 18.41		1



Certificate of Analytical Results 641169



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505

Sample Id: TT-9A @ 4'

Matrix: Soil

Date Received:10.25.19 15.10

Lab Sample Id: 641169-016

Date Collected: 10.17.19 14.35

Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 10.28.19 15.10

Basis: Wet Weight

Seq Number: 3105662

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	33.2	5.00	mg/kg	10.28.19 18.51		1



Certificate of Analytical Results 641169



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505

Sample Id: **TT-17A @ 0-1'**

Matrix: Soil

Date Received: 10.25.19 15.10

Lab Sample Id: 641169-017

Date Collected: 10.17.19 13.15

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 10.28.19 15.10

Basis: Wet Weight

Seq Number: 3105662

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1950	25.0	mg/kg	10.29.19 08.41		5



Certificate of Analytical Results 641169



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505

Sample Id: **TT-17A @ 2'**

Matrix: Soil

Date Received: 10.25.19 15.10

Lab Sample Id: 641169-018

Date Collected: 10.17.19 13.20

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 10.28.19 15.10

Basis: Wet Weight

Seq Number: 3105662

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	211	5.03	mg/kg	10.28.19 19.06		1



Certificate of Analytical Results 641169



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505

Sample Id: **SB-12A @ 0-1'**

Matrix: Soil

Date Received: 10.25.19 15.10

Lab Sample Id: 641169-019

Date Collected: 10.24.19 15.00

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 10.28.19 15.10

Basis: Wet Weight

Seq Number: 3105662

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2870	49.7	mg/kg	10.28.19 19.12		10



Certificate of Analytical Results 641169



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505

Sample Id: **SB-12A @ 2'**

Matrix: Soil

Date Received: 10.25.19 15.10

Lab Sample Id: 641169-020

Date Collected: 10.24.19 15.05

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 10.28.19 15.10

Basis: Wet Weight

Seq Number: 3105662

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3620	49.6	mg/kg	10.28.19 19.27		10



Certificate of Analytical Results 641169



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505

Sample Id: **SB-12A @ 3'**

Matrix: Soil

Date Received: 10.25.19 15.10

Lab Sample Id: 641169-021

Date Collected: 10.24.19 15.10

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 10.31.19 08.15

Basis: Wet Weight

Seq Number: 3106096

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	778	50.0	mg/kg	10.31.19 10.08		10



Certificate of Analytical Results 641169



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505

Sample Id: **SB-12A @ 4'**

Matrix: Soil

Date Received: 10.25.19 15.10

Lab Sample Id: 641169-022

Date Collected: 10.24.19 15.15

Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 10.31.19 08.15

Basis: Wet Weight

Seq Number: 3106096

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	321	50.0	mg/kg	10.31.19 10.28		10



Certificate of Analytical Results 641169



TRC Solutions, Inc, Midland, TX

SRO 5 State Com 504/505

Sample Id: **SB-12A @ 5'**

Matrix: Soil

Date Received: 10.25.19 15.10

Lab Sample Id: 641169-023

Date Collected: 10.24.19 15.20

Sample Depth: 5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 10.31.19 08.15

Basis: Wet Weight

Seq Number: 3106096

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	53.3	5.02	mg/kg	10.31.19 12.34		1

- 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



QC Summary 641169

TRC Solutions, Inc
SRO 5 State Com 504/505

Analytical Method: Chloride by EPA 300

Seq Number: 3105649

MB Sample Id: 7689037-1-BLK

Matrix: Solid

LCS Sample Id: 7689037-1-BKS

Prep Method: E300P

Date Prep: 10.28.19

LCSD Sample Id: 7689037-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	246	98	243	97	90-110	1	20	mg/kg	10.28.19 16:25	

Analytical Method: Chloride by EPA 300

Seq Number: 3105662

MB Sample Id: 7689038-1-BLK

Matrix: Solid

LCS Sample Id: 7689038-1-BKS

Prep Method: E300P

Date Prep: 10.28.19

LCSD Sample Id: 7689038-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	259	104	261	104	90-110	1	20	mg/kg	10.28.19 17:29	

