Revised Remediation Summary and Site Closure Request

January 30, 2020

Cabo Wabo 25 Federal Com #003H (2RP-5473)

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1.0 Introduction and Background Information

TRC Environmental Corporation (TRC), on behalf of COG Operating, LLC (COG), has prepared this *Remediation Summary and Site Closure Request* for the Release at the Site known as the Cabo Wabo 25 Federal Com #003H (the Site). The legal description of the Site is Unit Letter "I", Section 25, Township 25 South, Range 29 East, in Eddy County, New Mexico. The subject property is owned by the United States Federal Government and administered by the Department of Interior, Bureau of Land Management (BLM). The GPS coordinates for the Site are N 32.0973°, W 103.9297°. A topographical map is provided as **Figure 1**. Photographs are provided in the photolog as **Appendix A**.

On May 17, 2019, COG discovered a produced water release had occurred at the Site. The Release was attributed to a hole in a flow line, which impacted a lease road and the adjacent pasture. On the discovery date, COG notified the New Mexico Oil and Conservation Division (NMOCD) and New Mexico State Land Office (NMSLO) of the Release. The Release was assigned an NMOCD Reference number of 2RP-5473. During initial response activities, a vacuum truck was dispatched to recover all freestanding fluids. On June 4, 2019, the initial Release Notification and Corrective Action (Form C-141) was submitted to the NMOCD. The Form C-141 indicated twenty-two (22) barrels (bbls) of produced water was released. No produced water was recovered during initial response activities. The release affected an area measuring approximately nineteen thousand five hundred (19,500) square feet (sq. ft.). A copy of the submitted Form C-141 for the Release is provided in **Appendix C**.

A groundwater database maintained by The New Mexico Office of the State Engineer (NMOSE) did not identify any registered water wells in Section 25, Township 25 South, Range 29 East. The nearest water well, with well log information, cataloged in the NMOSE groundwater database is two and two tenths (2.2) miles to the east of the Release site. The water well has a depth to groundwater of approximately 277 feet bgs. Each water well cataloged in the NMOSE groundwater database within a three (3) mile radius around the Release site exhibited depth to groundwater of greater than one-hundred (100) feet bgs. In addition, the reference map utilized by the NMOCD indicates groundwater should be encountered at approximately one-hundred seventy-five (175) to two-hundred (200) feet 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 Site. An aerial map of the Site location is provided as **Figure 2**. NMOSE depth to groundwater data is provided in **Appendix B**.

Based on the depth to groundwater at the Cabo Wabo 25 Federal Com #003H, the NMOCD *Closure Criteria for Soils Impacted by a Release* are the least stringent closure criteria listed. The Cabo Wabo 25 Federal Com #003H is located in the 'low karst' area as defined by the BLM publicly available Karst Potential Map, provided as **Figure 3**. The top four (4) feet of the Release area were held to a more stringent chloride concentration criteria to satisfy NMAC 19.15.29.13.D(1). COG will utilize the least stringent NMOCD Closure Criteria for Soils Impacted by a Release for the Cabo Wabo 25 Federal Com #003H as follows:

- Benzene – 10 mg/kg

- Benzene, toluene, ethylbenzene, and xylenes (BTEX) – 50 mg/kg
- Gasoline and Diesel Range Organics (GRO + DRO) – 1,000 mg/kg
- Total Petroleum Hydrocarbons (TPH) –2,500 mg/kg
- Chloride –20,000 mg/kg (600 mg/kg at four feet bgs and shallower)

2.0 Initial Delineation Investigation

July 29, 2019, an initial investigation was conducted at the Release Site. During the initial investigation activities, seven (7) delineation trenches (TT-1, TT-2, TT-3, TT-4, TT-5, TT-6, and TT-7) were advanced within the Release margins in an effort to characterize the vertical extent of soil impact based on regulatory guidelines listed in Table 1 of NMAC 19.15.29.12. Forty-eight (48) delineation soil samples (TT-1 @ 0-1', TT-1 @ 2', TT-1 @ 3', TT-1 @ 4', TT-1 @ 5', TT-1 @ 6', TT-2 @ 0-1', TT-2 @ 2', TT-2 @ 3', TT-2 @ 4', TT-2 @ 5', TT-2 @ 6', TT-2 @ 7', TT-2 @ 8', TT-3 @ 0-1', TT-3 @ 2', TT-3 @ 3', TT-3 @ 4', TT-3 @ 5', TT-3 @ 6', TT-4 @ 0-1', TT-4 @ 2', TT-4 @ 3', TT-4 @ 4', TT-4 @ 5', TT-4 @ 6', TT-5 @ 0-1', TT-5 @ 2', TT-5 @ 3', TT-5 @ 4', TT-5 @ 5', TT-5 @ 6', TT-5 @ 7', TT-6 @ 0-1', TT-6 @ 2', TT-6 @ 3', TT-6 @ 4', TT-6 @ 5', TT-6 @ 6', TT-6 @ 7', TT-6 @ 8', TT-7 @ 0-1', TT-7 @ 2', TT-7 @ 3', TT-7 @ 4', TT-7 @ 5', TT-7 @ 6', and TT-7 @ 7') were collected from the seven (7) delineation trenches, and submitted to Cardinal Labs in Hobbs, NM for chloride analysis. A review of laboratory analytical results indicated chloride concentrations were below NMOCD regulatory guidelines in the submitted soil samples, with the exception of TT-2 @ 0-1', TT-4 @ 2', TT-6 @ 2', TT-6 @ 3', and TT-6 @ 5'. Please reference **Figure 4 – Excavation and Sample Location Map**.

The results of the chloride delineation activities indicated that only areas represented by delineation trench locations TT-2, TT-4, and TT-6 warranted excavation, and the areas represented by delineation trench locations TT-1, TT-3, TT-5, and TT-7 were not impacted above the NMOCD regulatory guidelines at any sampled depth. The high-traffic lease road through the center of the Release area was not sampled or excavated due to the safety concerns and as to not interrupt access to nearby infrastructure, specifically to the electrical substation adjacent to the Release Site.

3.0 Summary of Soil Remediation Activities

On August 12, 2019, remediation activities commenced at the Release Site. The excavation began in the area represented by delineation trench location TT-2, which was excavated to a depth of approximately one and a half (1.5) feet bgs. Excavated soil was stockpiled on polyurethane liners pending final disposition at an NMOCD approved disposal facility.

On August 13, 2019, fifteen (15) five-point composite floor confirmation soil samples (FL-A01-1.5', FL-A02-1.5', FL-A03-1.5', FL-A04-1.5', FL-A05-1.5', FL-A06-1.5', FL-A07-1.5', FL-A08-1.5', FL-A09-1.5', FL-A10-1.5', FL-A11-1.5', FL-A12-1.5', FL-A13-1.5', FL-A14-1.5', and FL-A15-1.5') were collected from the base of the excavation on a one (1) soil sample per two-hundred (200) square foot basis and submitted to the laboratory for chloride and/or TPH and BTEX analyses. Subsequently, excavation commenced in the areas represented by delineation trench locations TT-4 and TT-6, which were excavated to a depth of approximately two and a half (2.5)

feet and approximately five and a half (5.5) feet bgs, respectively. A review of the analytical results indicated each soil sample submitted for TPH and BTEX analyses was below laboratory reporting limits (RL). Each soil sample submitted exhibited chloride concentrations below NMOCD regulatory guidelines, with the exception of FL-A06-1.5', FL-A07-1.5', FL-A10-1.5', FL-A11-1.5', and FL-A13-1.5'.

On August 14, 2019, fourteen (14) five-point composite floor confirmation soil samples (FL-B01-2.5', FL-B02-2.5', FL-B03-2.5', FL-B04-2.5', FL-B05-2.5', FL-B06-2.5', FL-B07-2.5', FL-B08-2.5', FL-B09-2.5', FL-B10-2.5', FL-C01-5.5', FL-C02-5.5', FL-C03-5.5', and FL-C04-5.5') were collected and submitted to the laboratory for chloride and/or TPH and BTEX analyses. Subsequently, excavation commenced in the areas represented by soil samples FL-A06-1.5, FL-A07-1.5, FL-A10-1.5, FL-A11-1.5, and FL-A13-1.5, which were excavated to depths of approximately four (4) feet (FL-06-1.5'), five and a half (5.5) feet (FL-A07-1.5, FL-A10-1.5, and FL-A13-1.5), and two (2) feet (FL-A11-1.5') bgs. A review of the analytical data indicated each soil sample submitted for TPH and BTEX analyses exhibited BTEX and TPH concentrations below the laboratory RL. Each soil sample submitted for chloride analyses exhibited chloride concentrations below the NMOCD regulatory guidelines.

On August 15, 2019, one (1) five-point composite floor confirmation soil sample (FL-A11-2') was collected from the area represented by soil sample FL-A11-1.5' and six (6) five-point composite sidewall samples (SW-A01-9", SW-A02-9", SW-B01-15", SW-B02-15", SW-C01-33", and SW-C02-33") were collected from the sidewalls of the excavation and were submitted to the laboratory for chloride and/or TPH and BTEX analyses. A review of the analytical data indicated each soil sample submitted for TPH and BTEX analyses exhibited BTEX and TPH concentrations below the laboratory RL. Each soil sample submitted for chloride analyses exhibited chloride concentrations below the NMOCD regulatory guidelines.

On August 19, 2019, mechanical excavation immediately adjacent to the EnLink high pressure pipeline completed, and four (4) five-point composite floor confirmation soil samples (FL-A06-5', FL-A07-4', FL-A10-5.5', and FL-A13-5.5') were collected from the areas represented by soil samples FL-A06-1.5', FL-A07-1.5', FL-A10-1.5', and FL-A13-1.5', respectively. Soil samples were submitted to the laboratory for chloride and/or TPH and BTEX analyses. A review of the analytical data indicated each soil sample submitted for TPH and BTEX analyses exhibited BTEX and TPH concentrations below the laboratory RL. Each soil sample submitted for chloride analyses exhibited chloride concentrations below the NMOCD regulatory guidelines.

On August 26, 2019, hydrovac excavation of the soil immediately adjacent to the EnLink high pressure line commenced, per EnLink requirement. The soil around the line was hydroexcavated to an approximate depth of five and a half (5.5) feet bgs in the areas represented by soil samples FL-A07-5.5', FL-A10-5.5', and FL-A13-5.5'.

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 an NMOCD approved disposal facility. Confirmation soil sample locations are depicted in **Figure**

4. A summary of analytical data is shown in **Table 1**. Laboratory analytical reports are provided in **Appendix D**.

4.0 Closure Request Rejection and Subsequent Remediation Activities

Following the submission of the first closure request, the NMOCD responded with a denial due to no sampling or excavation in the lease road area between the two excavations. On December 3, 2019, fifteen (15) delineation soil samples (Road-1 @ 0-1', Road-1 @ 2', Road-1 @ 3', Road-1 @ 4', Road-1 @ 5', Road-2 @ 0-1', Road-2 @ 2', Road-2 @ 3', Road-2 @ 4', Road-2 @ 5', Road-3 @ 0-1', Road-3 @ 2', Road-3 @ 3', Road-3 @ 4', and Road-3 @ 5') were collected and submitted for chloride and/or TPH and BTEX analyses. Review of analytical results indicated only soil sample Road-1 @ 0-1' exhibited chloride concentrations above NMOCD regulatory guidelines. Each soil sample submitted for TPH and BTEX analyses exhibited concentrations below the laboratory reporting limits for each constituent.

On January 9, 2019, excavation of the road area representative of soil sample Road-1 @ 0-1' commenced. The excavation was advanced until chloride field screens indicated chloride concentrations were below NMOCD regulatory guidelines. Six (6) floor confirmation soil samples (FL-D01-3', FL-D02-1.5', FL-D03-1.5', FL-D04-1.5', FL-D05-1.5', and FL-D06-1.5) and two (2) sidewall confirmation soil samples (SW-D01-0.5' and SW-D02-1.5') were collected and submitted to the laboratory for chloride and/or TPH and BTEX analyses. A review of analytical data indicated each soil sample exhibited chloride concentrations below NMOCD regulatory guidelines, and each soil sample submitted for TPH and BTEX exhibited concentrations below NMOCD regulatory guidelines for each constituent.

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 an NMOCD approved disposal facility. Confirmation soil sample locations are depicted in **Figure 4**. A summary of analytical data is shown in **Table 1**. Laboratory analytical reports are provided in **Appendix D**.

5.0 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 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 BLM and request closure status to the Cabo Wabo 25 Federal Com #003H.

6.0 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.

7.0 Distribution

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TABLE 1

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)
TT-1 @ 0-1'	7/29/19	0-1'	In-Situ	–	–	–	–	–	–	–	<5.00
TT-1 @ 2'	7/29/19	2'	In-Situ	–	–	–	–	–	–	–	5.16
TT-1 @ 3'	7/29/19	3'	In-Situ	–	–	–	–	–	–	–	7.05
TT-1 @ 4'	7/29/19	4'	In-Situ	–	–	–	–	–	–	–	<4.99
TT-1 @ 5'	7/29/19	5'	In-Situ	–	–	–	–	–	–	–	<4.99
TT-1 @ 6'	7/29/19	6'	In-Situ	–	–	–	–	–	–	–	6.24
TT-2 @ 0-1'	7/29/19	0-1'	Excavated	–	–	–	–	–	–	–	**1,120**
TT-2 @ 2'	7/29/19	2'	In-Situ	–	–	–	–	–	–	–	21.4
TT-2 @ 3'	7/29/19	3'	In-Situ	–	–	–	–	–	–	–	73.9
TT-2 @ 4'	7/29/19	4'	In-Situ	–	–	–	–	–	–	–	6.79
TT-2 @ 5'	7/29/19	5'	In-Situ	–	–	–	–	–	–	–	<4.99
TT-2 @ 6'	7/29/19	6'	In-Situ	–	–	–	–	–	–	–	<4.99
TT-2 @ 7'	7/29/19	7'	In-Situ	–	–	–	–	–	–	–	<4.96
TT-2 @ 8'	7/29/19	8'	In-Situ	–	–	–	–	–	–	–	5.83
TT-3 @ 0-1'	7/29/19	0-1'	In-Situ	–	–	–	–	–	–	–	375
TT-3 @ 2'	7/29/19	2'	In-Situ	–	–	–	–	–	–	–	13.0
TT-3 @ 3'	7/29/19	3'	In-Situ	–	–	–	–	–	–	–	6.04
TT-3 @ 4'	7/29/19	4'	In-Situ	–	–	–	–	–	–	–	37.6
TT-3 @ 5'	7/29/19	5'	In-Situ	–	–	–	–	–	–	–	<4.99
TT-3 @ 6'	7/29/19	6'	In-Situ	–	–	–	–	–	–	–	18.3
TT-4 @ 0-1'	7/29/19	0-1'	Excavated	–	–	–	–	–	–	–	532
TT-4 @ 2'	7/29/19	2'	Excavated	–	–	–	–	–	–	–	**1,250**
TT-4 @ 3'	7/29/19	3'	In-Situ	–	–	–	–	–	–	–	429
TT-4 @ 4'	7/29/19	4'	In-Situ	–	–	–	–	–	–	–	6.69
TT-4 @ 5'	7/29/19	5'	In-Situ	–	–	–	–	–	–	–	<4.98
NMOCD Closure Criteria				**10**	**50**	**-**	**-**	**1,000**	**-**	**2,500**	**20000 (600)**

TABLE 1

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)
TT-4 @ 6'	7/29/19	6'	In-Situ	–	–	–	–	–	–	–	7.55
TT-5 @ 0-1'	7/29/19	0-1'	In-Situ	–	–	–	–	–	–	–	<5.00
TT-5 @ 2'	7/29/19	2'	In-Situ	–	–	–	–	–	–	–	<4.95
TT-5 @ 3'	7/29/19	3'	In-Situ	–	–	–	–	–	–	–	<4.97
TT-5 @ 4'	7/29/19	4'	In-Situ	–	–	–	–	–	–	–	5.16
TT-5 @ 5'	7/29/19	5'	In-Situ	–	–	–	–	–	–	–	<5.03
TT-5 @ 6'	7/29/19	6'	In-Situ	–	–	–	–	–	–	–	<5.02
TT-5 @ 7'	7/29/19	7'	In-Situ	–	–	–	–	–	–	–	5.80
TT-6 @ 0-1'	7/29/19	0-1'	Excavated	–	–	–	–	–	–	–	99.1
TT-6 @ 2'	7/29/19	2'	Excavated	–	–	–	–	–	–	–	**1,110**
TT-6 @ 3'	7/29/19	3'	Excavated	–	–	–	–	–	–	–	**2,760**
TT-6 @ 4'	7/29/19	4'	Excavated	–	–	–	–	–	–	–	187
TT-6 @ 5'	7/29/19	5'	Excavated	–	–	–	–	–	–	–	4,950
TT-6 @ 6'	7/29/19	6'	In-Situ	–	–	–	–	–	–	–	23.3
TT-6 @ 7'	7/29/19	7'	In-Situ	–	–	–	–	–	–	–	71.7
TT-6 @ 8'	7/29/19	8'	In-Situ	–	–	–	–	–	–	–	104
TT-7 @ 0-1'	7/29/19	0-1'	In-Situ	–	–	–	–	–	–	–	32.9
TT-7 @ 2'	7/29/19	2'	In-Situ	–	–	–	–	–	–	–	17.2
TT-7 @ 3'	7/29/19	3'	In-Situ	–	–	–	–	–	–	–	32.3
TT-7 @ 4'	7/29/19	4'	In-Situ	–	–	–	–	–	–	–	<5.04
TT-7 @ 5'	7/29/19	5'	In-Situ	–	–	–	–	–	–	–	9.41
TT-7 @ 6'	7/29/19	6'	In-Situ	–	–	–	–	–	–	–	6.49
TT-7 @ 7'	7/29/19	7'	In-Situ	–	–	–	–	–	–	–	11.7
FL - A01 - 1.5'	8/13/19	1.5'	In-Situ	–	–	–	–	–	–	–	352
FL - A02 - 1.5'	8/13/19	1.5'	In-Situ	–	–	–	–	–	–	–	32.0
FL - A03 - 1.5'	8/13/19	1.5'	In-Situ	–	–	–	–	–	–	–	112
NMOCD Closure Criteria				**10**	**50**	**-**	**-**	**1,000**	**-**	**2,500**	**20000 (600)**

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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 - A04 - 1.5'	8/13/19	1.5'	In-Situ	–	–	–	–	–	–	–	32.0
FL - A05 - 1.5'	8/13/19	1.5'	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
FL - A06 - 1.5'	8/13/19	1.5'	Excavated	–	–	–	–	–	–	–	**2,120**
FL - A07 - 1.5'	8/13/19	1.5'	Excavated	–	–	–	–	–	–	–	**672**
FL - A08 - 1.5'	8/13/19	1.5'	In-Situ	–	–	–	–	–	–	–	256
FL - A09 - 1.5'	8/13/19	1.5'	In-Situ	–	–	–	–	–	–	–	272
FL - A10 - 1.5'	8/13/19	1.5'	Excavated	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	**2,600**
FL - A11 - 1.5'	8/13/19	1.5'	Excavated	–	–	–	–	–	–	–	**624**
FL - A12 - 1.5'	8/13/19	1.5'	In-Situ	–	–	–	–	–	–	–	336
FL - A13 - 1.5'	8/13/19	1.5'	Excavated	–	–	–	–	–	–	–	**640**
FL - A14 - 1.5'	8/13/19	1.5'	In-Situ	–	–	–	–	–	–	–	<16.0
FL - A15 - 1.5'	8/13/19	1.5'	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FL - B01 - 2.5'	8/14/19	2.5'	In-Situ	–	–	–	–	–	–	–	336
FL - B02 - 2.5'	8/14/19	2.5'	In-Situ	–	–	–	–	–	–	–	96.0
FL - B03 - 2.5'	8/14/19	2.5'	In-Situ	–	–	–	–	–	–	–	48.0
FL - B04 - 2.5'	8/14/19	2.5'	In-Situ	–	–	–	–	–	–	–	576
FL - B05 - 2.5'	8/14/19	2.5'	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	448
FL - B06 - 2.5'	8/14/19	2.5'	In-Situ	–	–	–	–	–	–	–	80.0
FL - B07 - 2.5'	8/14/19	2.5'	In-Situ	–	–	–	–	–	–	–	416
FL - B08 - 2.5'	8/14/19	2.5'	In-Situ	–	–	–	–	–	–	–	48.0
FL - B09 - 2.5'	8/14/19	2.5'	In-Situ	–	–	–	–	–	–	–	80.0
FL - B10 - 2.5'	8/14/19	2.5'	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	560
FL - C01 - 5.5'	8/14/19	5.5'	In-Situ	–	–	–	–	–	–	–	80.0
FL - C02 - 5.5'	8/14/19	5.5'	In-Situ	–	–	–	–	–	–	–	160
FL - C03 - 5.5'	8/14/19	5.5'	In-Situ	–	–	–	–	–	–	–	128
FL - C04 - 5.5'	8/14/19	5.5'	In-Situ	–	–	–	–	–	–	–	32.0
FL - A11 - 2'	8/15/19	2'	In-Situ	–	–	–	–	–	–	–	< 16.0
NMOCD Closure Criteria				**10**	**50**	**-**	**-**	**1,000**	**-**	**2,500**	**20000 (600)**

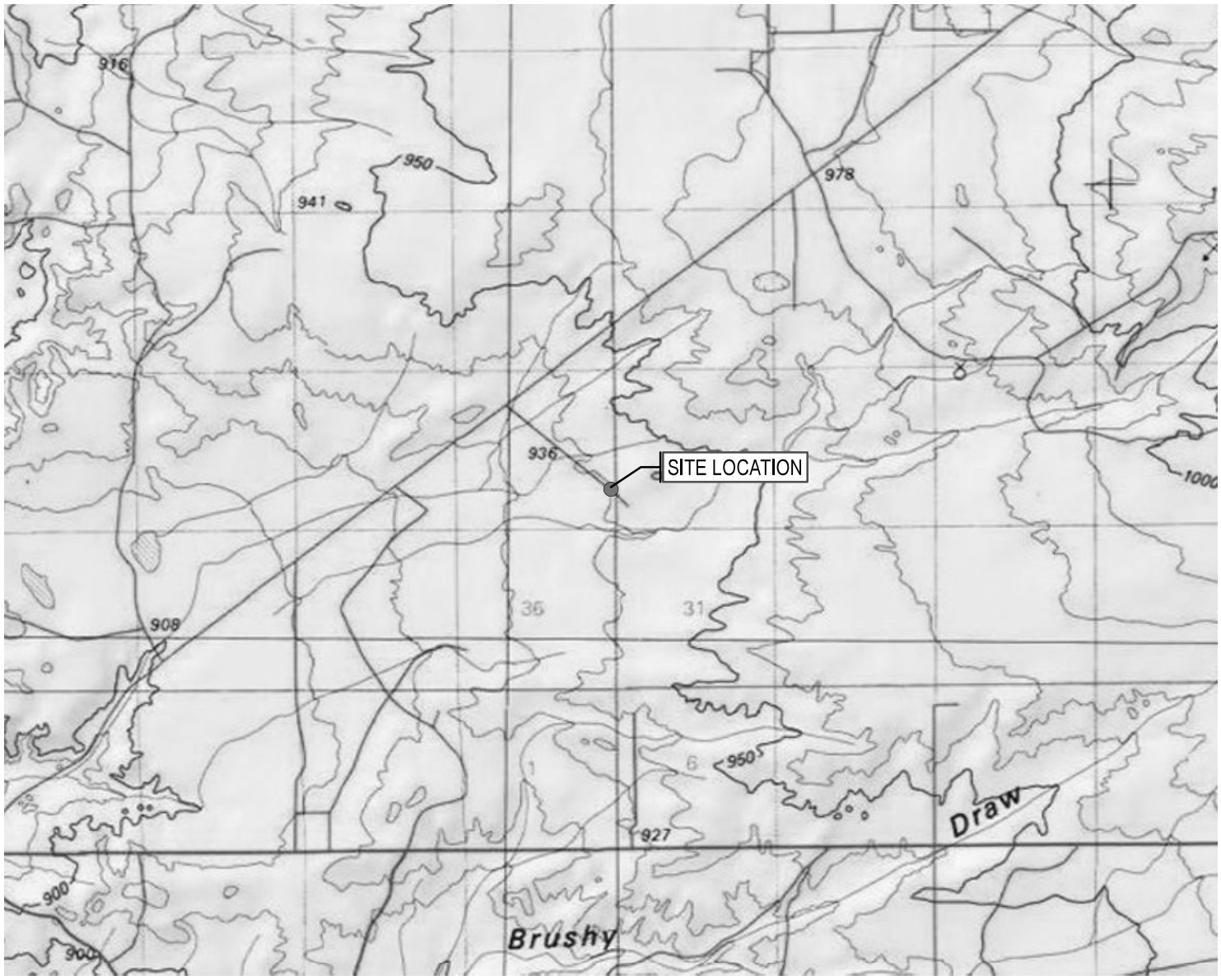
TABLE 1

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)
SW - A01 - 9"	8/15/19	9"	In-Situ	–	–	–	–	–	–	–	64.0
SW - A02 - 9"	8/15/19	9"	In-Situ	–	–	–	–	–	–	–	128.0
SW - B01 - 15"	8/15/19	15"	In-Situ	–	–	–	–	–	–	–	32.0
SW - B02 - 15"	8/15/19	15"	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
SW - C01- 33"	8/15/19	33"	In-Situ	–	–	–	–	–	–	–	<16.0
SW- C02 - 33"	8/15/19	33"	In-Situ	–	–	–	–	–	–	–	16.0
FL - A06 - 5'	8/19/19	5'	In-Situ	–	–	–	–	–	–	–	128
FL - A07 - 4'	8/19/19	4'	In-Situ	–	–	–	–	–	–	–	<16.0
FL - A10 - 5.5'	8/19/19	5.5'	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
FL - A13 -5.5'	8/19/19	5.5'	In-Situ	–	–	–	–	–	–	–	48.0
Road-1 @ 0-1'	12/3/19	0-1'	Excavated	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50	**707**
Road-1 @ 2'	12/3/19	2'	In-Situ	–	–	–	–	–	–	–	46.8
Road-1 @ 3'	12/3/19	3'	In-Situ	–	–	–	–	–	–	–	135
Road-1 @ 4'	12/3/19	4'	In-Situ	–	–	–	–	–	–	–	209
Road-1 @ 5'	12/3/19	5'	In-Situ	–	–	–	–	–	–	–	443
Road-2 @ 0-1'	12/3/19	0-1'	In-Situ	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50	79.1
Road-2 @ 2'	12/3/19	2'	In-Situ	–	–	–	–	–	–	–	121
Road-2 @ 3'	12/3/19	3'	In-Situ	–	–	–	–	–	–	–	174
Road-2 @ 4'	12/3/19	4'	In-Situ	–	–	–	–	–	–	–	142
Road-2 @ 5'	12/3/19	5'	In-Situ	–	–	–	–	–	–	–	154
Road-3 @ 0-1'	12/3/19	0-1'	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50	446
Road-3 @ 2'	12/3/19	2'	In-Situ	–	–	–	–	–	–	–	100
Road-3 @ 3'	12/3/19	3'	In-Situ	–	–	–	–	–	–	–	185
Road-3 @ 4'	12/3/19	4'	In-Situ	–	–	–	–	–	–	–	239
Road-3 @ 5'	12/3/19	5'	In-Situ	–	–	–	–	–	–	–	313
FL-D01-3'	1/9/20	3'	In-Situ	–	–	–	–	–	–	–	42.9
FL-D02-1.25'	1/9/20	1.25'	In-Situ	–	–	–	–	–	–	–	41.8
NMOCD Closure Criteria				**10**	**50**	**-**	**-**	**1,000**	**-**	**2,500**	**20000 (600)**

TABLE 1

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-D03-1.25'	1/9/20	1.25'	In-Situ	<0.00199	0.2675	<49.8	<49.8	<49.8	<49.8	<49.8	34.9
FL-D04-1.25'	1/9/20	1.25'	In-Situ	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	<49.9	35.4
FL-D05-1.25'	1/9/20	1.25'	In-Situ	–	–	–	–	–	–	–	29.7
FL-D06-1.25'	1/9/20	1.25'	In-Situ	–	–	–	–	–	–	–	33.8
SW-D01-0.5'	1/9/20	0.5'	In-Situ	–	–	–	–	–	–	–	34.5
SW-D02-1.5'	1/9/20	1.5'	In-Situ	–	–	–	–	–	–	–	33.7
NMOCD Closure Criteria				**10**	**50**	**-**	**-**	**1,000**	**-**	**2,500**	**20000 (600)**

S:\1-PROJECTS\ConchoResources\349719_CaboWabo\349719_1.mxd -- Saved By: SRAY on 9/17/2019, 13:12:35 PM



LEGEND

Site Location

BASEMAP FROM USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES - ROSS RANCH, NM.

N

0 0.5 1

MILES

1 " = 1 MILES

1:63,360

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

PROJECT:

CABO WABO 25 FEDERAL 3H
EDDY COUNTY, NM

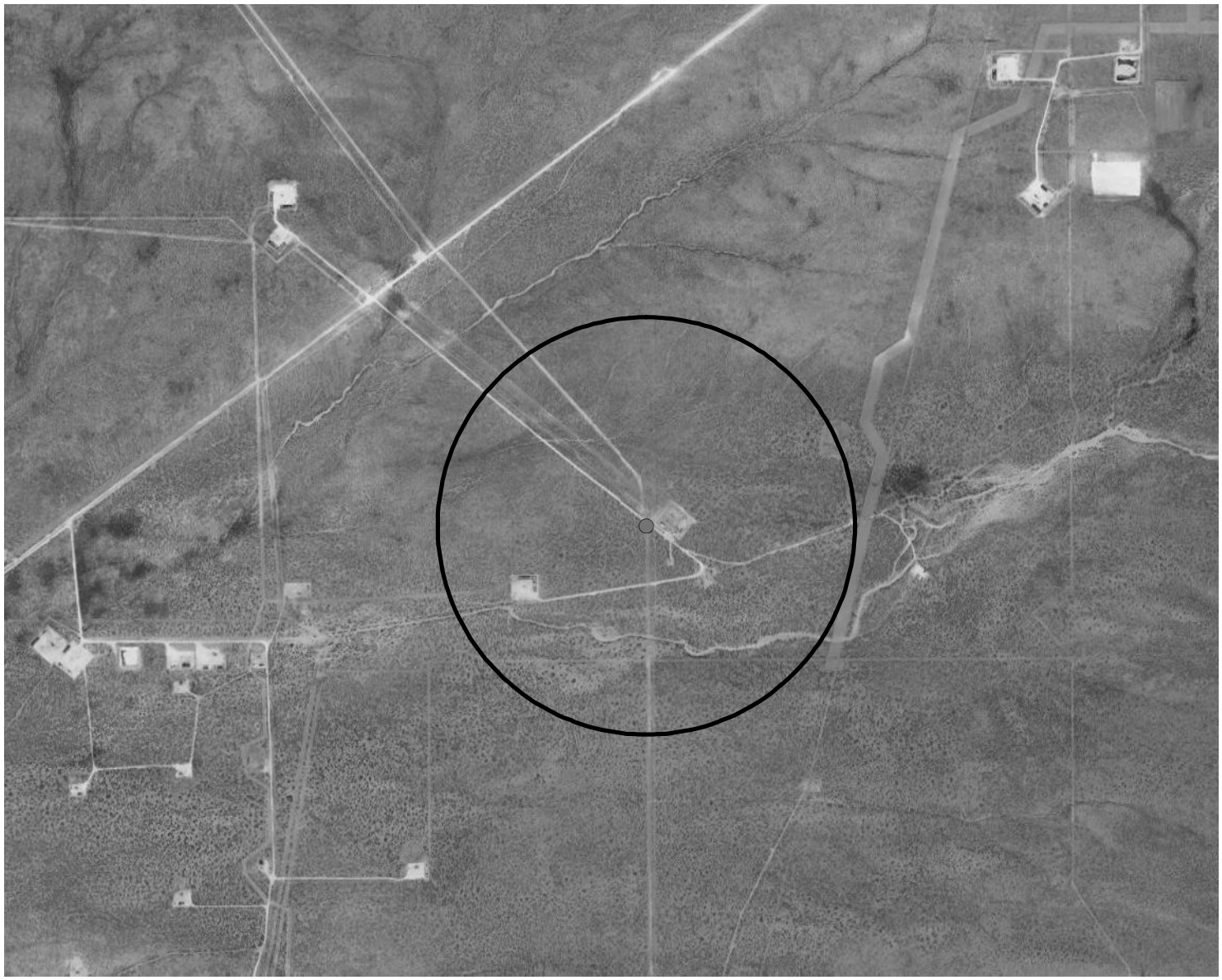
TITLE:

TOPOGRAPHIC MAP

DRAWN BY:	S. RAY
CHECKED BY:	
APPROVED BY:	
DATE:	SEPTEMBER 2019
PROJ. NO.:	349719
FILE:	349719_1.mxd

FIGURE 1

S:\1-PROJECTS\ConchoResources\349719_CaboWabo\349719_2.mxd -- Saved By: SRAY on 9/17/2019, 13:21:09 PM



LEGEND

- Site Location
- 1/2 Mile Radius

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

NO FLOODPLAINS, WATER WELLS, NON-INDUSTRIAL BUILDINGS, MUNICIPAL WELL FIELDS OR SUBSURFACE MINES FOUND IN THIS LOCATION AT THIS EXTENT.

N

0 1,000 2,000

FEET

1 " = 2,000 FEET

1:24,000

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

PROJECT:

CABO WABO 25 FEDERAL 3H
EDDY COUNTY, NM

TITLE:

AERIAL MAP

DRAWN BY:	S. RAY
CHECKED BY:	
APPROVED BY:	
DATE:	SEPTEMBER 2019
PROJ. NO.:	349719
FILE:	349719_2.mxd

FIGURE 2

S:\1-PROJECTS\ConchoResources\349719_CaboWabo\349719_3.mxd -- Saved By: SRAY on 9/17/2019, 13:32:16 PM

LEGEND

- SITE LOCATION
- HIGH KARST POTENTIAL
- MEDIUM KARST POTENTIAL
- LOW KARST POTENTIAL

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

KARST DATA FROM NEW MEXICO BUREAU OF LAND MANAGEMENT.

N

0 1 2

MILES

1 " = 2 MILES

1:126,720

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

PROJECT:

CABO WABO 25 FEDERAL 3H
EDDY COUNTY, NM

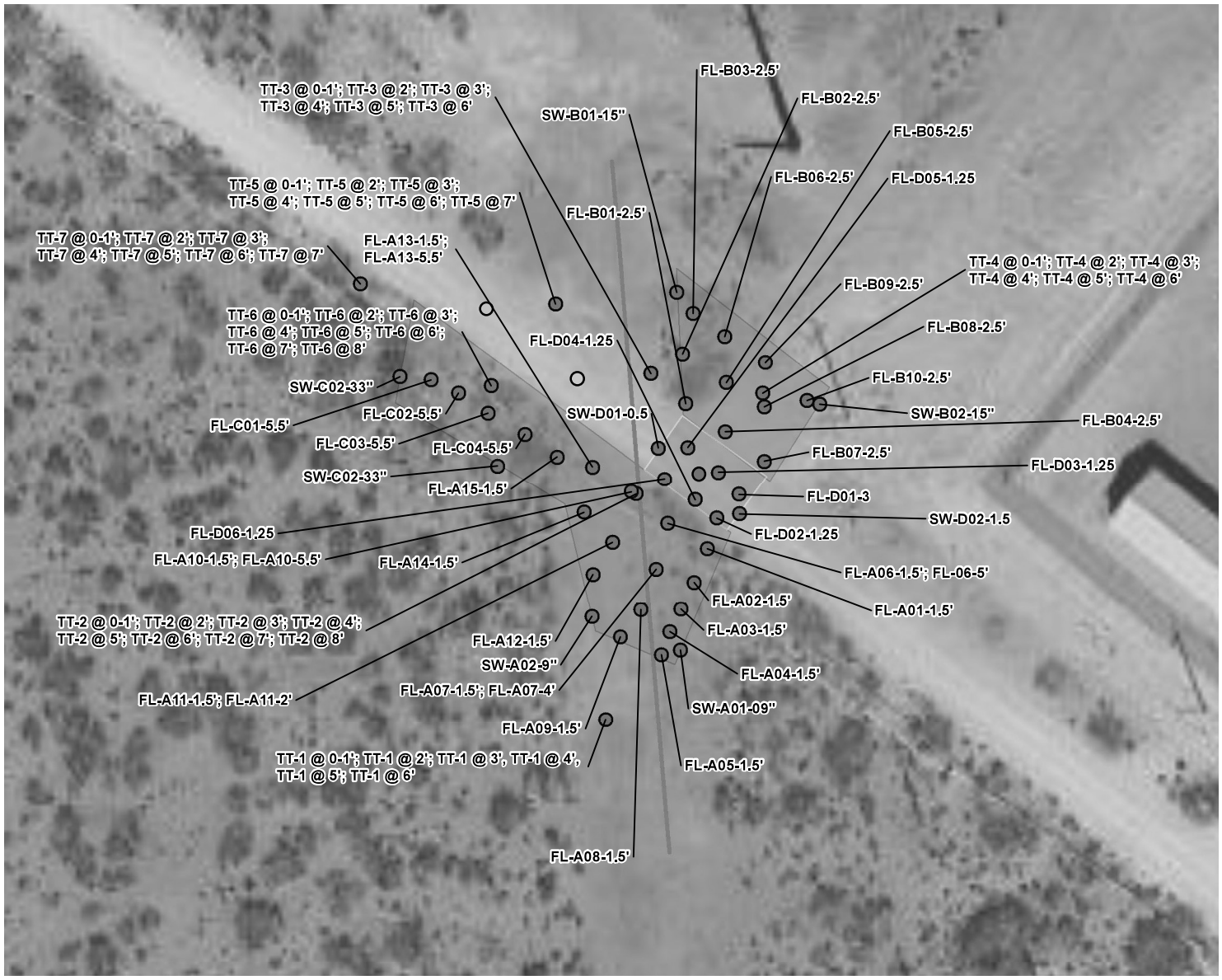
TITLE:

KARST POTENTIAL MAP

DRAWN BY:	S. RAY
CHECKED BY:	
APPROVED BY:	
DATE:	SEPTEMBER 2019
PROJ. NO.:	349719
FILE:	349719_3.mxd

FIGURE 3

S:\1-PROJECTS\ConchoResources\349719_CaboWabo\mxd\349719_4.mxd -- Saved By: SRAY on 1/30/2020, 13:54:41 PM



LEGEND

- Sample Location
- Road-1
- Road-2
- Road-3
- Enterprise High Pressure Pipeline
- Excavated Area

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

N

0 30 60

FEET

1 " = 60 FEET

1:720

TRC

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

TRC - GIS

PROJECT:

CABO WABO 25 FEDERAL 3H
EDDY COUNTY, NM

TITLE:

EXCAVATION AND SAMPLE LOCATION MAP

DRAWN BY:	S. RAY
CHECKED BY:	
APPROVED BY:	
DATE:	JANUARY 2020
PROJ. NO.:	349719
FILE:	349719_4.mxd

FIGURE 4

Appendix A: Photographic Documentation

COG- Cabo Wabo 25 Federal 3H
Date: 9/26/19

Photographic Documentation

Photograph No. 1 **Date:** **7/3/2019** **Direction:** **North** **Description:** **View of the impacted area.**	
Photograph No. 2 **Date:** **7/3/2019** **Direction:** **East** **Description:** **View of the impacted area.**	