Analytical Method: Chloride by EPA 300

Seq Number: 3106096

MB Sample Id: 7689290-1-BLK

Matrix: Solid

LCS Sample Id: 7689290-1-BKS

Prep Method: E300P

Date Prep: 10.31.19

LCSD Sample Id: 7689290-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	249	100	247	99	90-110	1	20	mg/kg	10.31.19 09:15	

Analytical Method: Chloride by EPA 300

Seq Number: 3105649

Parent Sample Id: 641169-002

Matrix: Soil

MS Sample Id: 641169-002 S

Prep Method: E300P

Date Prep: 10.28.19

MSD Sample Id: 641169-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	4.59	249	258	102	258	102	90-110	0	20	mg/kg	10.28.19 18:04	

Analytical Method: Chloride by EPA 300

Seq Number: 3105649

Parent Sample Id: 641169-010

Matrix: Soil

MS Sample Id: 641169-010 S

Prep Method: E300P

Date Prep: 10.28.19

MSD Sample Id: 641169-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	10.8	248	254	98	257	99	90-110	1	20	mg/kg	10.28.19 16:42	

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



QC Summary 641169

TRC Solutions, Inc
SRO 5 State Com 504/505

Analytical Method: Chloride by EPA 300

Seq Number: 3105662

Parent Sample Id: 641167-066

Matrix: Soil

MS Sample Id: 641167-066 S

Prep Method: E300P

Date Prep: 10.28.19

MSD Sample Id: 641167-066 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	458	250	630	69	630	69	90-110	0	20	mg/kg	10.28.19 17:44	X

Analytical Method: Chloride by EPA 300

Seq Number: 3105662

Parent Sample Id: 641169-016

Matrix: Soil

MS Sample Id: 641169-016 S

Prep Method: E300P

Date Prep: 10.28.19

MSD Sample Id: 641169-016 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	33.2	250	305	109	299	106	90-110	2	20	mg/kg	10.28.19 18:56	

Analytical Method: Chloride by EPA 300

Seq Number: 3106096

Parent Sample Id: 641434-036

Matrix: Soil

MS Sample Id: 641434-036 S

Prep Method: E300P

Date Prep: 10.31.19

MSD Sample Id: 641434-036 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	435	250	658	89	653	87	90-110	1	20	mg/kg	10.31.19 09:35	X

Analytical Method: Chloride by EPA 300

Seq Number: 3106096

Parent Sample Id: 641447-004

Matrix: Soil

MS Sample Id: 641447-004 S

Prep Method: E300P

Date Prep: 10.31.19

MSD Sample Id: 641447-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	263	253	518	101	518	101	90-110	0	20	mg/kg	10.31.19 11:08	

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



Atlanta, GA (770) 449-8800

Page 1 of 4

Other:

lah if received by 4:30pm

1631 / 245.1 / 7470 / 7471 : Ho



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
Hobbs, NM (575) 382-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
Atlanta, GA (770) 449-8800

Work Order No:

1611109

www.xenco.com Page 2 of 4

Project Manager:	Jared Stoffel	Bill to: (if different)	Ike Tavaraz
Company Name:	TRC Environmental	Company Name:	COG
Address:	10 Desta Dr. STE 150E	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	432-520-7720	Email:	jstoffel@trccompanies.com, ITavaraz@concho.com

Work Order Comments	
Program: UST/PST ☐ PRF ☐ Brownfield ☐ RRC ☐ Superfund ☐	
State of Project:	
Reporting Level: ☐ Level ☐ PST/US ☐ TRF ☐ Level ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