COG- Cabo Wabo 25 Federal 3H
Date: 9/26/19

Photographic Documentation

Photograph No. 3 **Date:** **7/3/2019** **Direction:** **Northwest** **Description: View of impacted area.**	
Photograph No. 4 **Date:** **6/12/2018** **Direction:** **Northwest** **Description: View of impacted area.**	

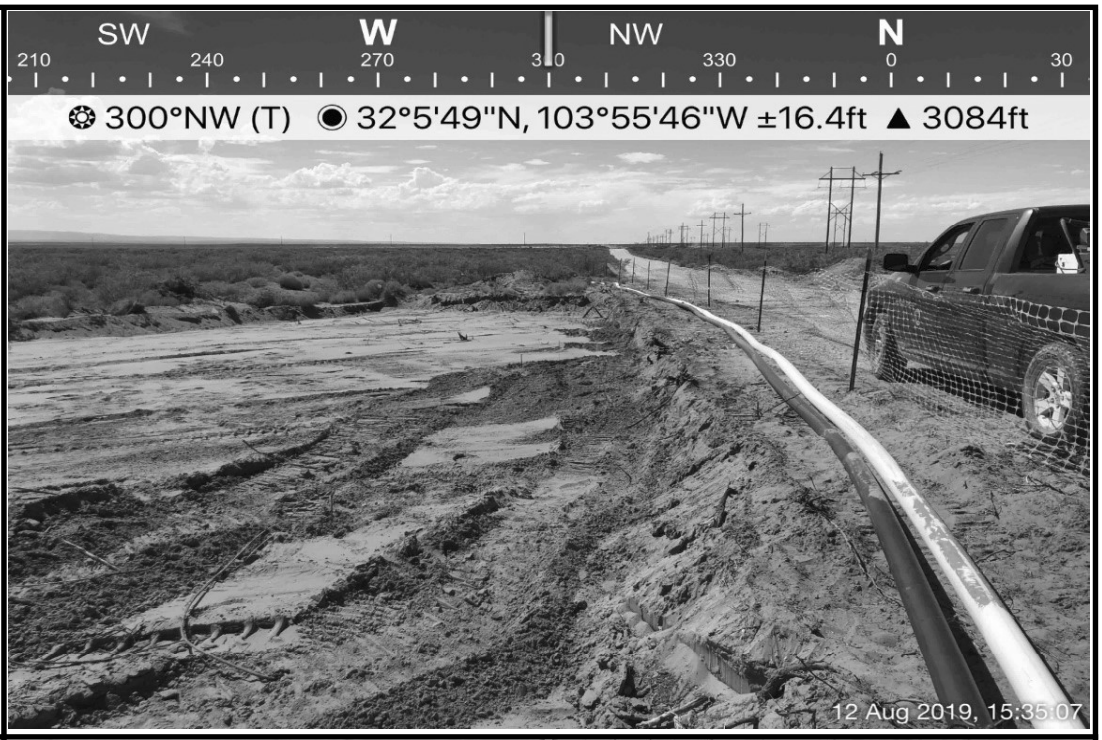
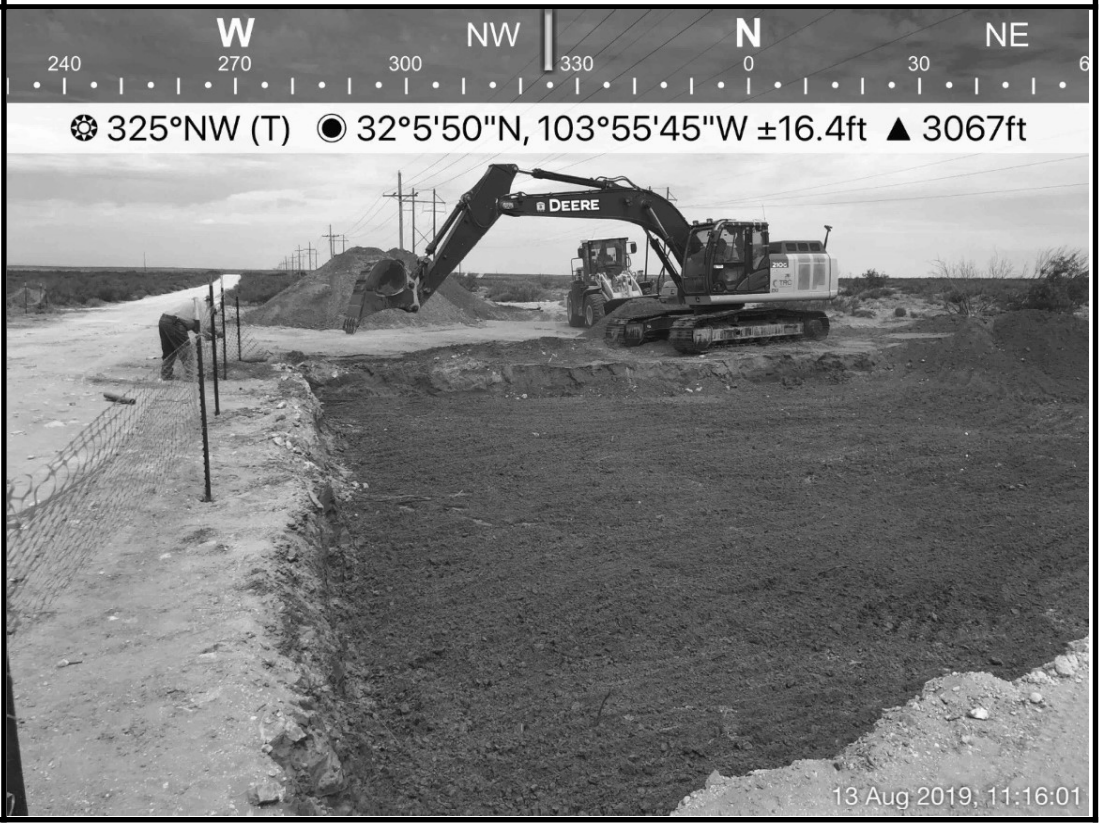
COG- Cabo Wabo 25 Federal 3H
Date: 9/26/2019

Photographic Documentation

Photograph No. 5 **Date:** **7/29/2019** **Direction:** **North** **Description:** **View of trench delineation.**	
Photograph No. 6 **Date:** **8/12/2019** **Direction:** **West** **Description:** **View of excavation activities.**	

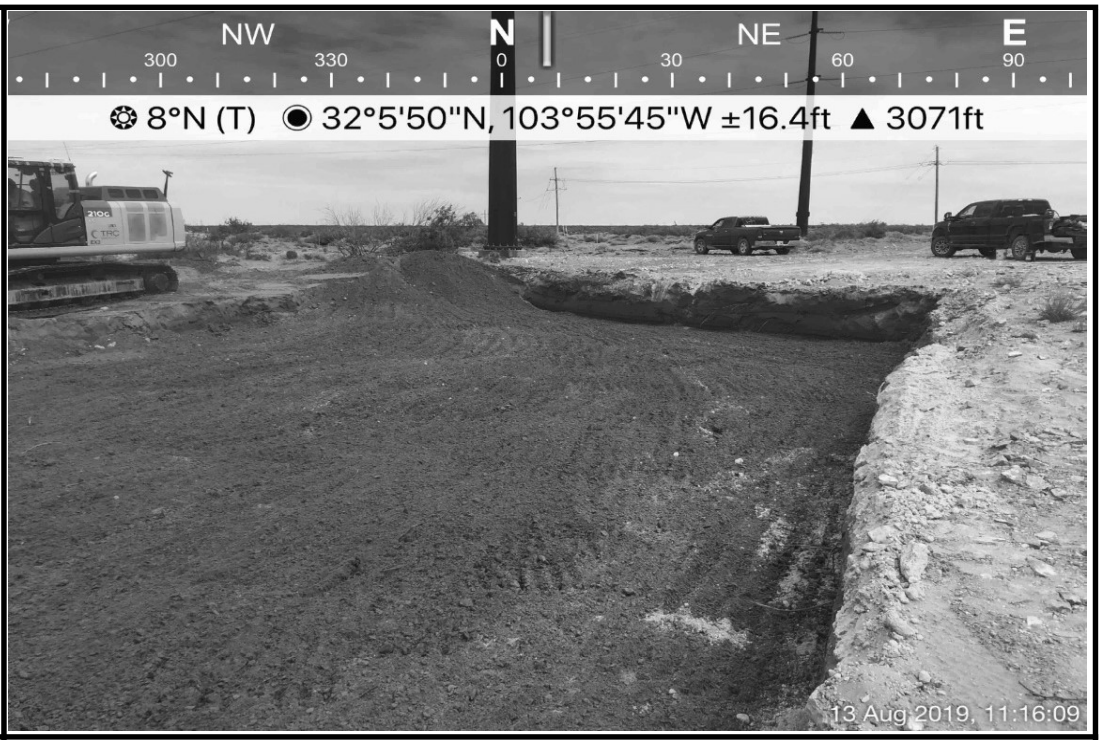
COG- Cabo Wabo 25 Federal 3H
Date: 9/26/19

Photographic Documentation

Photograph No. 5 **Date:** **8/12/2019** **Direction:** **North** **Description:** **View of excavation aactivities.**	
Photograph No. 6 **Date:** **8/13/2019** **Direction:** **North** **Description:** **View of excavation activities.**	

COG- Cabo Wabo 25 Federal 3H
Date: 9/26/2019

Photographic Documentation

Photograph No. 7 **Date:** **8/13/2019** **Direction:** **North** **Description:** **View of excavation activities.**	
Photograph No. 8 **Date:** **8/15/2019** **Direction:** **East** **Description:** **View of excavation activities.**	

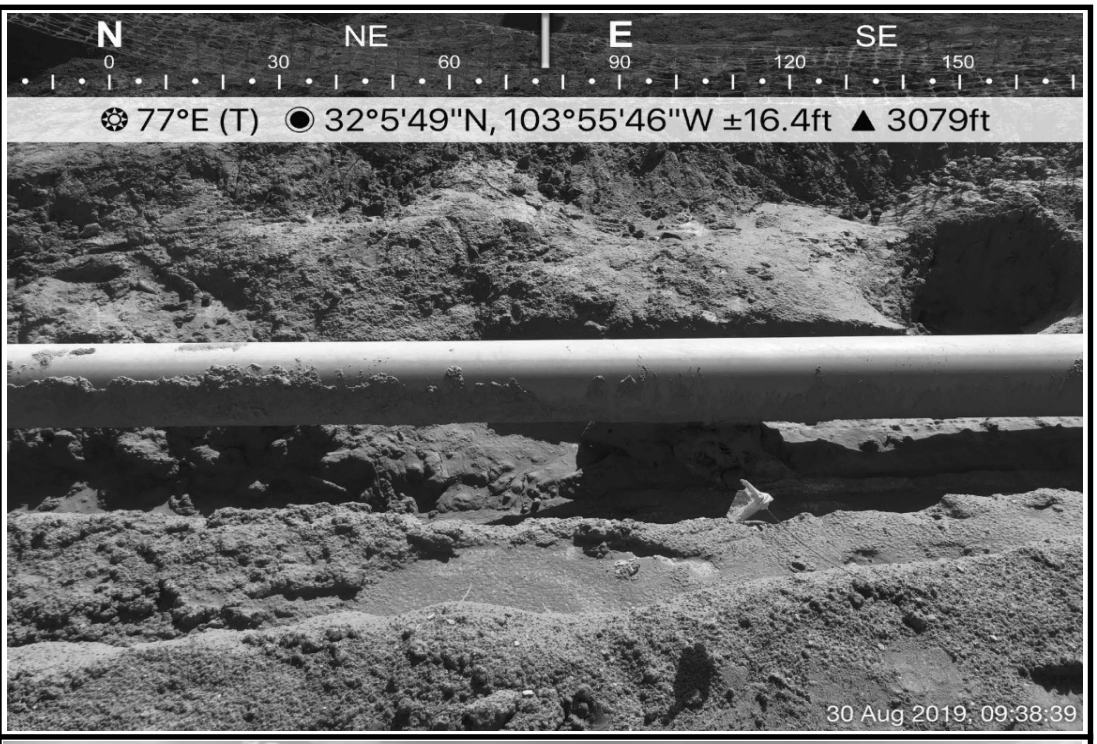
COG- Cabo Wabo 25 Federal 3H
Date: 9/26/2019

Photographic Documentation

Photograph No. 9 **Date:** **8/21/2019** **Direction:** **West** **Description:** **View of additional excavation activities in Area A.**	
Photograph No. 10 **Date:** **8/30/2019** **Direction:** **East** **Description:** **View of the Enlink high pressure pipeline.**	

COG- Cabo Wabo 25 Federal 3H
Date: 9/26/2019

Photographic Documentation

Photograph No. 11 **Date: 8/30/2019** **Direction: East** **Description: View of the Enlink high pressure pipeline.**	
Photograph No. 12 **Date: 9/4/2019** **Direction: West** **Description: View of remediated after backfill activities.**	

COG- Cabo Wabo 25 Federal 3H
Date: 9/26/2019

Photographic Documentation

Photograph No. 13 **Date: 9/4/2019** **Direction: North** **Description: View of remediated area after backfill activities.**	
Photograph No. 14 **Date: 9/4/2019** **Direction: West** **Description: View of the remediated area after backfill activities.**	

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): 600991.23 **Northing (Y):** 3551722 **Radius:** 305

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-basin Code	County	Source	q 6416	q 4	q	Sec	Tws	Rng	X	Y	Distance	Start Date	Finish Date	Log File Date	Depth Well	Depth Water	Driller	License Number
C 03782 POD1	CUB	ED	Artesian	4	3	3	28	25S	30E	604526	3551444	3545	01/16/2015	01/17/2015	02/19/2015	805	277	STEWART, JOEL H.	331
C 01360	CUB	ED	Shallow	4	3	3	05	26S	30E	602997	3548152	4094	04/26/1952	05/15/1952	11/17/1953	770	173		95
C 01361	CUB	ED	Shallow	3	4	3	05	26S	30E	603240	3548157	4214	05/16/1952	06/01/1952	11/17/1953	775	184		95
C 03581 POD1	CUB	ED	Shallow	4	4	4	05	26S	30E	604298	3548291	4764	11/01/2012	11/09/2012	11/13/2012	800	320	SIRMAN, JOHN (LD)	1654
C 03483	C	ED	Shallow	4	4	4	05	26S	30E	604296	3548251	4792	06/03/2011	06/08/2011	07/14/2011	700	200	BEAUREGARD, RICHARD	1509

Record Count: 5

UTMNAD83 Radius Search (in meters):

Easting (X): 600991.23 **Northing (Y):** 3551722 **Radius:** 5000

Appendix C: 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	NAB1916238377
District RP	2RP-5473
Facility ID	fAB1916238082
Application ID	pAB1916238178

Release Notification

Responsible Party

Responsible Party	COG Production, LLC	OGRID	217955
Contact Name	Jennifer Knowlton	Contact Telephone	(575) 748-1570
Contact email	JKnowlton@concho.com	Incident # *(assigned by OCD)*	NAB1916238377
Contact mailing address	600 West Illinois Avenue, Midland, Texas 79701		

Location of Release Source

Latitude 32.0973 Longitude -103.9297

(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Cabo Wabo 25 Federal Com #003H	Site Type	Flowline
Date Release Discovered	May 17, 2019	API# *(if applicable)*	

Unit Letter	Section	Township	Range	County
I	25	25S	29E	Eddy

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) 22	Volume Recovered (bbls) 0
	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

The release was caused by a hole in the flowline. The flowline has been repaired
The release was in the pasture. A vacuum truck was dispatched to remove all freestanding fluids. Concho will evaluate the site to determine if we may commence remediation immediately or delineate any possible impact from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation activities.

State of New Mexico
Oil Conservation Division

Incident ID	NAB1916238377
District RP	2RP-5473
Facility ID	fAB1916238082
Application ID	pAB1916238178

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 not 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: DeAnn Grant Title: HSE Administrative Assistant

Signature: DeAnn Grant Date: 6/4/2019

email: agrant@concho.com Telephone: (432) 253-4513

OCD Only

Received by: Amalia Bustamante Date: 6/11/2019

State of New Mexico
Oil Conservation Division

Incident ID	NAB1916238377
District RP	2RP-5473
Facility ID	fAB1916238082
Application ID	pAB1916238178

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

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	NAB1916238377
District RP	2RP-5473
Facility ID	fAB1916238082
Application ID	pAB1916238178

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 Tavarez Title: Senior HSE Coordinator

Signature:  Date: 9/26/19

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

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NAB1916238377
District RP	2RP-5473
Facility ID	fAB1916238082
Application ID	pAB1916238178

Closure

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

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

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

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

Printed Name: Ike Tavarez Title: Senior HSE Coordinator

Signature:  Date: 9/26/19

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

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

Appendix D: Analytical Laboratory Reports

Analytical Report 632555

for

TRC Solutions, Inc

Project Manager: Jared Stoffel

Cabo Wabo 25 Federal 3H

02-AUG-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-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)

02-AUG-19

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

Reference: XENCO Report No(s): **632555**
Cabo Wabo 25 Federal 3H
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) 632555. 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. 632555 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

Jessica Kramer
Project Assistant

Sample Cross Reference 632555

TRC Solutions, Inc, Midland, TX

Cabo Wabo 25 Federal 3H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
TT-3 @ 6'	S	07-29-19 09:30	6 ft	632555-001
TT-2 @ 8'	S	07-29-19 09:50	8 ft	632555-002
TT-6 @ 8'	S	07-29-19 10:00	8 ft	632555-003
TT-7 @ 7'	S	07-29-19 10:10	7 ft	632555-004
TT-1 @ 6'	S	07-29-19 10:20	6 ft	632555-005
TT-4 @ 6'	S	07-29-19 10:30	6 ft	632555-006
TT-1 @ 0-1'	S	07-29-19 10:40	0 - 1 ft	632555-007
TT-1@ 2'	S	07-29-19 10:45	2 ft	632555-008
TT-1 @ 3'	S	07-29-19 10:50	3 ft	632555-009
TT-1 @ 4'	S	07-29-19 10:55	4 ft	632555-010
TT-1 @ 5'	S	07-29-19 11:00	5 ft	632555-011
TT-2 @ 0-1'	S	07-29-19 11:01	0 - 1 ft	632555-012
TT-2@ 2'	S	07-29-19 11:05	2 ft	632555-013
TT-2 @ 3'	S	07-29-19 11:10	3 ft	632555-014
TT-2 @ 4'	S	07-29-19 11:15	4 ft	632555-015
TT-2 @ 5'	S	07-29-19 11:20	5 ft	632555-016
TT-2 @ 6'	S	07-29-19 11:25	6 ft	632555-017
TT-2 @ 7'	S	07-29-19 11:30	7 ft	632555-018
TT-3 @ 0-1'	S	07-29-19 11:40	0 - 1 ft	632555-019
TT-3 @ 2'	S	07-29-19 11:45	2 ft	632555-020
TT-3 @ 3'	S	07-29-19 11:50	3 ft	632555-021
TT-3 @ 4'	S	07-29-19 11:55	4 ft	632555-022
TT-3 @ 5'	S	07-29-19 12:00	5 ft	632555-023
TT-4 @ 0-1'	S	07-29-19 12:10	0 - 1 ft	632555-024
TT-4 @ 2'	S	07-29-19 12:15	2 ft	632555-025
TT-4 @ 3'	S	07-29-19 12:20	3 ft	632555-026
TT-4 @ 4'	S	07-29-19 12:25	4 ft	632555-027
TT-4 @ 5'	S	07-29-19 12:30	5 ft	632555-028
TT-5 @ 0-1'	S	07-29-19 12:40	0 - 1 ft	632555-029
TT-5 @ 2'	S	07-29-19 12:45	2 ft	632555-030
TT-5 @ 3'	S	07-29-19 12:50	3 ft	632555-031
TT-5 @ 4'	S	07-29-19 12:55	4 ft	632555-032
TT-5 @ 5'	S	07-29-19 13:00	5 ft	632555-033
TT-5 @ 6'	S	07-29-19 13:05	6 ft	632555-034
TT-5 @ 7'	S	07-29-19 13:10	7 ft	632555-035
TT-6 @ 0-1'	S	07-29-19 13:20	0 - 1 ft	632555-036
TT-6 @ 2'	S	07-29-19 13:25	2 ft	632555-037
TT-6 @ 3'	S	07-29-19 13:30	3 ft	632555-038
TT-6 @ 4'	S	07-29-19 13:35	4 ft	632555-039
TT-6 @ 5'	S	07-29-19 13:40	5 ft	632555-040
TT-6 @ 6'	S	07-29-19 13:45	6 ft	632555-041
TT-6 @ 7'	S	07-29-19 13:50	7 ft	632555-042
TT-7 @ 0-1'	S	07-29-19 14:00	0 - 1 ft	632555-043

TRC Solutions, Inc, Midland, TX

Cabo Wabo 25 Federal 3H

TT-7 @ 2'	S	07-29-19 14:05	2 ft	632555-044
TT-7 @ 3'	S	07-29-19 14:10	3 ft	632555-045
TT-7 @ 4'	S	07-29-19 14:15	4 ft	632555-046
TT-7 @ 5'	S	07-29-19 14:20	5 ft	632555-047
TT-7 @ 6'	S	07-29-19 14:25	6 ft	632555-048

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3097147 Chloride by EPA 300

Lab Sample ID 632555-014 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: 632555-004, -005, -006, -007, -008, -009, -010, -011, -012, -013, -014, -015, -016, -017, -018, -019, -020, -021, -022, -023.

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

Certificate of Analysis Summary 632555

TRC Solutions, Inc, Midland, TX

Project Name: Cabo Wabo 25 Federal 3H

Project Id:
Contact: Jared Stoffel
Project Location:

Date Received in Lab: Wed Jul-31-19 09:59 am
Report Date: 02-AUG-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	632555-001		632555-002		632555-003		632555-004		632555-005		632555-006	
	Field Id:	TT-3 @ 6'		TT-2 @ 8'		TT-6 @ 8'		TT-7 @ 7'		TT-1 @ 6'		TT-4 @ 6'	
	Depth:	6- ft		8- ft		8- ft		7- ft		6- ft		6- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jul-29-19 09:30		Jul-29-19 09:50		Jul-29-19 10:00		Jul-29-19 10:10		Jul-29-19 10:20		Jul-29-19 10:30	
Chloride by EPA 300	***Extracted:***	Jul-31-19 12:00		Jul-31-19 12:00		Jul-31-19 12:00		Jul-31-19 13:30		Jul-31-19 13:30		Jul-31-19 13:30	
	Analyzed:	Jul-31-19 17:44		Jul-31-19 18:06		Jul-31-19 18:13		Jul-31-19 15:50		Jul-31-19 16:31		Jul-31-19 16:44	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		18.3	4.95	5.83	4.96	104	4.99	11.7	4.95	6.24	4.95	7.55	4.99

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 632555

TRC Solutions, Inc, Midland, TX

Project Name: Cabo Wabo 25 Federal 3H

Project Id:
Contact: Jared Stoffel
Project Location:

Date Received in Lab: Wed Jul-31-19 09:59 am
Report Date: 02-AUG-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	632555-007		632555-008		632555-009		632555-010		632555-011		632555-012	
	Field Id:	TT-1 @ 0-1'		TT-1@ 2'		TT-1 @ 3'		TT-1 @ 4'		TT-1 @ 5'		TT-2 @ 0-1'	
	Depth:	0-1 ft		2- ft		3- ft		4- ft		5- ft		0-1 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jul-29-19 10:40		Jul-29-19 10:45		Jul-29-19 10:50		Jul-29-19 10:55		Jul-29-19 11:00		Jul-29-19 11:01	
Chloride by EPA 300	***Extracted:***	Jul-31-19 13:30		Jul-31-19 13:30		Jul-31-19 13:30		Jul-31-19 13:30		Jul-31-19 13:30		Jul-31-19 13:30	
	Analyzed:	Jul-31-19 16:58		Jul-31-19 17:11		Jul-31-19 17:52		Jul-31-19 18:06		Jul-31-19 18:19		Jul-31-19 18:33	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		<5.00	5.00	5.16	5.00	7.05	4.99	<4.99	4.99	<4.99	4.99	1120	4.98

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 632555

TRC Solutions, Inc, Midland, TX

Project Name: Cabo Wabo 25 Federal 3H

Project Id:
Contact: Jared Stoffel
Project Location:

Date Received in Lab: Wed Jul-31-19 09:59 am
Report Date: 02-AUG-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	632555-013		632555-014		632555-015		632555-016		632555-017		632555-018	
	Field Id:	TT-2@ 2'		TT-2 @ 3'		TT-2 @ 4'		TT-2 @ 5'		TT-2 @ 6'		TT-2 @ 7'	
	Depth:	2- ft		3- ft		4- ft		5- ft		6- ft		7- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jul-29-19 11:05		Jul-29-19 11:10		Jul-29-19 11:15		Jul-29-19 11:20		Jul-29-19 11:25		Jul-29-19 11:30	
Chloride by EPA 300	***Extracted:***	Jul-31-19 13:30		Jul-31-19 13:30		Jul-31-19 13:30		Jul-31-19 13:30		Jul-31-19 13:30		Jul-31-19 13:30	
	Analyzed:	Jul-31-19 18:46		Jul-31-19 19:00		Jul-31-19 19:41		Jul-31-19 19:54		Jul-31-19 20:35		Jul-31-19 20:49	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		21.4	4.99	73.9	4.98	6.79	4.99	<4.99	4.99	<4.99	4.99	<4.96	4.96

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 632555

TRC Solutions, Inc, Midland, TX

Project Name: Cabo Wabo 25 Federal 3H

Project Id:
Contact: Jared Stoffel
Project Location:

Date Received in Lab: Wed Jul-31-19 09:59 am
Report Date: 02-AUG-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	632555-019		632555-020		632555-021		632555-022		632555-023		632555-024	
	Field Id:	TT-3 @ 0-1'		TT-3 @ 2'		TT-3 @ 3'		TT-3 @ 4'		TT-3 @ 5'		TT-4 @ 0-1'	
	Depth:	0-1 ft		2- ft		3- ft		4- ft		5- ft		0-1 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jul-29-19 11:40		Jul-29-19 11:45		Jul-29-19 11:50		Jul-29-19 11:55		Jul-29-19 12:00		Jul-29-19 12:10	
Chloride by EPA 300	***Extracted:***	Jul-31-19 13:30		Jul-31-19 13:30		Jul-31-19 13:30		Jul-31-19 13:30		Jul-31-19 13:30		Aug-01-19 11:00	
	Analyzed:	Jul-31-19 21:02		Jul-31-19 21:16		Jul-31-19 21:29		Jul-31-19 21:43		Jul-31-19 21:57		Aug-01-19 11:47	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		375	4.98	13.0	4.99	6.04	4.99	37.6	4.96	<4.99	4.99	532	4.96

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 632555

TRC Solutions, Inc, Midland, TX

Project Name: Cabo Wabo 25 Federal 3H

Project Id:
Contact: Jared Stoffel
Project Location:

Date Received in Lab: Wed Jul-31-19 09:59 am
Report Date: 02-AUG-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	632555-025		632555-026		632555-027		632555-028		632555-029		632555-030	
	Field Id:	TT-4 @ 2'		TT-4 @ 3'		TT-4 @ 4'		TT-4 @ 5'		TT-5 @ 0-1'		TT-5 @ 2'	
	Depth:	2- ft		3- ft		4- ft		5- ft		0-1 ft		2- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jul-29-19 12:15		Jul-29-19 12:20		Jul-29-19 12:25		Jul-29-19 12:30		Jul-29-19 12:40		Jul-29-19 12:45	
Chloride by EPA 300	***Extracted:***	Aug-01-19 11:00		Aug-01-19 11:00		Aug-01-19 11:00		Aug-01-19 11:00		Aug-01-19 11:00		Aug-01-19 11:00	
	Analyzed:	Aug-01-19 12:03		Aug-01-19 12:08		Aug-01-19 12:14		Aug-01-19 12:19		Aug-01-19 12:35		Aug-01-19 12:41	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1250	5.05	429	4.96	6.69	5.04	<4.98	4.98	<5.00	5.00	<4.95	4.95

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 632555

TRC Solutions, Inc, Midland, TX

Project Name: Cabo Wabo 25 Federal 3H

Project Id:
Contact: Jared Stoffel
Project Location:

Date Received in Lab: Wed Jul-31-19 09:59 am
Report Date: 02-AUG-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	632555-031		632555-032		632555-033		632555-034		632555-035		632555-036	
	Field Id:	TT-5 @ 3'		TT-5 @ 4'		TT-5 @ 5'		TT-5 @ 6'		TT-5 @ 7'		TT-6 @ 0-1'	
	Depth:	3- ft		4- ft		5- ft		6- ft		7- ft		0-1 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jul-29-19 12:50		Jul-29-19 12:55		Jul-29-19 13:00		Jul-29-19 13:05		Jul-29-19 13:10		Jul-29-19 13:20	
Chloride by EPA 300	***Extracted:***	Aug-01-19 11:00		Aug-01-19 11:00		Aug-01-19 11:00		Aug-01-19 11:00		Aug-01-19 11:00		Aug-01-19 11:00	
	Analyzed:	Aug-01-19 12:46		Aug-01-19 12:52		Aug-01-19 12:57		Aug-01-19 13:03		Aug-01-19 13:19		Aug-01-19 13:24	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		<4.97	4.97	5.16	4.99	<5.03	5.03	<5.02	5.02	5.80	4.98	99.1	4.95

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 632555

TRC Solutions, Inc, Midland, TX

Project Name: Cabo Wabo 25 Federal 3H

Project Id:
Contact: Jared Stoffel
Project Location:

Date Received in Lab: Wed Jul-31-19 09:59 am
Report Date: 02-AUG-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	632555-037		632555-038		632555-039		632555-040		632555-041		632555-042	
	Field Id:	TT-6 @ 2'		TT-6 @ 3'		TT-6 @ 4'		TT-6 @ 5'		TT-6 @ 6'		TT-6 @ 7'	
	Depth:	2- ft		3- ft		4- ft		5- ft		6- ft		7- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jul-29-19 13:25		Jul-29-19 13:30		Jul-29-19 13:35		Jul-29-19 13:40		Jul-29-19 13:45		Jul-29-19 13:50	
Chloride by EPA 300	***Extracted:***	Aug-01-19 11:00		Aug-01-19 11:00		Aug-01-19 11:00		Aug-01-19 11:00		Aug-01-19 11:00		Aug-01-19 11:00	
	Analyzed:	Aug-01-19 13:40		Aug-01-19 13:46		Aug-01-19 13:51		Aug-01-19 13:57		Aug-01-19 14:02		Aug-01-19 14:08	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1110	4.99	2760	24.9	187	4.98	4950	24.9	23.3	5.02	71.7	5.05

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 632555

TRC Solutions, Inc, Midland, TX

Project Name: Cabo Wabo 25 Federal 3H

Project Id:
Contact: Jared Stoffel
Project Location:

Date Received in Lab: Wed Jul-31-19 09:59 am
Report Date: 02-AUG-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	632555-043		632555-044		632555-045		632555-046		632555-047		632555-048	
	Field Id:	TT-7 @ 0-1'		TT-7 @ 2'		TT-7 @ 3'		TT-7 @ 4'		TT-7 @ 5'		TT-7 @ 6'	
	Depth:	0-1 ft		2- ft		3- ft		4- ft		5- ft		6- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jul-29-19 14:00		Jul-29-19 14:05		Jul-29-19 14:10		Jul-29-19 14:15		Jul-29-19 14:20		Jul-29-19 14:25	
Chloride by EPA 300	***Extracted:***	Aug-01-19 11:00		Aug-01-19 08:30		Aug-01-19 08:30		Aug-01-19 08:30		Aug-01-19 08:30		Aug-01-19 08:30	
	Analyzed:	Aug-01-19 14:13		Aug-01-19 12:27		Aug-01-19 12:33		Aug-01-19 12:52		Aug-01-19 12:59		Aug-01-19 13:18	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		32.9	5.05	17.2	4.97	32.3	4.98	<5.04	5.04	9.41	5.05	6.49	5.03

Jessica Kramer
Project Assistant

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

BS / BSD Recoveries

Project Name: Cabo Wabo 25 Federal 3H

Work Order #: 632555 **Project ID:**

Analyst: SPC **Date Prepared:** 07/31/2019 **Date Analyzed:** 07/31/2019

Lab Batch ID: 3097144 **Sample:** 7683282-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	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
Chloride	<5.00	250	269	108	250	269	108	0	90-110	20	

Analyst: SPC **Date Prepared:** 07/31/2019 **Date Analyzed:** 07/31/2019

Lab Batch ID: 3097147 **Sample:** 7683284-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	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
Chloride	<5.00	250	253	101	250	254	102	0	90-110	20	

Analyst: SPC **Date Prepared:** 08/01/2019 **Date Analyzed:** 08/01/2019

Lab Batch ID: 3097154 **Sample:** 7683285-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	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
Chloride	<5.00	250	254	102	250	255	102	0	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

BS / BSD Recoveries

Project Name: Cabo Wabo 25 Federal 3H

Work Order #: 632555 **Project ID:**

Analyst: SPC **Date Prepared:** 08/01/2019 **Date Analyzed:** 08/01/2019

Lab Batch ID: 3097295 **Sample:** 7683286-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	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
Chloride	<5.00	250	269	108	250	267	107	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: Cabo Wabo 25 Federal 3H

Work Order # : 632555 **Project ID:**

Lab Batch ID: 3097144 **QC- Sample ID:** 632289-003 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 07/31/2019 **Date Prepared:** 07/31/2019 **Analyst:** SPC

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	22.9	253	298	109	253	297	108	0	90-110	20	

Lab Batch ID: 3097144 **QC- Sample ID:** 632555-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 07/31/2019 **Date Prepared:** 07/31/2019 **Analyst:** SPC

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	18.3	248	283	107	248	282	106	0	90-110	20	

Lab Batch ID: 3097147 **QC- Sample ID:** 632555-004 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 07/31/2019 **Date Prepared:** 07/31/2019 **Analyst:** SPC

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	11.7	248	268	103	248	270	104	1	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.

Form 3 - MS / MSD Recoveries

Project Name: Cabo Wabo 25 Federal 3H

Work Order # : 632555 **Project ID:**

Lab Batch ID: 3097147 **QC- Sample ID:** 632555-014 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 07/31/2019 **Date Prepared:** 07/31/2019 **Analyst:** SPC

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	73.9	249	350	111	249	350	111	0	90-110	20	X

Lab Batch ID: 3097154 **QC- Sample ID:** 632555-045 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/01/2019 **Date Prepared:** 08/01/2019 **Analyst:** SPC

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	32.3	249	294	105	249	294	105	0	90-110	20	

Lab Batch ID: 3097154 **QC- Sample ID:** 632558-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/01/2019 **Date Prepared:** 08/01/2019 **Analyst:** SPC

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	344	250	617	109	250	619	110	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.

Form 3 - MS / MSD Recoveries

Project Name: Cabo Wabo 25 Federal 3H

Work Order # : 632555 **Project ID:**

Lab Batch ID: 3097295 **QC- Sample ID:** 632555-024 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/01/2019 **Date Prepared:** 08/01/2019 **Analyst:** SPC

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	532	248	779	100	248	775	98	1	90-110	20	

Lab Batch ID: 3097295 **QC- Sample ID:** 632555-034 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 08/01/2019 **Date Prepared:** 08/01/2019 **Analyst:** SPC

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	3.11	251	276	109	251	273	108	1	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.

Chain of Custody

Work Order No: 437555

XENCO LABORATORIES

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) www.xenco.com Page 1 of 5

Project Manager:	Jared Stoffel	Bill to: (if different)	Ike Tavarez
Company Name:	TRC	Company Name:	COG
Address:	10 Desta Dr. STE 150 E	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	(432) 238-3003 Email:	JStoffel@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:	Cabo Wabo 25 Federal 3H	Turn Around	
Project Number:		Routine ☐	
P.O. Number:		Rush: ~~24hrs~~ 72hrs	
Sampler's Name:	Tania Babu	Due Date: 72hrs	

SAMPLE RECEIPT	Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	0.4/0.9	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 Containers	Chloride (E300)
TT-3 @ 6'	ss	7/29/2019	9:30	6'	1	x
TT-2 @ 8'	ss	7/29/2019	9:50	8'	1	x
TT-6 @ 8'	ss	7/29/2019	10:00	8'	1	x
TT-7 @ 7'	ss	7/29/2019	10:10	7'	1	x
TT-1 @ 6'	ss	7/29/2019	10:20	6'	1	x
TT-4 @ 6'	ss	7/29/2019	10:30	6'	1	x
TT-1 @ 0-1'	ss	7/29/2019	10:40	0-1'	1	x
TT-1 @ 2'	ss	7/29/2019	10:45	2'	1	x
TT-1 @ 3'	ss	7/29/2019	10:50	3'	1	x
TT-1 @ 4'	ss	7/29/2019	10:55	4'	1	x

ANALYSIS REQUEST

Work Order Notes

TAT starts the day recevied 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 Tl 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 Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		7/31/19 0959	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Final 1.000

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Chain of Custody

Work Order No: 423555

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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) www.xenco.com

Project Manager:	Jared Stoffel	Bill to: (if different)	Ike Tavarez
Company Name:	TRC	Company Name:	COG
Address:	10 Desta Dr. STE 150 E	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	(432) 238-3003	Email:	JStoffel@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:	Cabo Wabo 25 Federal 3H	Turn Around	
Project Number:		Routine ☐	
P.O. Number:		Rush: ~~24hrs~~ 72hrs TB	
Sampler's Name:	Tania Babu	Due Date: 72hrs	

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Temperature (°C):	0.4	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 Containers	Chloride (E300)	Work Order Notes / Sample Comments
TT-1 @ 5'	ss	7/29/2019	11:00	5'	1	x	
TT-2 @ 0-1'	ss	7/29/2019	11:01	0-1'	1	x	
TT-2 @ 2'	ss	7/29/2019	11:05	2'	1	x	
TT-2 @ 3'	ss	7/29/2019	11:10	3'	1	x	
TT-2 @ 4'	ss	7/29/2019	11:15	4'	1	x	
TT-2 @ 5'	ss	7/29/2019	11:20	5'	1	x	
TT-2 @ 6'	ss	7/29/2019	11:25	6'	1	x	
TT-2 @ 7'	ss	7/29/2019	11:30	7'	1	x	
TT-3 @ 0-1'	ss	7/29/2019	11:40	0-1'	1	x	
TT-3 @ 2'	ss	7/29/2019	11:45	2'	1	x	

TAT starts the day recevied 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 Tl 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 Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		7/31/19 0959	2		
3			4		
5			6		

Chain of Custody

Work Order No: 623555

XENCO LABORATORIES

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Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000) www.xenco.com Page 3 of 5

Project Manager:	Jared Stoffel	Bill to: (if different)	Ike Tavarez
Company Name:	TRC	Company Name:	COG
Address:	10 Desta Dr. STE 150 E	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	(432) 238-3003	Email:	JStoffel@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:	Cabo Wabo 25 Federal 3H	Turn Around	
Project Number:		Routine ☐	
P.O. Number:		Rush: ~~24hrs~~ 72 hrs TR	
Sampler's Name:	Tania Babu	Due Date: 72hrs	

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Temperature (°C):	0.5	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 Containers	Chloride (E300)	Work Order Notes
TT-3 @ 3'	ss	7/29/2019	11:50	3'	1	x	
TT-3 @ 4'	ss	7/29/2019	11:55	4'	1	x	
TT-3 @ 5'	ss	7/29/2019	12:00	5'	1	x	
TT-4 @ 0-1'	ss	7/29/2019	12:10	0-1'	1	x	
TT-4 @ 2'	ss	7/29/2019	12:15	2'	1	x	
TT-4 @ 3'	ss	7/29/2019	12:20	3'	1	x	
TT-4 @ 4'	ss	7/29/2019	12:25	4'	1	x	
TT-4 @ 5'	ss	7/29/2019	12:30	5'	1	x	
TT-5 @ 0-1'	ss	7/29/2019	12:40	0-1'	1	x	
TT-5 @ 2'	ss	7/29/2019	12:45	2'	1	x	