Project Name:	SRO 5 State Com 504/505	Turn Around	
Project Number:		Routine: ☐	
Project Location:		Rush: ☐	
Sampler's Name:	Braedon Billings	Due Date:	
PO #:			
SAMPLE RECEIPT		Temp Blank:	Yes No Wet Ice: Yes No
Temperature (°C):		Thermometer ID	
Received In tact:	Yes No		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	
Sample Custody Seals:	Yes No N/A	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	ANALYSIS REQUEST																Preservative Codes	Sample Comments
TT-8A @ 0-1'	SS	10/17/2019	1230	0-1'	1	X																	
TT-8A @ 2'	SS	10/17/2019	1235	2'	1	X																	
TT-9A @ 0-1'	SS	10/17/2019	1245	0-1'	1	X																	
TT-9A @ 2'	SS	10/17/2019	1250	2'	1	X																	
TT-9A @ 3'	SS	10/17/2019	1430	3'	1	X																	
TT-9A @ 4'	SS	10/17/2019	1435	4'	1	X																	
TT-17A @ 0-1'	SS	10/17/2019	1315	0-1'	1	X																	
TT-17A @ 2'	SS	10/17/2019	1320	2'	1	X																	
SB-12A @ 0-1'	SS	10/24/2019	1500	0-1'	1	X																	
SB-12A @ 2'	SS	10/24/2019	1505	2'	1	X																	

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	B	Cd	Ca	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
1					
3					
5					



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
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 889-6701
Atlanta, GA (770) 449-8800

Work Order No:

10411109

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Project Manager:	Jared Stoffel	Bill to: (if different)	Ike Tavaréz
Company Name:	TRC Environmental	Company Name:	COG
Address:	10 Desta Dr. STE 150E	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	432-520-7720	Email:	jstoffel@trccompanies.com, itavaréz@concho.com

Work Order Comments	
Program: UST/PST ☐ PRF ☐ Brownfield ☐ RR ☐ Superfund ☐	
State of Project:	
Reporting Level: ☐ Level ☐ PST/US ☐ TRF ☐ Level ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

Project Name:	SRO 5 State Com 504/505	Turn Around	
Project Number:		Routine: ☐	
Project Location:		Rush: ☐	
Sampler's Name:	Braedon Billings	Due Date:	
PO #:			
SAMPLE RECEIPT		Temp Blank:	Yes No Wet Ice: Yes No
Temperature (°C):		Thermometer ID	
Received In tact:	Yes No		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	
Sample Custody Seals:	Yes No N/A	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	Chlorides	ANALYSIS REQUEST	Preservative Codes	Sample Comments
SB-12A @ 3'	SS	10/24/2019	1510	3'	1	X		HNO3: HN	run if 2' sample > 600mg/kg
SB-12A @ 4'	SS	10/24/2019	1515	4'	1	X		H2SO4: H2	run if 3' sample > 600mg/kg
SB-12A @ 5'	SS	10/24/2019	1520	5'	1	X		HCL: HL	run if 4' sample > 600mg/kg
SB-12A @ 6'	SS	10/24/2019	1525	6'	1	X		None: NO	run if 5' sample > 600mg/kg
SB-12A @ 7'	SS	10/24/2019	1530	7'	1	X		NaOH: Na	run if 6' sample > 600mg/kg
SB-12A @ 8'	SS	10/24/2019	1535	8'	1	X		MeOH: Me	run if 7' sample > 600mg/kg
SB-12A @ 9'	SS	10/24/2019	1540	9'	1	X		Zn Acetate+ NaOH: Zn	run if 8' sample > 600mg/kg
SB-12A @ 10'	SS	10/24/2019	1545	10'	1	X			run if 9' sample > 600mg/kg
SB-12A @ 11'	SS	10/24/2019	1550	11'	1	X			run if 10' sample > 600mg/kg
SB-12A @ 12'	SS	10/24/2019	1555	12'	1	X			run if 11' sample > 600mg/kg

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
		2			
		4			
		6			



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
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (904) 756-0747, Delray Beach, FL (561) 689-6701
Atlanta, GA (770) 449-8800

Work Order No:

1041109

www.xenco.com Page 4 of 4

Project Manager:	Jared Stoffel	Bill to: (if different)	Ike Tavaraz
Company Name:	TRC Environmental	Company Name:	COG
Address:	10 Desta Dr. STE 150E	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	432-520-7720	Email:	jstoffel@trccompanies.com, ltavaraz@concho.com