ANALYSIS REQUEST

TAT starts the day recevied 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 Tl 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 Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		7/31/19 0854	2		
3			4		
5			6		

Chain of Custody

Work Order No: 632555

XENCO LABORATORIES

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Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000) www.xenco.com Page 4 of 5

Project Manager:	Jared Stoffel	Bill to: (if different)	Ike Tavarez
Company Name:	TRC	Company Name:	COG
Address:	10 Desta Dr. STE 150 E	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	(432) 238-3003	Email:	JStoffel@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:	Cabo Wabo 25 Federal 3H	Turn Around	
Project Number:		Routine ☐ TR	
P.O. Number:		Rush: ~~24hrs~~ 72 hr	
Sampler's Name:	Tania Babu	Due Date: 72hrs	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	0.6	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 Containers	Chloride (E300)
TT-5 @ 3'	ss	7/29/2019	12:50	3'	1	x
TT-5 @ 4'	ss	7/29/2019	12:55	4'	1	x
TT-5 @ 5'	ss	7/29/2019	13:00	5'	1	x
TT-5 @ 6'	ss	7/29/2019	13:05	6'	1	x
TT-5 @ 7'	ss	7/29/2019	13:10	7'	1	x
TT-6 @ 0-1'	ss	7/29/2019	13:20	0-1'	1	x
TT-6 @ 2'	ss	7/29/2019	13:25	2'	1	x
TT-6 @ 3'	ss	7/29/2019	13:30	3'	1	x
TT-6 @ 4'	ss	7/29/2019	13:35	4'	1	x
TT-6 @ 5'	ss	7/29/2019	13:40	5'	1	x

ANALYSIS REQUEST

Work Order Notes

TAT starts the day recevied 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 Tl 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 Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		7/31/19 0959	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Final 1.000

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Chain of Custody

Work Order No: 632555

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Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000) www.xenco.com Page 5 of 5

Project Manager:	Jared Stoffel	Bill to: (if different)	Ike Tavarez
Company Name:	TRC	Company Name:	COG
Address:	10 Desta Dr. STE 150 E	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	(432) 238-3003	Email:	JStoffel@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:	Cabo Wabo 25 Federal 3H	Turn Around	
Project Number:		Routine ☐ TAT	
P.O. Number:		Rush: ~~24hrs~~ 72 hrs	
Sampler's Name:	Tania Babu	Due Date: 72hrs	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):	0.1/0.4	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 Containers	Chloride (E300)	ANALYSIS REQUEST	Work Order Notes
TT-6 @ 6'	ss	7/29/2019	13:45	6'	1	x		
TT-6 @ 7'	ss	7/29/2019	13:50	7'	1	x		TAT starts the day recevied by the lab, if received by 4:30pm
TT-7 @ 0-1'	ss	7/29/2019	14:00	0-1'	1	x		
TT-7 @ 2'	ss	7/29/2019	14:05	2'	1	x		
TT-7 @ 3'	ss	7/29/2019	14:10	3'	1	x		
TT-7 @ 4'	ss	7/29/2019	14:15	4'	1	x		
TT-7 @ 5'	ss	7/29/2019	14:20	5'	1	x		
TT-7 @ 6'	ss	7/29/2019	14:25	6'	1	x		

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 Tl 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 Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	BATCH	7/31/19 0959	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Final 1.000

Page 24 of 25

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 07/31/2019 09:59:00 AM

Work Order #: 632555

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

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.4
#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 Date: 07/31/2019

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 07/31/2019

Jessica Kramer

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

August 14, 2019

JARED STOFFEL

TRC

10 DESTA DR. SUITE 150 E

MIDLAND, TX 79705

RE: CABO WABO 25 FEDERAL COM #003

Enclosed are the results of analyses for samples received by the laboratory on 08/13/19 13:55.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

August 16, 2019

JARED STOFFEL

TRC

10 DESTA DR. SUITE 150 E

MIDLAND, TX 79705

RE: CABO WABO 25 FEDERAL COM #003

Enclosed are the results of analyses for samples received by the laboratory on 08/14/19 15:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Total Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TRC 10 DESTA DR. SUITE 150 E MIDLAND TX, 79705	Project: CABO WABO 25 FEDERAL COM #0 Project Number: NONE GIVEN Project Manager: JARED STOFFEL Fax To:	Reported: 16-Aug-19 09:14

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FL - B01 - 2.5'	H902792-01	Soil	14-Aug-19 09:00	14-Aug-19 15:40
FL - B02 - 2.5'	H902792-02	Soil	14-Aug-19 09:05	14-Aug-19 15:40
FL - B03 - 2.5'	H902792-03	Soil	14-Aug-19 09:10	14-Aug-19 15:40
FL - B04 - 2.5'	H902792-04	Soil	14-Aug-19 09:15	14-Aug-19 15:40
FL - B05 - 2.5'	H902792-05	Soil	14-Aug-19 09:20	14-Aug-19 15:40
FL - B06 - 2.5'	H902792-06	Soil	14-Aug-19 11:30	14-Aug-19 15:40
FL - B07 - 2.5'	H902792-07	Soil	14-Aug-19 09:30	14-Aug-19 15:40
FL - B08 - 2.5'	H902792-08	Soil	14-Aug-19 09:35	14-Aug-19 15:40
FL - B09 - 2.5'	H902792-09	Soil	14-Aug-19 11:35	14-Aug-19 15:40
FL - B10 - 2.5'	H902792-10	Soil	14-Aug-19 11:40	14-Aug-19 15:40
FL - C01 - 5.5'	H902792-11	Soil	14-Aug-19 12:30	14-Aug-19 15:40
FL - C02 - 5.5'	H902792-12	Soil	14-Aug-19 12:35	14-Aug-19 15:40
FL - C03 - 5.5'	H902792-13	Soil	14-Aug-19 12:40	14-Aug-19 15:40
FL - C04 - 5.5'	H902792-14	Soil	14-Aug-19 12:45	14-Aug-19 15:40

Client requested a re-extract for chloride on sample -04. Sample was re-extracted and analyzed. This is the revised report and will replace the one sent on 08/15/19.

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TRC 10 DESTA DR. SUITE 150 E MIDLAND TX, 79705	Project: CABO WABO 25 FEDERAL COM #0 Project Number: NONE GIVEN Project Manager: JARED STOFFEL Fax To:	Reported: 16-Aug-19 09:14

FL - B01 - 2.5'

H902792-01 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**336**		16.0	mg/kg	4	9081508	AC	15-Aug-19	4500-Cl-B	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TRC 10 DESTA DR. SUITE 150 E MIDLAND TX, 79705	Project: CABO WABO 25 FEDERAL COM #0 Project Number: NONE GIVEN Project Manager: JARED STOFFEL Fax To:	Reported: 16-Aug-19 09:14

FL - B02 - 2.5'

H902792-02 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**96.0**		16.0	mg/kg	4	9081508	AC	15-Aug-19	4500-Cl-B	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TRC 10 DESTA DR. SUITE 150 E MIDLAND TX, 79705	Project: CABO WABO 25 FEDERAL COM #0 Project Number: NONE GIVEN Project Manager: JARED STOFFEL Fax To:	Reported: 16-Aug-19 09:14

FL - B03 - 2.5'

H902792-03 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**48.0**		16.0	mg/kg	4	9081508	AC	15-Aug-19	4500-Cl-B	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TRC 10 DESTA DR. SUITE 150 E MIDLAND TX, 79705	Project: CABO WABO 25 FEDERAL COM #0 Project Number: NONE GIVEN Project Manager: JARED STOFFEL Fax To:	Reported: 16-Aug-19 09:14

FL - B04 - 2.5'

H902792-04 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**576**		16.0	mg/kg	4	9081508	AC	15-Aug-19	4500-Cl-B	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TRC 10 DESTA DR. SUITE 150 E MIDLAND TX, 79705	Project: CABO WABO 25 FEDERAL COM #0 Project Number: NONE GIVEN Project Manager: JARED STOFFEL Fax To:	Reported: 16-Aug-19 09:14

FL - B05 - 2.5'

H902792-05 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**448**		16.0	mg/kg	4	9081508	AC	15-Aug-19	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	9081413	ms	15-Aug-19	8021B	
Toluene*	<0.050		0.050	mg/kg	50	9081413	ms	15-Aug-19	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	9081413	ms	15-Aug-19	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	9081413	ms	15-Aug-19	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	9081413	ms	15-Aug-19	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*96.9 %*	*73.3-129*		*9081413*	ms	*15-Aug-19*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	9081411	MS	15-Aug-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9081411	MS	15-Aug-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9081411	MS	15-Aug-19	8015B	
Surrogate: 1-Chlorooctane			*103 %*	*41-142*		*9081411*	MS	*15-Aug-19*	*8015B*	
Surrogate: 1-Chlorooctadecane			*107 %*	*37.6-147*		*9081411*	MS	*15-Aug-19*	*8015B*	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TRC 10 DESTA DR. SUITE 150 E MIDLAND TX, 79705	Project: CABO WABO 25 FEDERAL COM #0 Project Number: NONE GIVEN Project Manager: JARED STOFFEL Fax To:	Reported: 16-Aug-19 09:14

FL - B06 - 2.5'

H902792-06 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**80.0**		16.0	mg/kg	4	9081509	AC	15-Aug-19	4500-Cl-B	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TRC 10 DESTA DR. SUITE 150 E MIDLAND TX, 79705	Project: CABO WABO 25 FEDERAL COM #0 Project Number: NONE GIVEN Project Manager: JARED STOFFEL Fax To:	Reported: 16-Aug-19 09:14

FL - B07 - 2.5'

H902792-07 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**416**		16.0	mg/kg	4	9081509	AC	15-Aug-19	4500-Cl-B	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TRC 10 DESTA DR. SUITE 150 E MIDLAND TX, 79705	Project: CABO WABO 25 FEDERAL COM #0 Project Number: NONE GIVEN Project Manager: JARED STOFFEL Fax To:	Reported: 16-Aug-19 09:14

FL - B08 - 2.5'

H902792-08 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**48.0**		16.0	mg/kg	4	9081509	AC	15-Aug-19	4500-Cl-B	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TRC 10 DESTA DR. SUITE 150 E MIDLAND TX, 79705	Project: CABO WABO 25 FEDERAL COM #0 Project Number: NONE GIVEN Project Manager: JARED STOFFEL Fax To:	Reported: 16-Aug-19 09:14

FL - B09 - 2.5'

H902792-09 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**80.0**		16.0	mg/kg	4	9081509	AC	15-Aug-19	4500-Cl-B	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TRC 10 DESTA DR. SUITE 150 E MIDLAND TX, 79705	Project: CABO WABO 25 FEDERAL COM #0 Project Number: NONE GIVEN Project Manager: JARED STOFFEL Fax To:	Reported: 16-Aug-19 09:14

FL - B10 - 2.5'

H902792-10 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**560**		16.0	mg/kg	4	9081509	AC	15-Aug-19	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	9081413	ms	15-Aug-19	8021B	
Toluene*	<0.050		0.050	mg/kg	50	9081413	ms	15-Aug-19	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	9081413	ms	15-Aug-19	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	9081413	ms	15-Aug-19	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	9081413	ms	15-Aug-19	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*96.4 %*	*73.3-129*		*9081413*	ms	*15-Aug-19*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	9081411	MS	15-Aug-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9081411	MS	15-Aug-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9081411	MS	15-Aug-19	8015B	
Surrogate: 1-Chlorooctane			*102 %*	*41-142*		*9081411*	MS	*15-Aug-19*	*8015B*	
Surrogate: 1-Chlorooctadecane			*104 %*	*37.6-147*		*9081411*	MS	*15-Aug-19*	*8015B*	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TRC 10 DESTA DR. SUITE 150 E MIDLAND TX, 79705	Project: CABO WABO 25 FEDERAL COM #0 Project Number: NONE GIVEN Project Manager: JARED STOFFEL Fax To:	Reported: 16-Aug-19 09:14

FL - C01 - 5.5'

H902792-11 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**80.0**		16.0	mg/kg	4	9081509	AC	15-Aug-19	4500-Cl-B	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TRC 10 DESTA DR. SUITE 150 E MIDLAND TX, 79705	Project: CABO WABO 25 FEDERAL COM #0 Project Number: NONE GIVEN Project Manager: JARED STOFFEL Fax To:	Reported: 16-Aug-19 09:14

FL - C02 - 5.5'

H902792-12 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**160**		16.0	mg/kg	4	9081509	AC	15-Aug-19	4500-Cl-B	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TRC 10 DESTA DR. SUITE 150 E MIDLAND TX, 79705	Project: CABO WABO 25 FEDERAL COM #0 Project Number: NONE GIVEN Project Manager: JARED STOFFEL Fax To:	Reported: 16-Aug-19 09:14

FL - C03 - 5.5'

H902792-13 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**128**		16.0	mg/kg	4	9081509	AC	15-Aug-19	4500-Cl-B	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TRC 10 DESTA DR. SUITE 150 E MIDLAND TX, 79705	Project: CABO WABO 25 FEDERAL COM #0 Project Number: NONE GIVEN Project Manager: JARED STOFFEL Fax To:	Reported: 16-Aug-19 09:14

FL - C04 - 5.5'

H902792-14 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**32.0**		16.0	mg/kg	4	9081509	AC	15-Aug-19	4500-Cl-B	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TRC 10 DESTA DR. SUITE 150 E MIDLAND TX, 79705	Project: CABO WABO 25 FEDERAL COM #0 Project Number: NONE GIVEN Project Manager: JARED STOFFEL Fax To:	Reported: 16-Aug-19 09:14

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9081508 - 1:4 DI Water										
Blank (9081508-BLK1)				Prepared & Analyzed: 15-Aug-19						
Chloride	ND	16.0	mg/kg							
LCS (9081508-BS1)				Prepared & Analyzed: 15-Aug-19						
Chloride	448	16.0	mg/kg	400		112	80-120			
LCS Dup (9081508-BSD1)				Prepared & Analyzed: 15-Aug-19						
Chloride	416	16.0	mg/kg	400		104	80-120	7.41	20	
Batch 9081509 - 1:4 DI Water										
Blank (9081509-BLK1)				Prepared & Analyzed: 15-Aug-19						
Chloride	ND	16.0	mg/kg							
LCS (9081509-BS1)				Prepared & Analyzed: 15-Aug-19						
Chloride	416	16.0	mg/kg	400		104	80-120			
LCS Dup (9081509-BSD1)				Prepared & Analyzed: 15-Aug-19						
Chloride	432	16.0	mg/kg	400		108	80-120	3.77	20	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TRC 10 DESTA DR. SUITE 150 E MIDLAND TX, 79705	Project: CABO WABO 25 FEDERAL COM #0 Project Number: NONE GIVEN Project Manager: JARED STOFFEL Fax To:	Reported: 16-Aug-19 09:14

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9081413 - Volatiles										
Blank (9081413-BLK1)				Prepared: 14-Aug-19 Analyzed: 15-Aug-19						
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	*0.0973*		mg/kg	*0.100*		*97.3*	*73.3-129*			
LCS (9081413-BS1)				Prepared: 14-Aug-19 Analyzed: 15-Aug-19						
Benzene	1.97	0.050	mg/kg	2.00		98.5	72.2-131			
Toluene	2.13	0.050	mg/kg	2.00		107	71.7-126			
Ethylbenzene	2.02	0.050	mg/kg	2.00		101	68.9-126			
Total Xylenes	6.07	0.150	mg/kg	6.00		101	71.4-125			
Surrogate: 4-Bromofluorobenzene (PID)	*0.0973*		mg/kg	*0.100*		*97.3*	*73.3-129*			
LCS Dup (9081413-BSD1)				Prepared: 14-Aug-19 Analyzed: 15-Aug-19						
Benzene	1.84	0.050	mg/kg	2.00		91.9	72.2-131	6.96	6.91	QR-02
Toluene	1.94	0.050	mg/kg	2.00		97.1	71.7-126	9.43	7.12	QR-02
Ethylbenzene	1.90	0.050	mg/kg	2.00		94.8	68.9-126	6.61	7.88	
Total Xylenes	5.74	0.150	mg/kg	6.00		95.6	71.4-125	5.65	7.46	
Surrogate: 4-Bromofluorobenzene (PID)	*0.0962*		mg/kg	*0.100*		*96.2*	*73.3-129*			

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TRC 10 DESTA DR. SUITE 150 E MIDLAND TX, 79705	Project: CABO WABO 25 FEDERAL COM #0 Project Number: NONE GIVEN Project Manager: JARED STOFFEL Fax To:	Reported: 16-Aug-19 09:14

Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9081411 - General Prep - Organics										
Blank (9081411-BLK1)				Prepared: 14-Aug-19 Analyzed: 15-Aug-19						
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	*54.4*		mg/kg	*50.0*		*109*	*41-142*			
Surrogate: 1-Chlorooctadecane	*57.6*		mg/kg	*50.0*		*115*	*37.6-147*			
LCS (9081411-BS1)				Prepared & Analyzed: 14-Aug-19						
GRO C6-C10	215	10.0	mg/kg	200		108	76.5-133			
DRO >C10-C28	214	10.0	mg/kg	200		107	72.9-138			
Total TPH C6-C28	429	10.0	mg/kg	400		107	78-132			
Surrogate: 1-Chlorooctane	*57.4*		mg/kg	*50.0*		*115*	*41-142*			
Surrogate: 1-Chlorooctadecane	*57.8*		mg/kg	*50.0*		*116*	*37.6-147*			
LCS Dup (9081411-BSD1)				Prepared: 14-Aug-19 Analyzed: 15-Aug-19						
GRO C6-C10	209	10.0	mg/kg	200		105	76.5-133	2.88	20.6	
DRO >C10-C28	207	10.0	mg/kg	200		104	72.9-138	3.21	20.6	
Total TPH C6-C28	416	10.0	mg/kg	400		104	78-132	3.04	18	
Surrogate: 1-Chlorooctane	*55.4*		mg/kg	*50.0*		*111*	*41-142*			
Surrogate: 1-Chlorooctadecane	*56.2*		mg/kg	*50.0*		*112*	*37.6-147*			

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name:	TRC Environmental	**BILL TO**	
Project Manager:	Jared Stoffel	P.O. #:	
Address:	10 Desta Dr. STE 1SOE	Company:	COG
City:	Midland	State: Tx Zip: 79705	Attn: Becky Haskell
Phone #:	(432) 520-7720	Fax #:	Address:
Project #:		Project Owner:	City:
Project Name:	Cabo Wabo 25 Federal Com # 003		State: Zip:
Project Location:	Eddy County, NM		Phone #:
Sampler Name:	Braedon Billings		Fax #:

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	ANALYSIS REQUEST: Chlorides	TPH	BTEX
H902792																	
1	FL - B01 - 2.5'	G	1			X							8/14/19	0900	X		
2	FL - B02 - 2.5'		1											0905	X		
3	FL - B03 - 2.5'		1											0910	X		
4	FL - B04 - 2.5'		1											0915	X		
5	FL - B05 - 2.5		1											0920	X	X	X
6	FL - B06 - 2.5'		1											1130	X		
7	FL - B07 - 2.5'		1											0930	X		
8	FL - B08 - 2.5'		1											0935	X		
9	FL - B09 - 2.5		1											1135	X		
10	FL - B10 - 2.5'		1											1140	X	X	X

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 8-14-19	Received By:	Phone Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 15:40		Fax Result: ☐ Yes ☐ No Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS: JStoffel@trccompanies.com
	Time:		Rhaskell@concho.com
Delivered By: (Circle One) 3.2° #97	Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No	CHECKED BY: (Initials) TO	ltavarez@concho.com
Sampler - UPS - Bus - Other: Corrected 3.6°			Rush!!

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name:		**BILL TO**	
Project Manager:		P.O. #:	
Address:		Company:	
City:	State: Zip:	Attn:	
Phone #:	Fax #:	Address:	
Project #:	Project Owner:	City:	
Project Name:		State: Zip:	
Project Location:		Phone #:	
Sampler Name:		Fax #:	

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	Chlorides
H902792															
11	FL - C01 - 5.5'	G	1			X							8/14/19	1230	X
12	FL - C02 - 5.5'	↓	1			↓								1235	X
13	FL - C03 - 5.5'		1											1240	X
14	FL - C04 - 5.5'	↓	1			↓							↓	1245	X

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 8-14-19	Received By:	Phone Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 15:40		Fax Result: ☐ Yes ☐ No Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS: Rush!!
	Time:		
Delivered By: (Circle One) 3.2° #97	Sample Condition Cool Intact	CHECKED BY: (Initials)	
Sampler - UPS - Bus - Other: corrected 3.6°	☑ Yes ☑ Yes ☐ No ☐ No	TO	

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

August 19, 2019

JARED STOFFEL

TRC

10 DESTA DR. SUITE 150 E

MIDLAND, TX 79705

RE: CABO WABO 25 FEDERAL COM #003

Enclosed are the results of analyses for samples received by the laboratory on 08/16/19 14:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TRC
JARED STOFFEL
10 DESTA DR. SUITE 150 E
MIDLAND TX, 79705
Fax To:

Received:	08/16/2019	Sampling Date:	08/15/2019
Reported:	08/19/2019	Sampling Type:	Soil
Project Name:	CABO WABO 25 FEDERAL COM #003	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: FL-ALL-2' (H902825-01)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/19/2019	ND	448	112	400	3.51	

Sample ID: SW-A01-9'' (H902825-02)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	08/19/2019	ND	448	112	400	3.51	

Sample ID: SW-A02-9'' (H902825-03)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**128**	16.0	08/19/2019	ND	448	112	400	3.51	

Sample ID: SW-B01-15'' (H902825-04)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	08/19/2019	ND	448	112	400	3.51	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TRC
JARED STOFFEL
10 DESTA DR. SUITE 150 E
MIDLAND TX, 79705
Fax To:

Received:	08/16/2019	Sampling Date:	08/15/2019
Reported:	08/19/2019	Sampling Type:	Soil
Project Name:	CABO WABO 25 FEDERAL COM #003	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: SW-B02-15'' (H902825-05)

BTEX 8021B mg/kg **Analyzed By: ms**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/18/2019	ND	1.81	90.4	2.00	3.70	
Toluene*	<0.050	0.050	08/18/2019	ND	1.92	95.9	2.00	3.11	
Ethylbenzene*	<0.050	0.050	08/18/2019	ND	2.05	102	2.00	1.25	
Total Xylenes*	<0.150	0.150	08/18/2019	ND	6.09	101	6.00	1.42	
Total BTEX	<0.300	0.300	08/18/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.1 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/19/2019	ND	448	112	400	3.51	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/16/2019	ND	207	104	200	2.89	
DRO >C10-C28*	<10.0	10.0	08/16/2019	ND	198	98.9	200	6.97	
EXT DRO >C28-C36	<10.0	10.0	08/16/2019	ND					

Surrogate: 1-Chlorooctane *91.8 %* *41-142*

Surrogate: 1-Chlorooctadecane *101 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TRC
JARED STOFFEL
10 DESTA DR. SUITE 150 E
MIDLAND TX, 79705
Fax To:

Received:	08/16/2019	Sampling Date:	08/15/2019
Reported:	08/19/2019	Sampling Type:	Soil
Project Name:	CABO WABO 25 FEDERAL COM #003	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - EDDY CO NM		

Sample ID: SW-C01-33'' (H902825-06)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/19/2019	ND	448	112	400	3.51	

Sample ID: SW-C02-33'' (H902825-07)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	08/19/2019	ND	448	112	400	3.51	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name:	TRC Environmental
Project Manager:	Jared Stoffel
Address:	10 Desta Dr. STE 1506
City:	Midland State: Tx Zip: 79705
Phone #:	432 520 7720 Fax #:
Project #:	Project Owner:
Project Name:	Cabo Wabo 25 Federal Com #003
Project Location:	Eddy County, NM
Sampler Name:	Braedon Billings

BILL TO

P.O. #:	
Company:	COG
Attn:	
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Chlorides	TPH	BTEX
H902825																	
1	FL-A11-2'	G	1			X							8/15/19	1015	X		
2	SW-A01-9"		1										8/15/19	0900	X		
3	SW-A02-9"		1										8/15/19	0905	X		
4	SW-B01-15"		1										8/15/19	0835	X		
5	SW-B02-15"		1										8/15/19	0840	X	X	X
6	SW-C01-33"		1										8/15/19	0930	X		
7	SW-C02-33"		1										8/15/19	0935	X		

Relinquished By:	Date: 8/16/19	Received By: Jodi Henson	
	Time: 14:00		
Relinquished By:	Date:	Received By:	
	Time:		

Delivered By: (Circle One)
Sampler - UPS - Bus - Other: 2.3°C +.4 corrected 2.7°C #97

Sample Condition: Cool ☐ Yes ☐ No / Intact ☑ Yes ☐ No

CHECKED BY: (Initials) JA

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS: RUSH!!

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

August 20, 2019

JARED STOFFEL

TRC

10 DESTA DR. SUITE 150 E

MIDLAND, TX 79705

RE: CABO WABO 25 FEDERAL COM #003

Enclosed are the results of analyses for samples received by the laboratory on 08/19/19 15:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TRC
JARED STOFFEL
10 DESTA DR. SUITE 150 E
MIDLAND TX, 79705
Fax To:

Received:	08/19/2019	Sampling Date:	08/19/2019
Reported:	08/20/2019	Sampling Type:	Soil
Project Name:	CABO WABO 25 FEDERAL COM #003	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: FL - A07 - 4' (H902839-01)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/20/2019	ND	400	100	400	0.00	

Sample ID: FL - A13 - 5.5' (H902839-02)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	08/20/2019	ND	400	100	400	0.00	

Sample ID: FL - A10 - 5.5' (H902839-03)

BTEX 8021B mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/19/2019	ND	1.83	91.3	2.00	1.39	
Toluene*	<0.050	0.050	08/19/2019	ND	2.02	101	2.00	0.977	
Ethylbenzene*	<0.050	0.050	08/19/2019	ND	2.09	105	2.00	0.730	
Total Xylenes*	<0.150	0.150	08/19/2019	ND	6.33	105	6.00	0.921	
Total BTEX	<0.300	0.300	08/19/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	08/20/2019	ND	400	100	400	0.00	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TRC
JARED STOFFEL
10 DESTA DR. SUITE 150 E
MIDLAND TX, 79705
Fax To:

Received:	08/19/2019	Sampling Date:	08/19/2019
Reported:	08/20/2019	Sampling Type:	Soil
Project Name:	CABO WABO 25 FEDERAL COM #003	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: FL - A10 - 5.5' (H902839-03)

TPH 8015M **mg/kg** **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/19/2019	ND	216	108	200	0.0102	
DRO >C10-C28*	<10.0	10.0	08/19/2019	ND	216	108	200	1.23	
EXT DRO >C28-C36	<10.0	10.0	08/19/2019	ND					

Surrogate: 1-Chlorooctane	*95.1 %*	*41-142*
Surrogate: 1-Chlorooctadecane	*100 %*	*37.6-147*

Sample ID: FL - A06 - 5' (H902839-04)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**128**	16.0	08/20/2019	ND	400	100	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: TRC Environmental	**BILL TO**
Project Manager: Jared Stoffel	P.O. #:
Address: 10 Desta Dr. STE 1506	Company: COG
City: Midland State: Tx Zip: 79705	Attn: Becky Haskell
Phone #: (432) 520 - 7720 Fax #:	Address:
Project #: Project Owner:	City:
Project Name: Cabo Wabo 25 Fdrl Com #003	State: Zip:
Project Location: Eddy County, NM	Phone #:
Sampler Name: Braedon Billings	Fax #:

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST		
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	Chlorides	TPH	BTEX
H902839																	
1	FL - A07 - 4'	G	1			X							8/19/19	1000	X		
2	FL - A13 - 5.5'	G	1			↓								1010	X		
3	FL - A10 - 5.5'	G	1			↓								1020	X	X	X
4	FL - A06 - 5'	G	1			↓							↓	1030	X		

Relinquished By:	Date: 8-19-19	Received By:	
	Time: 15:00		
Relinquished By:	Date:	Received By:	
	Time:		
Delivered By: (Circle One) 4.0° #197	Sample Condition Cool Intact	CHECKED BY: (Initials)	
Sampler - UPS - Bus - Other: Corrected 4.4°	☐ Yes ☐ Yes ☐ No ☐ No	TO-	

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS:
JStoffel@trccompanies.com
Rhaskell@concho.com
Itavarez@concho.com

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TRC
JARED STOFFEL
10 DESTA DR. SUITE 150 E
MIDLAND TX, 79705
Fax To:

Received:	08/13/2019	Sampling Date:	08/13/2019
Reported:	08/14/2019	Sampling Type:	Soil
Project Name:	CABO WABO 25 FEDERAL COM #003	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: FL - A01 - 1.5' (H902771-01)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**352**	16.0	08/14/2019	ND	400	100	400	3.92	

Sample ID: FL - A02 - 1.5' (H902771-02)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	08/14/2019	ND	400	100	400	3.92	

Sample ID: FL - A03 - 1.5' (H902771-03)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**112**	16.0	08/14/2019	ND	400	100	400	3.92	

Sample ID: FL - A04 - 1.5' (H902771-04)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	08/14/2019	ND	400	100	400	3.92	

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TRC
JARED STOFFEL
10 DESTA DR. SUITE 150 E
MIDLAND TX, 79705
Fax To:

Received:	08/13/2019	Sampling Date:	08/13/2019
Reported:	08/14/2019	Sampling Type:	Soil
Project Name:	CABO WABO 25 FEDERAL COM #003	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: FL - A05 - 1.5' (H902771-05)

BTEX 8021B mg/kg **Analyzed By: ms**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/13/2019	ND	2.03	102	2.00	4.53	
Toluene*	<0.050	0.050	08/13/2019	ND	2.17	109	2.00	4.91	
Ethylbenzene*	<0.050	0.050	08/13/2019	ND	2.09	105	2.00	3.88	
Total Xylenes*	<0.150	0.150	08/13/2019	ND	6.34	106	6.00	4.13	
Total BTEX	<0.300	0.300	08/13/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.4 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	08/14/2019	ND	400	100	400	3.92	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/13/2019	ND	201	101	200	3.72	
DRO >C10-C28*	<10.0	10.0	08/13/2019	ND	195	97.7	200	3.43	
EXT DRO >C28-C36	<10.0	10.0	08/13/2019	ND					

Surrogate: 1-Chlorooctane *77.5 %* *41-142*

Surrogate: 1-Chlorooctadecane *75.2 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TRC
JARED STOFFEL
10 DESTA DR. SUITE 150 E
MIDLAND TX, 79705
Fax To:

Received:	08/13/2019	Sampling Date:	08/13/2019
Reported:	08/14/2019	Sampling Type:	Soil
Project Name:	CABO WABO 25 FEDERAL COM #003	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: FL - A06 - 1.5' (H902771-06)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2120**	16.0	08/14/2019	ND	400	100	400	3.92	

Sample ID: FL - A07 - 1.5' (H902771-07)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**672**	16.0	08/14/2019	ND	400	100	400	3.92	

Sample ID: FL - A08 - 1.5' (H902771-08)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**256**	16.0	08/14/2019	ND	400	100	400	3.92	

Sample ID: FL - A09 - 1.5' (H902771-09)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**272**	16.0	08/14/2019	ND	400	100	400	3.92	

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TRC
JARED STOFFEL
10 DESTA DR. SUITE 150 E
MIDLAND TX, 79705
Fax To:

Received:	08/13/2019	Sampling Date:	08/13/2019
Reported:	08/14/2019	Sampling Type:	Soil
Project Name:	CABO WABO 25 FEDERAL COM #003	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: FL - A10 - 1.5' (H902771-10)

BTEX 8021B mg/kg **Analyzed By: ms**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/13/2019	ND	2.03	102	2.00	4.53	
Toluene*	<0.050	0.050	08/13/2019	ND	2.17	109	2.00	4.91	
Ethylbenzene*	<0.050	0.050	08/13/2019	ND	2.09	105	2.00	3.88	
Total Xylenes*	<0.150	0.150	08/13/2019	ND	6.34	106	6.00	4.13	
Total BTEX	<0.300	0.300	08/13/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.9 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2600**	16.0	08/14/2019	ND	400	100	400	3.92	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/14/2019	ND	201	101	200	3.72	
DRO >C10-C28*	<10.0	10.0	08/14/2019	ND	195	97.7	200	3.43	
EXT DRO >C28-C36	<10.0	10.0	08/14/2019	ND					

Surrogate: 1-Chlorooctane *80.2 %* *41-142*

Surrogate: 1-Chlorooctadecane *78.8 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TRC
JARED STOFFEL
10 DESTA DR. SUITE 150 E
MIDLAND TX, 79705
Fax To:

Received:	08/13/2019	Sampling Date:	08/13/2019
Reported:	08/14/2019	Sampling Type:	Soil
Project Name:	CABO WABO 25 FEDERAL COM #003	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: FL - A11 - 1.5' (H902771-11)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**624**	16.0	08/14/2019	ND	400	100	400	3.92	

Sample ID: FL - A12 - 1.5' (H902771-12)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**336**	16.0	08/14/2019	ND	400	100	400	3.92	

Sample ID: FL - A13 - 1.5' (H902771-13)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**640**	16.0	08/14/2019	ND	432	108	400	3.77	QM-07

Sample ID: FL - A14 - 1.5' (H902771-14)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/14/2019	ND	432	108	400	3.77	

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TRC
JARED STOFFEL
10 DESTA DR. SUITE 150 E
MIDLAND TX, 79705
Fax To:

Received:	08/13/2019	Sampling Date:	08/13/2019
Reported:	08/14/2019	Sampling Type:	Soil
Project Name:	CABO WABO 25 FEDERAL COM #003	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: FL - A15 - 1.5' (H902771-15)

BTEX 8021B mg/kg **Analyzed By: ms**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/13/2019	ND	2.03	102	2.00	4.53	
Toluene*	<0.050	0.050	08/13/2019	ND	2.17	109	2.00	4.91	
Ethylbenzene*	<0.050	0.050	08/13/2019	ND	2.09	105	2.00	3.88	
Total Xylenes*	<0.150	0.150	08/13/2019	ND	6.34	106	6.00	4.13	
Total BTEX	<0.300	0.300	08/13/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.5 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/14/2019	ND	432	108	400	3.77	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/14/2019	ND	201	101	200	3.72	
DRO >C10-C28*	<10.0	10.0	08/14/2019	ND	195	97.7	200	3.43	
EXT DRO >C28-C36	<10.0	10.0	08/14/2019	ND					

Surrogate: 1-Chlorooctane *79.2 %* *41-142*

Surrogate: 1-Chlorooctadecane *77.7 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: TRC Environmental		BILL TO	
Project Manager: Jared Stoffel		P.O. #:	
Address: 10 Desta Dr. STE 150E		Company: COG	
City: Midland	State: TX Zip: 79705	Attn: ~~Brandt Hardaway~~	
Phone #: (432) 520-7720	Fax #:	Address: Becky Haskell	
Project #:	Project Owner:	City:	
Project Name: Cabo Wabo 25 Federal Com #003		State: Zip:	
Project Location: Eddy County, NM		Phone #:	
Sampler Name: Braedon Billings		Fax #:	

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST											
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	~~OIL~~ BD	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME	Chlorides (4500) ~~(E 300.0)~~	TPH	BTEX									
H902771																										
1	FL - A01 - 1.5'	G	1			X							8/13/19	0830	X											
2	FL - A02 - 1.5'		1											0835	X											
3	FL - A03 - 1.5'		1											0840	X											
4	FL - A04 - 1.5'		1											0845	X											
5	FL - A05 - 1.5'		1											0850	X	X	X									
6	FL - A06 - 1.5'		1											0855	X											
7	FL - A07 - 1.5'		1											0900	X											
8	FL - A08 - 1.5		1											0905	X											
9	FL - A09 - 1.5'		1											0910	X											
10	FL - A10 - 1.5'	↓	1			↓							↓	0915	X	X	X									

Relinquished By:	Date: 8-13-19	Received By:	Phone Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 13:55	Tamara Oldaker	Fax Result: ☐ Yes ☐ No Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS: JStoffel@trccompanies.com Rhaskell@concho.com ltavarez@concho.com Rush!!
	Time:		
Delivered By: (Circle One) 1.1° #97	Sample Condition Cool: ~~Yes~~ No Intact: ~~Yes~~ No	CHECKED BY: (Initials) T.O.	
Sampler - UPS - Bus - Other: Corrected 1.5°C			

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name:		**BILL TO**	
Project Manager:		P.O. #:	
Address:		Company:	
City:	State: Zip:	Attn:	
Phone #:	Fax #:	Address:	
Project #:	Project Owner:	City:	
Project Name:		State: Zip:	
Project Location:		Phone #:	
Sampler Name:		Fax #:	

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	ANALYSIS REQUEST: Chlorides (6300)	TPH	BTEX
H902771																	
11	FL - A11 - 1.5'	G	1			X							8/13/19	0920	X		
12	FL - A12 - 1.5'		1											0925	X		
13	FL - A13 - 1.5'		1											0930	X		
14	FL - A14 - 1.5'		1											0935	X		
15	FL - A15 - 1.5'	↓	1			↓							↓	0940	X	X	X

Relinquished By:	Date: 8-13-19	Received By:	Phone Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 13:55		Fax Result: ☐ Yes ☐ No Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS: Rush!!
	Time:		
Delivered By: (Circle One)	1.1°	#97	Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No
Sampler - UPS - Bus - Other:	Corrected 1.5°		CHECKED BY: (Initials) T.C.