Work Order Comments	
Program: UST/PST ☐ PRF ☐ Brownfield ☐ RR ☐ Superfund ☐	
State of Project:	
Reporting Level: ☐ Level ☐ PST/US ☐ TRF ☐ Level ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

Project Name:	SRO 5 State Com 504/505	Turn Around	
Project Number:		Routine: ☐	
Project Location:		Rush: ☐	
Sampler's Name:	Braedon Billings	Due Date:	
PO #:			
SAMPLE RECEIPT		Temp Blank:	Yes No
Temperature (°C):		Wet Ice:	Yes No
Received Intact:	Yes No	Thermometer ID	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	
Sample Custody Seals:	Yes No N/A	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	Chlorides	ANALYSIS REQUEST	Preservative Codes
SB-12A @ 13'	SS	10/24/2019	1600	13'	1	X		HNO3: HN
SB-12A @ 14'	SS	10/24/2019	1605	14'	1	X		H2SO4: H2
SB-12A @ 15'	SS	10/24/2019	1610	15'	1	X		HCL: HL
								None: NO
								NaOH: Na
								MeOH: Me
								Zn Acetate + NaOH: Zn
								TAT starts the day received by the lab, if received by 4:30pm
								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

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			
3		4			
5		6			



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In



Client: TRC Solutions, Inc

Date/ Time Received: 10/25/2019 03:10:00 PM

Work Order #: 641169

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	1.1	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received on ice?	Yes	
#4 *Custody Seals intact on shipping container/ cooler?	N/A	
#5 Custody Seals intact on sample bottles?	N/A	
#6 *Custody Seals Signed and dated?	N/A	
#7 *Chain of Custody present?	Yes	
#8 Any missing/extra samples?	No	
#9 Chain of Custody signed when relinquished/ received?	Yes	
#10 Chain of Custody agrees with sample labels/matrix?	Yes	
#11 Container label(s) legible and intact?	Yes	
#12 Samples in proper container/ bottle?	Yes	tph was in bulk container
#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)?	N/A	
#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:

Brianna Teel

Brianna Teel

Date: 10/25/2019

Checklist reviewed by:

Jessica Kramer

Jessica Kramer

Date: 10/29/2019



Certificate of Analysis Summary 644147

TRC Solutions, Inc, Midland, TX

Project Name: SRO State COM 504/505

Project Id:

Contact: Jared Stoffel

Project Location:

Date Received in Lab: Fri Nov-22-19 08:05 am

Report Date: 22-NOV-19

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	644147-001	644147-002	644147-003	644147-004		
	Field Id:	FL-B5-5'	FL-D2-2'	CSW - SSW- C1 -1.25' R	CSW - ESW- C1 -1.25' R		
	Depth:	5- ft	2- ft	1.25- ft	1.25- ft		
	Matrix:	SOIL	SOIL	SOIL	SOIL		
	Sampled:	Nov-21-19 16:00	Nov-21-19 16:05	Nov-21-19 16:10	Nov-21-19 16:15		
Chloride by EPA 300	Extracted:	Nov-22-19 08:30	Nov-22-19 08:30	Nov-22-19 08:30	Nov-22-19 08:30		
	Analyzed:	Nov-22-19 10:24	Nov-22-19 10:37	Nov-22-19 10:44	Nov-22-19 10:51		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		51.8 9.88	<9.98 9.98	133 9.84	425 9.88		

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 Assistant

Analytical Report 644147

**for
TRC Solutions, Inc**

Project Manager: Jared Stoffel

SRO State COM 504/505

22-NOV-19

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)



22-NOV-19

Project Manager: **Jared Stoffel**
TRC Solutions, Inc
2057 Commerce
Midland, TX 79703

Reference: XENCO Report No(s): **644147**
SRO State COM 504/505
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) 644147. 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. 644147 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'. The signature is written in a cursive, flowing style.