Certificate of Analysis Summary 644958

TRC Solutions, Inc, Midland, TX

Project Name: Cabo Wabo

Project Id:
Contact: Jared Stoffel
Project Location: New Mexico

Date Received in Lab: Wed Dec-04-19 09:04 am
Report Date: 05-DEC-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	644958-001		644958-002		644958-003		644958-004		644958-005		644958-006	
	Field Id:	Road-1 @ 0-1'		Road-1 @ 2'		Road-1 @ 3'		Road-1 @ 4'		Road-1 @5'		Road-2 @ 0-1'	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Dec-03-19 16:00		Dec-03-19 16:05		Dec-03-19 16:10		Dec-03-19 16:15		Dec-03-19 16:20		Dec-03-19 16:25	
BTEX by EPA 8021B	***Extracted:***	Dec-04-19 10:00										Dec-04-19 10:00	
	Analyzed:	Dec-04-19 14:45										Dec-04-19 15:05	
	Units/RL:	mg/kg	RL									mg/kg	RL
Benzene		<0.00202	0.00202									<0.00198	0.00198
Toluene		<0.00202	0.00202									<0.00198	0.00198
Ethylbenzene		<0.00202	0.00202									<0.00198	0.00198
m,p-Xylenes		<0.00403	0.00403									<0.00397	0.00397
o-Xylene		<0.00202	0.00202									<0.00198	0.00198
Total Xylenes		<0.00202	0.00202									<0.00198	0.00198
Total BTEX		<0.00202	0.00202									<0.00198	0.00198
Chloride by EPA 300	***Extracted:***	Dec-04-19 13:00		Dec-04-19 13:00		Dec-04-19 13:35		Dec-04-19 13:35		Dec-04-19 13:35		Dec-04-19 13:35	
	Analyzed:	Dec-04-19 15:47		Dec-04-19 15:57		Dec-04-19 19:02		Dec-04-19 19:30		Dec-04-19 19:39		Dec-04-19 19:49	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		707	24.9	46.8	5.05	135	4.99	209	4.96	443	4.95	79.1	4.98
TPH by SW8015 Mod	***Extracted:***	Dec-04-19 11:00										Dec-04-19 11:00	
	Analyzed:	Dec-04-19 15:07										Dec-04-19 15:25	
	Units/RL:	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

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 644958

TRC Solutions, Inc, Midland, TX

Project Name: Cabo Wabo

Project Id:

Contact: Jared Stoffel

Project Location: New Mexico

Date Received in Lab: Wed Dec-04-19 09:04 am

Report Date: 05-DEC-19

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	644958-007		644958-008		644958-009		644958-010		644958-011		644958-012	
	Field Id:	Road-2 @ 2'		Road-2 @ 3'		Road-2 @ 4'		Road-2 @ 5'		Road-3 @ 0-1'		Road-3 @2'	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Dec-03-19 16:30		Dec-03-19 16:35		Dec-03-19 16:40		Dec-03-19 16:45		Dec-03-19 16:50		Dec-03-19 16:55	
BTEX by EPA 8021B	***Extracted:***									Dec-04-19 10:00			
	Analyzed:									Dec-04-19 15:26			
	Units/RL:									mg/kg	RL		
Benzene										<0.00199	0.00199		
Toluene										<0.00199	0.00199		
Ethylbenzene										<0.00199	0.00199		
m,p-Xylenes										<0.00398	0.00398		
o-Xylene										<0.00199	0.00199		
Total Xylenes										<0.00199	0.00199		
Total BTEX										<0.00199	0.00199		
Chloride by EPA 300	***Extracted:***	Dec-04-19 13:35		Dec-04-19 13:35		Dec-04-19 13:35		Dec-04-19 13:35		Dec-04-19 13:35		Dec-04-19 13:35	
	Analyzed:	Dec-04-19 19:58		Dec-04-19 20:26		Dec-04-19 20:35		Dec-04-19 20:44		Dec-04-19 20:53		Dec-04-19 21:03	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		121	5.00	174	5.02	142	4.97	154	4.95	446	5.02	100	4.99
TPH by SW8015 Mod	***Extracted:***									Dec-04-19 11:00			
	Analyzed:									Dec-04-19 15:44			
	Units/RL:									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		

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 644958

TRC Solutions, Inc, Midland, TX

Project Name: Cabo Wabo

Project Id:
Contact: Jared Stoffel
Project Location: New Mexico

Date Received in Lab: Wed Dec-04-19 09:04 am
Report Date: 05-DEC-19
Project Manager: Jessica Kramer

Analysis Requested											
	Lab Id:	644958-013		644958-014		644958-015					
	Field Id:	Road-3 @ 3'		Road-3 @ 4'		Road-3 @ 5'					
	Depth:										
	Matrix:	SOIL		SOIL		SOIL					
	Sampled:	Dec-03-19 17:00		Dec-03-19 17:05		Dec-03-19 17:10					
Chloride by EPA 300	***Extracted:***	Dec-04-19 13:35		Dec-04-19 13:35		Dec-04-19 13:35					
	Analyzed:	Dec-04-19 21:12		Dec-04-19 21:40		Dec-04-19 21:49					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		185	5.00	239	5.04	313	4.99				

Jessica Kramer
Project Assistant

Analytical Report 644958

for

TRC Solutions, Inc

Project Manager: Jared Stoffel

Cabo Wabo

05-DEC-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 (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)

05-DEC-19

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

Reference: XENCO Report No(s): **644958**
Cabo Wabo
Project Address: New Mexico

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) 644958. 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. 644958 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

Jessica Kramer
Project Assistant

Sample Cross Reference 644958

TRC Solutions, Inc, Midland, TX

Cabo Wabo

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Road-1 @ 0-1'	S	12-03-19 16:00		644958-001
Road-1 @ 2'	S	12-03-19 16:05		644958-002
Road-1 @ 3'	S	12-03-19 16:10		644958-003
Road-1 @ 4'	S	12-03-19 16:15		644958-004
Road-1 @5'	S	12-03-19 16:20		644958-005
Road-2 @ 0-1'	S	12-03-19 16:25		644958-006
Road-2 @ 2'	S	12-03-19 16:30		644958-007
Road-2 @ 3'	S	12-03-19 16:35		644958-008
Road-2 @ 4'	S	12-03-19 16:40		644958-009
Road-2 @ 5'	S	12-03-19 16:45		644958-010
Road-3 @ 0-1'	S	12-03-19 16:50		644958-011
Road-3 @2'	S	12-03-19 16:55		644958-012
Road-3 @ 3'	S	12-03-19 17:00		644958-013
Road-3 @ 4'	S	12-03-19 17:05		644958-014
Road-3 @ 5'	S	12-03-19 17:10		644958-015

Client Name: TRC Solutions, Inc
Project Name: Cabo Wabo

Project ID:
Work Order Number(s): *644958*

Report Date: *05-DEC-19*
Date Received: *12/04/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3109384 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analytical Results 644958

TRC Solutions, Inc, Midland, TX

Cabo Wabo

Sample Id:	**Road-1 @ 0-1'**	Matrix:	Soil	Date Received:	12.04.19 09.04
Lab Sample Id:	644958-001	Date Collected:	12.03.19 16.00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	12.04.19 13.00	Basis:	Wet Weight
Seq Number:	3109421				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**707**	24.9	mg/kg	12.04.19 15.47		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	12.04.19 11.00	Basis:	Wet Weight
Seq Number:	3109353				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.04.19 15.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.04.19 15.07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.04.19 15.07	U	1
Total TPH	PHC635	<50	50	mg/kg	12.04.19 15.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	12.04.19 15.07	
o-Terphenyl	84-15-1	101	%	70-135	12.04.19 15.07	

Certificate of Analytical Results 644958

TRC Solutions, Inc, Midland, TX

Cabo Wabo

Sample Id:	**Road-1 @ 0-1'**	Matrix:	Soil	Date Received:	12.04.19 09.04
Lab Sample Id:	644958-001	Date Collected:	12.03.19 16.00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	12.04.19 10.00	Basis:	Wet Weight
Seq Number:	3109384				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	12.04.19 14.45	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	12.04.19 14.45	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	12.04.19 14.45	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	12.04.19 14.45	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	12.04.19 14.45	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	12.04.19 14.45	U	1
Total BTEX		<0.00202	0.00202	mg/kg	12.04.19 14.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	12.04.19 14.45	
1,4-Difluorobenzene	540-36-3	97	%	70-130	12.04.19 14.45	

Certificate of Analytical Results 644958

TRC Solutions, Inc, Midland, TX

Cabo Wabo

Sample Id:	**Road-1 @ 2'**	Matrix:	Soil	Date Received:	12.04.19 09.04
Lab Sample Id:	644958-002	Date Collected:	12.03.19 16.05		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	12.04.19 13.00	Basis:	Wet Weight
Seq Number:	3109421				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**46.8**	5.05	mg/kg	12.04.19 15.57		1

Certificate of Analytical Results 644958

TRC Solutions, Inc, Midland, TX

Cabo Wabo

Sample Id:	**Road-1 @ 3'**	Matrix:	Soil	Date Received:	12.04.19 09.04
Lab Sample Id:	644958-003	Date Collected:	12.03.19 16.10		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	12.04.19 13.35	Basis:	Wet Weight
Seq Number:	3109422				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**135**	4.99	mg/kg	12.04.19 19.02		1

Certificate of Analytical Results 644958

TRC Solutions, Inc, Midland, TX

Cabo Wabo

Sample Id:	**Road-1 @ 4'**	Matrix:	Soil	Date Received:	12.04.19 09.04
Lab Sample Id:	644958-004	Date Collected:	12.03.19 16.15		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	12.04.19 13.35	Basis:	Wet Weight
Seq Number:	3109422				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**209**	4.96	mg/kg	12.04.19 19.30		1

Certificate of Analytical Results 644958

TRC Solutions, Inc, Midland, TX

Cabo Wabo

Sample Id:	**Road-1 @5'**	Matrix:	Soil	Date Received:	12.04.19 09.04
Lab Sample Id:	644958-005	Date Collected:	12.03.19 16.20		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	12.04.19 13.35	Basis:	Wet Weight
Seq Number:	3109422				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**443**	4.95	mg/kg	12.04.19 19.39		1

TRC Solutions, Inc, Midland, TX

Cabo Wabo

Sample Id:	**Road-2 @ 0-1'**	Matrix:	Soil	Date Received:	12.04.19 09.04
Lab Sample Id:	644958-006	Date Collected:	12.03.19 16.25		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	12.04.19 13.35	Basis:	Wet Weight
Seq Number:	3109422				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**79.1**	4.98	mg/kg	12.04.19 19.49		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	12.04.19 11.00	Basis:	Wet Weight
Seq Number:	3109353				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.04.19 15.25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.04.19 15.25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.04.19 15.25	U	1
Total TPH	PHC635	<50	50	mg/kg	12.04.19 15.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	12.04.19 15.25	
o-Terphenyl	84-15-1	103	%	70-135	12.04.19 15.25	

Certificate of Analytical Results 644958

TRC Solutions, Inc, Midland, TX

Cabo Wabo

Sample Id:	**Road-2 @ 0-1'**	Matrix:	Soil	Date Received:	12.04.19 09.04
Lab Sample Id:	644958-006	Date Collected:	12.03.19 16.25		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	12.04.19 10.00	Basis:	Wet Weight
Seq Number:	3109384				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	12.04.19 15.05	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	12.04.19 15.05	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	12.04.19 15.05	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	12.04.19 15.05	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	12.04.19 15.05	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	12.04.19 15.05	U	1
Total BTEX		<0.00198	0.00198	mg/kg	12.04.19 15.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	12.04.19 15.05	
4-Bromofluorobenzene	460-00-4	104	%	70-130	12.04.19 15.05	

Certificate of Analytical Results 644958

TRC Solutions, Inc, Midland, TX

Cabo Wabo

Sample Id:	**Road-2 @ 2'**	Matrix:	Soil	Date Received:	12.04.19 09.04
Lab Sample Id:	644958-007	Date Collected:	12.03.19 16.30		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	12.04.19 13.35	Basis:	Wet Weight
Seq Number:	3109422				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**121**	5.00	mg/kg	12.04.19 19.58		1

Certificate of Analytical Results 644958

TRC Solutions, Inc, Midland, TX

Cabo Wabo

Sample Id:	**Road-2 @ 3'**	Matrix:	Soil	Date Received:	12.04.19 09.04
Lab Sample Id:	644958-008	Date Collected:	12.03.19 16.35		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	12.04.19 13.35	Basis:	Wet Weight
Seq Number:	3109422				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**174**	5.02	mg/kg	12.04.19 20.26		1

Certificate of Analytical Results 644958

TRC Solutions, Inc, Midland, TX

Cabo Wabo

Sample Id:	**Road-2 @ 4'**	Matrix:	Soil	Date Received:	12.04.19 09.04
Lab Sample Id:	644958-009	Date Collected:	12.03.19 16.40		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	12.04.19 13.35	Basis:	Wet Weight
Seq Number:	3109422				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**142**	4.97	mg/kg	12.04.19 20.35		1

Certificate of Analytical Results 644958

TRC Solutions, Inc, Midland, TX

Cabo Wabo

Sample Id:	**Road-2 @ 5'**	Matrix:	Soil	Date Received:	12.04.19 09.04
Lab Sample Id:	644958-010	Date Collected:	12.03.19 16.45		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	12.04.19 13.35	Basis:	Wet Weight
Seq Number:	3109422				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**154**	4.95	mg/kg	12.04.19 20.44		1

TRC Solutions, Inc, Midland, TX

Cabo Wabo

Sample Id:	**Road-3 @ 0-1'**	Matrix:	Soil	Date Received:	12.04.19 09.04
Lab Sample Id:	644958-011	Date Collected:	12.03.19 16.50		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	12.04.19 13.35	Basis:	Wet Weight
Seq Number:	3109422				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**446**	5.02	mg/kg	12.04.19 20.53		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	12.04.19 11.00	Basis:	Wet Weight
Seq Number:	3109353				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.04.19 15.44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.04.19 15.44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.04.19 15.44	U	1
Total TPH	PHC635	<50	50	mg/kg	12.04.19 15.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	12.04.19 15.44	
o-Terphenyl	84-15-1	98	%	70-135	12.04.19 15.44	

TRC Solutions, Inc, Midland, TX

Cabo Wabo

Sample Id:	**Road-3 @ 0-1'**	Matrix:	Soil	Date Received:	12.04.19 09.04
Lab Sample Id:	644958-011	Date Collected:	12.03.19 16.50		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	12.04.19 10.00	Basis:	Wet Weight
Seq Number:	3109384				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	12.04.19 15.26	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	12.04.19 15.26	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	12.04.19 15.26	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	12.04.19 15.26	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	12.04.19 15.26	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	12.04.19 15.26	U	1
Total BTEX		<0.00199	0.00199	mg/kg	12.04.19 15.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	96	%	70-130	12.04.19 15.26	
4-Bromofluorobenzene	460-00-4	99	%	70-130	12.04.19 15.26	

Certificate of Analytical Results 644958

TRC Solutions, Inc, Midland, TX

Cabo Wabo

Sample Id:	**Road-3 @2'**	Matrix:	Soil	Date Received:	12.04.19 09.04
Lab Sample Id:	644958-012	Date Collected:	12.03.19 16.55		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	12.04.19 13.35	Basis:	Wet Weight
Seq Number:	3109422				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**100**	4.99	mg/kg	12.04.19 21.03		1

Certificate of Analytical Results 644958

TRC Solutions, Inc, Midland, TX

Cabo Wabo

Sample Id:	**Road-3 @ 3'**	Matrix:	Soil	Date Received:	12.04.19 09.04
Lab Sample Id:	644958-013	Date Collected:	12.03.19 17.00		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	12.04.19 13.35	Basis:	Wet Weight
Seq Number:	3109422				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**185**	5.00	mg/kg	12.04.19 21.12		1

Certificate of Analytical Results 644958

TRC Solutions, Inc, Midland, TX

Cabo Wabo

Sample Id:	**Road-3 @ 4'**	Matrix:	Soil	Date Received:	12.04.19 09.04
Lab Sample Id:	644958-014	Date Collected:	12.03.19 17.05		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	12.04.19 13.35	Basis:	Wet Weight
Seq Number:	3109422				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**239**	5.04	mg/kg	12.04.19 21.40		1

Certificate of Analytical Results 644958

TRC Solutions, Inc, Midland, TX

Cabo Wabo

Sample Id:	**Road-3 @ 5'**	Matrix:	Soil	Date Received:	12.04.19 09.04
Lab Sample Id:	644958-015	Date Collected:	12.03.19 17.10		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	12.04.19 13.35	Basis:	Wet Weight
Seq Number:	3109422				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**313**	4.99	mg/kg	12.04.19 21.49		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 644958

TRC Solutions, Inc

Cabo Wabo

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3109421 — Matrix: Solid — Date Prep: 12.04.19
MB Sample Id: 7691651-1-BLK — LCS Sample Id: 7691651-1-BKS — LCSD Sample Id: 7691651-1-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	255	102	255	102	90-110	0	20	mg/kg	12.04.19 13:19	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3109422 — Matrix: Solid — Date Prep: 12.04.19
MB Sample Id: 7691652-1-BLK — LCS Sample Id: 7691652-1-BKS — LCSD Sample Id: 7691652-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	7.37	250	253	101	253	101	90-110	0	20	mg/kg	12.04.19 18:44	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3109421 — Matrix: Soil — Date Prep: 12.04.19
Parent Sample Id: 644709-005 — MS Sample Id: 644709-005 S — MSD Sample Id: 644709-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	3.14	248	253	101	252	100	90-110	0	20	mg/kg	12.04.19 13:56	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3109421 — Matrix: Soil — Date Prep: 12.04.19
Parent Sample Id: 644958-002 — MS Sample Id: 644958-002 S — MSD Sample Id: 644958-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	46.8	253	306	102	300	100	90-110	2	20	mg/kg	12.04.19 16:06	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3109422 — Matrix: Soil — Date Prep: 12.04.19
Parent Sample Id: 644958-003 — MS Sample Id: 644958-003 S — MSD Sample Id: 644958-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	135	250	376	96	367	93	90-110	2	20	mg/kg	12.04.19 19:11	

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

QC Summary 644958

TRC Solutions, Inc

Cabo Wabo

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3109422 Matrix: Soil Date Prep: 12.04.19
Parent Sample Id: 644958-013 MS Sample Id: 644958-013 S MSD Sample Id: 644958-013 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	185	250	434	100	432	99	90-110	0	20	mg/kg	12.04.19 21:21	

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3109353 Matrix: Solid Date Prep: 12.04.19
MB Sample Id: 7691630-1-BLK LCS Sample Id: 7691630-1-BKS LCSD Sample Id: 7691630-1-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	1100	110	1060	106	70-135	4	20	mg/kg	12.04.19 10:26	
Diesel Range Organics (DRO)	<15.0	1000	1020	102	997	100	70-135	2	20	mg/kg	12.04.19 10:26	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	110		127		125		70-135	%	12.04.19 10:26
o-Terphenyl	109		109		105		70-135	%	12.04.19 10:26

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3109353 Matrix: Solid Date Prep: 12.04.19
MB Sample Id: 7691630-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	12.04.19 10:08	

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3109353 Matrix: Soil Date Prep: 12.04.19
Parent Sample Id: 644955-001 MS Sample Id: 644955-001 S MSD Sample Id: 644955-001 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)	<15.0	997	1120	112	1150	115	70-135	3	20	mg/kg	12.04.19 11:24	
Diesel Range Organics (DRO)	30.6	997	1050	102	1090	106	70-135	4	20	mg/kg	12.04.19 11:24	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	127		129		70-135	%	12.04.19 11:24
o-Terphenyl	113		114		70-135	%	12.04.19 11:24

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

QC Summary 644958

TRC Solutions, Inc

Cabo Wabo

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3109384 — Matrix: Solid — Date Prep: 12.04.19
MB Sample Id: 7691602-1-BLK — LCS Sample Id: 7691602-1-BKS — LCSD Sample Id: 7691602-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.103	103	0.104	104	70-130	1	35	mg/kg	12.04.19 11:45	
Toluene	<0.000456	0.100	0.0992	99	0.102	102	70-130	3	35	mg/kg	12.04.19 11:45	
Ethylbenzene	<0.000565	0.100	0.0965	97	0.0996	100	70-130	3	35	mg/kg	12.04.19 11:45	
m,p-Xylenes	<0.00101	0.200	0.194	97	0.201	101	70-130	4	35	mg/kg	12.04.19 11:45	
o-Xylene	<0.000344	0.100	0.0961	96	0.103	103	70-130	7	35	mg/kg	12.04.19 11:45	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	92		92		97		70-130	%	12.04.19 11:45
4-Bromofluorobenzene	95		101		116		70-130	%	12.04.19 11:45

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3109384 — Matrix: Soil — Date Prep: 12.04.19
Parent Sample Id: 644960-001 — MS Sample Id: 644960-001 S — MSD Sample Id: 644960-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000384	0.0998	0.0809	81	0.0924	92	70-130	13	35	mg/kg	12.04.19 12:25	
Toluene	0.00104	0.0998	0.0718	71	0.0881	87	70-130	20	35	mg/kg	12.04.19 12:25	
Ethylbenzene	<0.000564	0.0998	0.0610	61	0.0830	83	70-130	31	35	mg/kg	12.04.19 12:25	X
m,p-Xylenes	0.00133	0.200	0.121	60	0.168	83	70-130	33	35	mg/kg	12.04.19 12:25	X
o-Xylene	0.000996	0.0998	0.0610	60	0.0845	84	70-130	32	35	mg/kg	12.04.19 12:25	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	95		98		70-130	%	12.04.19 12:25
4-Bromofluorobenzene	106		111		70-130	%	12.04.19 12:25

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

Chain of Custody

XENCO LABORATORIES

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 Craslbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701 www.xenco.com

Work Order No: 444958

Page 1 of 2

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, TX 79705	**City, State ZIP:**	
Phone:	432-238-3003	**Email:**	