Jessica Kramer
Project Assistant

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 644147

TRC Solutions, Inc, Midland, TX

SRO State COM 504/505

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FL-B5-5'	S	11-21-19 16:00	5 ft	644147-001
FL-D2-2'	S	11-21-19 16:05	2 ft	644147-002
CSW - SSW- C1 -1.25' R	S	11-21-19 16:10	1.25 ft	644147-003
CSW - ESW- C1 -1.25' R	S	11-21-19 16:15	1.25 ft	644147-004



CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: SRO State COM 504/505

Project ID:

Work Order Number(s): 644147

Report Date: 22-NOV-19

Date Received: 11/22/2019

Sample receipt non conformances and comments:

Corrected sample 002 name and depth to read FL-D2-2' New version generated JK 11/22/19

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 644147

TRC Solutions, Inc, Midland, TX

SRO State COM 504/505

Sample Id: **FL-B5-5'**

Matrix: Soil

Date Received: 11.22.19 08.05

Lab Sample Id: 644147-001

Date Collected: 11.21.19 16.00

Sample Depth: 5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 11.22.19 08.30

Basis: Wet Weight

Seq Number: 3108413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	51.8	9.88	mg/kg	11.22.19 10.24		1



Certificate of Analytical Results 644147

TRC Solutions, Inc, Midland, TX

SRO State COM 504/505

Sample Id: **FL-D2-2'**

Matrix: Soil

Date Received: 11.22.19 08.05

Lab Sample Id: 644147-002

Date Collected: 11.21.19 16.05

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 11.22.19 08.30

Basis: Wet Weight

Seq Number: 3108413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.98	9.98	mg/kg	11.22.19 10.37	U	1



Certificate of Analytical Results 644147

TRC Solutions, Inc, Midland, TX

SRO State COM 504/505

Sample Id: **CSW - SSW- C1 -1.25' R**

Matrix: Soil

Date Received: 11.22.19 08.05

Lab Sample Id: 644147-003

Date Collected: 11.21.19 16.10

Sample Depth: 1.25 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 11.22.19 08.30

Basis: Wet Weight

Seq Number: 3108413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	133	9.84	mg/kg	11.22.19 10.44		1



Certificate of Analytical Results 644147

TRC Solutions, Inc, Midland, TX

SRO State COM 504/505

Sample Id: **CSW - ESW- C1 -1.25' R**

Matrix: Soil

Date Received: 11.22.19 08.05

Lab Sample Id: 644147-004

Date Collected: 11.21.19 16.15

Sample Depth: 1.25 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 11.22.19 08.30

Basis: Wet Weight

Seq Number: 3108413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	425	9.88	mg/kg	11.22.19 10.51		1

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



QC Summary 644147

TRC Solutions, Inc
SRO State COM 504/505

Analytical Method: Chloride by EPA 300

Seq Number: 3108413

MB Sample Id: 7690995-1-BLK

Matrix: Solid

LCS Sample Id: 7690995-1-BKS

Prep Method: E300P

Date Prep: 11.22.19

LCSD Sample Id: 7690995-1-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	255	102	254	102	90-110	0	20	mg/kg	11.22.19 10:11	

Analytical Method: Chloride by EPA 300

Seq Number: 3108413

Parent Sample Id: 644147-001

Matrix: Soil

MS Sample Id: 644147-001 S

Prep Method: E300P

Date Prep: 11.22.19

MSD Sample Id: 644147-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	51.8	200	262	105	260	105	90-110	1	20	mg/kg	11.22.19 10:30	

Analytical Method: Chloride by EPA 300

Seq Number: 3108413

Parent Sample Id: 644186-006

Matrix: Soil

MS Sample Id: 644186-006 S

Prep Method: E300P

Date Prep: 11.22.19

MSD Sample Id: 644186-006 SD

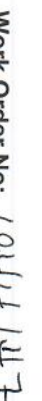
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	109	200	320	106	316	105	90-110	1	20	mg/kg	11.22.19 12:09	

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



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