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:	Cano Wash	**Turn Around**	
Project Number:		Routine ☐	
Project Location	New Mexico	Rush: 3 day	
Sampler's Name:	J. Stoffel	Due Date:	
PO #:		**Quote #:**	

SAMPLE RECEIPT

Temp Blank:	Yes (No)	**Wet Ice:**	(Yes) No
Temperature (°C):	3.3	**Thermometer ID**	D8
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	**Correction Factor:**	0
Sample Custody Seals:	Yes No (N/A)	**Total Containers:**	

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (8015)	BTEX (8021B)	Chlorides (E300)	Sample Comments
	Road-1 @ 0-1'	Soil	12/3/19	1600		1	X	X	X	
	Road-1 @ 2'			1605					X	
	Road-1 @ 3'			1610					X	
	Road-1 @ 4'			1615					X	
	Road-1 @ 5'			1620					X	
	Road-2 @ 0-1'			1625			X	X	X	
	Road-2 @ 2'			1630					X	
	Road-2 @ 3'			1635					X	
	Road-2 @ 4'			1640					X	
	Road-2 @ 5'			1645					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 Tl 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 Tl 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			12/4/19 0944	2		
3				4		
5				6		

Revised Date 022619 Rev. 2019.1

Final 1.000

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Chain of Custody

XENCO LABORATORIES

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Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

Work Order No: 644958

www.xenco.com Page 2 of 2

Project Manager:	Jared Stoffel	**Bill to: (if different)**	TRC Jarred
Company Name:	TRC	**Company Name:**	COG
Address:	10 Desta Dr STE 150E	**Address:**	
City, State ZIP:	Midland, Tx 79705	**City, State ZIP:**	
Phone:	432-236-3003 **Email:**	Ike, Jared	

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:	Cabo Wabo	**Turn Around**	
Project Number:		Routine ☐	
Project Location	New Mexico	Rush: 3 day	
Sampler's Name:	J. Stoffel	Due Date:	
PO #:	**Quote #:**		

SAMPLE RECEIPT

Temp Blank:	Yes (No)	**Wet Ice:**	(Yes) No
Temperature (°C):	3.5	**Thermometer ID**	
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	**Correction Factor:**	0
Sample Custody Seals:	Yes No (N/A)	**Total Containers:**	

ANALYSIS REQUEST

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Pres. Code	TPH (8015)	BTEX (8021B)	Chloride (E300)	Sample Comments
	Road-3@0-1'	Soil	12/3/19	1650							
	Road-3@2'			1655							
	Road-3@3'			1700							
	Road-3@4'			1705							
	Road-3@5'			1710							

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 Tl 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 Tl U **1631 / 245.1 / 7470 / 7471** : Hg

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			12/4/19 0904	2		
3				4		
5				6		

Revised Date 022619 Rev. 2019.1

Final 1.000

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XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 12/04/2019 09:04:00 AM

Work Order #: 644958

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 Date: 12/04/2019

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 12/05/2019

Jessica Kramer

Certificate of Analysis Summary 648608

TRC Solutions, Inc, Midland, TX

Project Name: Caco Wabo

Project Id:
Contact: Jared Stoffel
Project Location: Jal NM

Date Received in Lab: Thu Jan-09-20 04:59 pm
Report Date: 16-JAN-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	648608-001		648608-002		648608-003		648608-004		648608-005		648608-006	
	Field Id:	FL-D01-3'		FL-D02-1.25'		FL-D03-1.25'		FL-D04-1.25'		FL-D05-1.25'		FL-D06-1.25'	
	Depth:	3- ft		1.25- ft		1.25- ft		1.25- ft		1.25- ft		3- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-09-20 12:00		Jan-09-20 09:00		Jan-09-20 10:00		Jan-09-20 10:30		Jan-09-20 11:00		Jan-09-20 11:30	
BTEX by EPA 8021B	***Extracted:***					Jan-15-20 10:30		Jan-15-20 10:30					
	Analyzed:					Jan-15-20 16:23		Jan-15-20 16:43					
	Units/RL:					mg/kg	RL	mg/kg	RL				
Benzene						<0.00199	0.00199	<0.00201	0.00201				
Toluene						0.0114	0.00199	<0.00201	0.00201				
Ethylbenzene						0.0469	0.00199	<0.00201	0.00201				
m,p-Xylenes						0.0402	0.00398	<0.00402	0.00402				
o-Xylene						0.169	0.00199	<0.00201	0.00201				
Total Xylenes						0.2092	0.00199	<0.00201	0.00201				
Total BTEX						0.2675	0.00199	<0.00201	0.00201				
Chloride by EPA 300	***Extracted:***	Jan-12-20 08:30		Jan-12-20 08:30		Jan-12-20 08:30		Jan-12-20 08:30		Jan-12-20 08:30		Jan-12-20 08:30	
	Analyzed:	Jan-12-20 11:44		Jan-12-20 11:51		Jan-12-20 11:58		Jan-12-20 12:04		Jan-12-20 12:11		Jan-12-20 12:18	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		42.9	4.98	41.8	5.03	34.9	4.97	35.4	4.96	29.7	5.04	33.8	5.02
TPH by SW8015 Mod	***Extracted:***					Jan-14-20 13:00		Jan-14-20 13:00					
	Analyzed:					Jan-15-20 03:06		Jan-15-20 03:25					
	Units/RL:					mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)						<49.8	49.8	<49.9	49.9				
Diesel Range Organics (DRO)						<49.8	49.8	<49.9	49.9				
Motor Oil Range Hydrocarbons (MRO)						<49.8	49.8	<49.9	49.9				
Total TPH						<49.8	49.8	<49.9	49.9				

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 648608

TRC Solutions, Inc, Midland, TX

Project Name: Caco Wabo

Project Id:
Contact: Jared Stoffel
Project Location: Jal NM

Date Received in Lab: Thu Jan-09-20 04:59 pm
Report Date: 16-JAN-20
Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	648608-007	648608-008				
	Field Id:	SW-D01-0.5'	SW-D02-1.5'				
	Depth:	0-5 ft	1.5- ft				
	Matrix:	SOIL	SOIL				
	Sampled:	Jan-09-20 12:15	Jan-09-20 12:30				
Chloride by EPA 300	***Extracted:***	Jan-12-20 08:30	Jan-12-20 08:30				
	Analyzed:	Jan-12-20 12:38	Jan-12-20 12:44				
	Units/RL:	mg/kg RL	mg/kg RL				
Chloride		34.5 5.05	33.7 4.96				

Jessica Kramer
Project Assistant

Analytical Report 648608

for

TRC Solutions, Inc

Project Manager: Jared Stoffel

Caco Wabo

16-JAN-20

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 (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)

16-JAN-20

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

Reference: XENCO Report No(s): **648608**
Caco Wabo
Project Address: Jal NM

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) 648608. 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. 648608 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

Jessica Kramer
Project Assistant

Sample Cross Reference 648608

TRC Solutions, Inc, Midland, TX

Caco Wabo

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FL-D01-3'	S	01-09-20 12:00	3 ft	648608-001
FL-D02-1.25'	S	01-09-20 09:00	1.25 ft	648608-002
FL-D03-1.25'	S	01-09-20 10:00	1.25 ft	648608-003
FL-D04-1.25'	S	01-09-20 10:30	1.25 ft	648608-004
FL-D05-1.25'	S	01-09-20 11:00	1.25 ft	648608-005
FL-D06-1.25'	S	01-09-20 11:30	3 ft	648608-006
SW-D01-0.5'	S	01-09-20 12:15	0 - 5 ft	648608-007
SW-D02-1.5'	S	01-09-20 12:30	1.5 ft	648608-008

Client Name: TRC Solutions, Inc
Project Name: Caco Wabo

Project ID:
Work Order Number(s): *648608*

Report Date: *16-JAN-20*
Date Received: *01/09/2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:
Batch: LBA-3113509 BTEX by EPA 8021B
Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected.
Samples affected are: 648608-003.
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analytical Results 648608

TRC Solutions, Inc, Midland, TX

Caco Wabo

Sample Id:	**FL-D01-3'**	Matrix:	Soil	Date Received:	01.09.20 16.59
Lab Sample Id:	648608-001	Date Collected:	01.09.20 12.00	Sample Depth:	3 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	01.12.20 08.30	Basis:	Wet Weight
Seq Number:	3112972				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**42.9**	4.98	mg/kg	01.12.20 11.44		1

Certificate of Analytical Results 648608

TRC Solutions, Inc, Midland, TX

Caco Wabo

Sample Id:	**FL-D02-1.25'**	Matrix:	Soil	Date Received:	01.09.20 16.59
Lab Sample Id:	648608-002	Date Collected:	01.09.20 09.00	Sample Depth:	1.25 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	01.12.20 08.30	Basis:	Wet Weight
Seq Number:	3112972				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**41.8**	5.03	mg/kg	01.12.20 11.51		1

TRC Solutions, Inc, Midland, TX

Caco Wabo

Sample Id:	**FL-D03-1.25'**	Matrix:	Soil	Date Received:	01.09.20 16.59
Lab Sample Id:	648608-003	Date Collected:	01.09.20 10.00	Sample Depth:	1.25 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	01.12.20 08.30	Basis:	Wet Weight
Seq Number:	3112972				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**34.9**	4.97	mg/kg	01.12.20 11.58		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.14.20 13.00	Basis:	Wet Weight
Seq Number:	3113299				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.15.20 03.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.15.20 03.06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.15.20 03.06	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.15.20 03.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-135	01.15.20 03.06	
o-Terphenyl	84-15-1	82	%	70-135	01.15.20 03.06	

Certificate of Analytical Results 648608

TRC Solutions, Inc, Midland, TX

Caco Wabo

Sample Id:	**FL-D03-1.25'**	Matrix:	Soil	Date Received:	01.09.20 16.59
Lab Sample Id:	648608-003	Date Collected:	01.09.20 10.00	Sample Depth:	1.25 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	01.15.20 10.30	Basis:	Wet Weight
Seq Number:	3113509				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.15.20 16.23	U	1
Toluene	108-88-3	**0.0114**	0.00199	mg/kg	01.15.20 16.23		1
Ethylbenzene	100-41-4	**0.0469**	0.00199	mg/kg	01.15.20 16.23		1
m,p-Xylenes	179601-23-1	**0.0402**	0.00398	mg/kg	01.15.20 16.23		1
o-Xylene	95-47-6	**0.169**	0.00199	mg/kg	01.15.20 16.23		1
Total Xylenes	1330-20-7	**0.2092**	0.00199	mg/kg	01.15.20 16.23		1
Total BTEX		**0.2675**	0.00199	mg/kg	01.15.20 16.23		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	212	%	70-130	01.15.20 16.23	**
1,4-Difluorobenzene	540-36-3	108	%	70-130	01.15.20 16.23	

TRC Solutions, Inc, Midland, TX

Caco Wabo

Sample Id:	**FL-D04-1.25'**	Matrix:	Soil	Date Received:	01.09.20 16.59
Lab Sample Id:	648608-004	Date Collected:	01.09.20 10.30	Sample Depth:	1.25 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	01.12.20 08.30	Basis:	Wet Weight
Seq Number:	3112972				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**35.4**	4.96	mg/kg	01.12.20 12.04		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.14.20 13.00	Basis:	Wet Weight
Seq Number:	3113299				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.15.20 03.25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.15.20 03.25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.15.20 03.25	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.15.20 03.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-135	01.15.20 03.25	
o-Terphenyl	84-15-1	81	%	70-135	01.15.20 03.25	

TRC Solutions, Inc, Midland, TX

Caco Wabo

Sample Id:	**FL-D04-1.25'**	Matrix:	Soil	Date Received:	01.09.20 16.59
Lab Sample Id:	648608-004	Date Collected:	01.09.20 10.30	Sample Depth:	1.25 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	01.15.20 10.30	Basis:	Wet Weight
Seq Number:	3113509				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.15.20 16.43	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.15.20 16.43	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.15.20 16.43	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.15.20 16.43	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.15.20 16.43	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.15.20 16.43	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.15.20 16.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	70-130	01.15.20 16.43	
1,4-Difluorobenzene	540-36-3	107	%	70-130	01.15.20 16.43	

Certificate of Analytical Results 648608

TRC Solutions, Inc, Midland, TX

Caco Wabo

Sample Id:	**FL-D05-1.25'**	Matrix:	Soil	Date Received:	01.09.20 16.59
Lab Sample Id:	648608-005	Date Collected:	01.09.20 11.00	Sample Depth:	1.25 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	01.12.20 08.30	Basis:	Wet Weight
Seq Number:	3112972				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**29.7**	5.04	mg/kg	01.12.20 12.11		1

Certificate of Analytical Results 648608

TRC Solutions, Inc, Midland, TX

Caco Wabo

Sample Id:	**FL-D06-1.25'**	Matrix:	Soil	Date Received:	01.09.20 16.59
Lab Sample Id:	648608-006	Date Collected:	01.09.20 11.30	Sample Depth:	3 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	01.12.20 08.30	Basis:	Wet Weight
Seq Number:	3112972				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**33.8**	5.02	mg/kg	01.12.20 12.18		1

Certificate of Analytical Results 648608

TRC Solutions, Inc, Midland, TX

Caco Wabo

Sample Id:	**SW-D01-0.5'**	Matrix:	Soil	Date Received:	01.09.20 16.59
Lab Sample Id:	648608-007	Date Collected:	01.09.20 12.15	Sample Depth:	0 - 5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	01.12.20 08.30	Basis:	Wet Weight
Seq Number:	3112972				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**34.5**	5.05	mg/kg	01.12.20 12.38		1

Certificate of Analytical Results 648608

TRC Solutions, Inc, Midland, TX

Caco Wabo

Sample Id:	**SW-D02-1.5'**	Matrix:	Soil	Date Received:	01.09.20 16.59
Lab Sample Id:	648608-008	Date Collected:	01.09.20 12.30	Sample Depth:	1.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	01.12.20 08.30	Basis:	Wet Weight
Seq Number:	3112972				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**33.7**	4.96	mg/kg	01.12.20 12.44		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 648608

TRC Solutions, Inc

Caco Wabo

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3112972 — Matrix: Solid — Date Prep: 01.12.20
MB Sample Id: 7694154-1-BLK — LCS Sample Id: 7694154-1-BKS — LCSD Sample Id: 7694154-1-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	272	109	272	109	90-110	0	20	mg/kg	01.12.20 10:31	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3112972 — Matrix: Soil — Date Prep: 01.12.20
Parent Sample Id: 648608-006 — MS Sample Id: 648608-006 S — MSD Sample Id: 648608-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	33.8	251	307	109	307	109	90-110	0	20	mg/kg	01.12.20 12:24	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3112972 — Matrix: Soil — Date Prep: 01.12.20
Parent Sample Id: 648722-001 — MS Sample Id: 648722-001 S — MSD Sample Id: 648722-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1140	149	1270	87	1290	101	90-110	2	20	mg/kg	01.12.20 10:51	X

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3113299 — Matrix: Solid — Date Prep: 01.14.20
MB Sample Id: 7694309-1-BLK — LCS Sample Id: 7694309-1-BKS — LCSD Sample Id: 7694309-1-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	996	100	913	91	70-135	9	20	mg/kg	01.14.20 20:51	
Diesel Range Organics (DRO)	<15.0	1000	948	95	862	86	70-135	10	20	mg/kg	01.14.20 20:51	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	109		121		110		70-135	%	01.14.20 20:51
o-Terphenyl	115		109		97		70-135	%	01.14.20 20:51

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3113299 — Matrix: Solid — Date Prep: 01.14.20
MB Sample Id: 7694309-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.14.20 20:33	

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

QC Summary 648608

TRC Solutions, Inc

Caco Wabo

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3113299 — Matrix: Soil — Date Prep: 01.14.20
Parent Sample Id: 648566-001 — MS Sample Id: 648566-001 S — MSD Sample Id: 648566-001 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)	<15.0	997	831	83	833	83	70-135	0	20	mg/kg	01.14.20 21:47	
Diesel Range Organics (DRO)	17.9	997	786	77	787	77	70-135	0	20	mg/kg	01.14.20 21:47	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		108		70-135	%	01.14.20 21:47
o-Terphenyl	91		93		70-135	%	01.14.20 21:47

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3113509 — Matrix: Solid — Date Prep: 01.15.20
MB Sample Id: 7694429-1-BLK — LCS Sample Id: 7694429-1-BKS — LCSD Sample Id: 7694429-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.111	111	0.103	103	70-130	7	35	mg/kg	01.15.20 12:23	
Toluene	<0.000456	0.100	0.104	104	0.0925	93	70-130	12	35	mg/kg	01.15.20 12:23	
Ethylbenzene	<0.000565	0.100	0.0996	100	0.0882	88	70-130	12	35	mg/kg	01.15.20 12:23	
m,p-Xylenes	<0.00101	0.200	0.195	98	0.172	86	70-130	13	35	mg/kg	01.15.20 12:23	
o-Xylene	<0.000344	0.100	0.0967	97	0.0860	86	70-130	12	35	mg/kg	01.15.20 12:23	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		105		104		70-130	%	01.15.20 12:23
4-Bromofluorobenzene	75		93		89		70-130	%	01.15.20 12:23

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3113509 — Matrix: Soil — Date Prep: 01.15.20
Parent Sample Id: 648467-021 — MS Sample Id: 648467-021 S — MSD Sample Id: 648467-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.0963	96	0.101	101	70-130	5	35	mg/kg	01.15.20 13:03	
Toluene	<0.000456	0.100	0.0903	90	0.0908	91	70-130	1	35	mg/kg	01.15.20 13:03	
Ethylbenzene	<0.000565	0.100	0.0864	86	0.0852	85	70-130	1	35	mg/kg	01.15.20 13:03	
m,p-Xylenes	<0.00101	0.200	0.169	85	0.165	83	70-130	2	35	mg/kg	01.15.20 13:03	
o-Xylene	<0.000344	0.100	0.0843	84	0.0833	83	70-130	1	35	mg/kg	01.15.20 13:03	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	106		106		70-130	%	01.15.20 13:03
4-Bromofluorobenzene	93		92		70-130	%	01.15.20 13:03

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

XENCO LABORATORIES

Chain of Custody

RSEBRINGE@TRCCOMPANIES.COM
ITAVEREZ@CONCHO.COM

Work Order No: 664868

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 Craslbad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

www.xenco.com Page ____ of ____

Project Manager:	Jared Stoffel	Bill to: (if different)	Ike Tavarez
Company Name:	TRC	Company Name:	COG
Address:	10 Desta Dr, #150E	Address:	600 W Illinois
City, State ZIP:	Midland TX 79705	City, State ZIP:	Midland TX 79701
Phone:	432.520.7720	Email:	JStoffel@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:	Cabo Wabo	Turn Around	
Project Number:		Routine	☑
Project Location	Jal NM	Rush:	
Sampler's Name:	Russell Sebring	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT

Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	2.4	Thermometer ID:	R8
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	
Sample Custody Seals:	Yes No (N/A)	Total Containers:	

ANALYSIS REQUEST

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Chloride 300	BTEX	TPH 8015	Sample Comments
	FL-D01-3'	S	9Jun20	1200	3'	1	✓			
	FL-D02-1.25'	S		0900	1.25'	1	✓			
	FL-D03-1.25'	S		1000	1.25'	1	✓	✓	✓	Please see email
	FL-D04-1.25'	S		1030	1.25'	1	✓	✓	✓	in header
	FL-D05-1.25'	S		1100	1.25'	1	✓			
	FL-D06-1.25'	S		1130	1.25'	1	✓			
	SW-D01-0.5'	S		1215	0.5'	1	✓			
	SW-D02-1.5'	S		1230	1.5'	1	✓			

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl 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 Tl U **1631 / 245.1 / 7470 / 7471** : Hg

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time		Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	[signature]	[signature]	1/9/20 1659	2			
3				4			
5				6			

Revised Date 022619 Rev. 2019.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 01.09.2020 04.59.00 PM

Work Order #: 648608

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)?	2.4
#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 Date: 01.10.2020
Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 01.10.2020
Jessica Kramer