TRC

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SITE REMEDIATION SUMMARY

and

SITE CLOSURE REQUEST

COG Operating, LLC
Road Runner Federal #003 & 013 CTB
Eddy County, New Mexico
Unit Letter "B", Section 36, Township 25 South, Range 26 East
Latitude 32.09207 ° North, Longitude 104.24589° West
NMOCD Reference No. NRM2002143101

Prepared For:

COG Operating, LLC
600 W Illinois Avenue
Midland, Texas 79701

Prepared By:

TRC Environmental Corporation
10 Desta Drive, Suite 150E
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April 2020

Tania Babu
Environmental Scientist I

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Project Manager

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INTRODUCTION & BACKGROUND INFORMATION

TRC Environmental Corporation (TRC), on behalf of COG Operating, LLC (COG), has prepared this *Site Remediation Summary and Site Closure Request* for the Release Site known as the Road Runner Federal #003 & #013 CTB (the Site). The legal description of the Site is Unit Letter "B", Section 36, Township 25 South, Range 26 East, in Eddy County, New Mexico. The subject property is owned by the United States Department of the Interior and administered by The Bureau of Land Management (BLM). The GPS coordinates for the Site are N 32.09207°, W 104.24589°. A topographical map is provided as **Figure 1**. Photographs are provided in the photolog as **Appendix C**.

On November 5, 2019, COG discovered a produced water release had occurred at the Site. The Release was attributed to an incompatible material application in the flowline. On the discovery date, COG notified the New Mexico Oil Conservation Division (NMOCD) and BLM of the Release. The Release was assigned an NMOCD Reference number of NRM2002143101. During initial response activities, a vacuum truck was dispatched to recover all freestanding fluids. On November 19, 2019, the initial Release Notification and Corrective Action (Form C-141) was submitted to the NMOCD. The Form C-141 indicated twenty-three (23) barrels (bbls) of produced water was released. No produced water was recovered during initial response activities. The Release affected an area measuring approximately 7,600 square feet (sq. ft.). The C-141 indicated the impacted area was located on the pasture adjacent to the flowline. A copy of the submitted Form C-141 for the Release is provided in **Appendix A**.

A groundwater database maintained by The New Mexico Office of the State Engineer (NMOSE) did not identify any registered water wells in Section 36, Township 25 South, Range 26 East. The nearest well recorded in the NMOSE groundwater database is located approximately seven-tenths (0.7) of a mile north of the Site and has a depth to groundwater less than thirty-five (35) feet (ft) below ground surface (bgs). No water wells were observed within one thousand (1,000) feet of the Site. No surface water was observed within one thousand (1,000) feet of the Release. An aerial map with nearby water wells and floodplain data is provided as **Figure 2**.

Based on the inferred depth to groundwater at the Road Runner Federal #003 & #013 CTB Release Site, the NMOCD *Closure Criteria for Soils Impacted by a Release* warrants the most stringent closure criteria listed, due to the lack of definitive depth to groundwater data. In addition, the Road Runner Federal #003 & #013 CTB is located in the 'high karst' area as outlined in Bureau of Land Management (BLM) publicly available Karst Potential Map. The karst potential map is provided as **Figure 3**. Consequently, COG will utilize the most stringent NMOCD Closure Criteria for Soils Impacted by a Release for the Road Runner Federal #003 & #013 CTB as follows:

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

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INITIAL SOIL INVESTIGATION SUMMARY

On November 18, 2019 and December 3, 2019, an initial soil investigation was conducted at the Release Site. During the investigation, a total of nineteen (19) soil samples (AH-1 0-6", AH-1 0-6" R, AH-1 6-12", AH-1 6-12" R, AH-1 12-18", AH-1 12-18" R, AH-1 18-24", AH-1 24-30", AH-2 0-6", AH-2 0-6" R, AH-2 6-12", AH-2 6-12" R, AH-2 12-15", AH-3 0-6", AH-3 6-12", AH-4 0-6", AH-4 6-12", AH-5 0-6", AH-5 6-12") were collected from five (5) augerholes advanced within the Release footprint. Soil samples were submitted to Xenco Laboratories in Midland, Texas for chloride analysis by E300.0 and/or TPH analysis by Method SW 846 8015M and BTEX by Method SW 846 8021B. A review of analytical results indicated the soil samples exhibited concentrations for TPH, BTEX, and chloride were above NMOCD regulatory guidelines, with the exception of soil samples AH-2 12-15", AH-3 6-12", AH-4 6-12", AH-5 0-6", and AH-5 6-12" . On February 10, 2020, a trench was installed in the area represented by Augerhole-1 to a depth of approximately five (5) ft bgs to confirm chloride delineation. One soil sample (Trench-1 @ 5') was collected from the base of the trench and submitted to the laboratory for chloride analysis. A review of the analytical results indicated the soil sample a chloride concentration below NMOCD regulatory guidelines. A summary of the analytical results is presented in **Table 1**. The sample locations are depicted in **Figure 4**.

REMEDIATION SUMMARY

Based on the laboratory analytical results from the soil samples collected during the initial soil investigation, the Release Site does not appear to be impacted above NMOCD regulatory guidelines by TPH or BTEX. However, the Release Site does appear to be impacted above NMOCD regulatory guidelines by chloride concentrations ranging from surface to approximately two and a half (2.5) ft bgs.

On February 12, 2020, excavation activities commenced to remove impacted soils from the Release Site. The Release area was excavated until each area and depth represented by a soil sample that exhibited chloride concentrations above NMOCD regulatory guidelines was removed. Additional excavation was utilized in areas where chloride field screen results indicated chloride concentrations above the NMOCD regulatory guidelines remained. A total of seven (7) five-point composite sidewall samples (NSW01, NSW-02, SW-01, ESW-01, ESW-02, WSW-01, WSW-02) were collected and submitted to the laboratory for chloride and/or TPH and BTEX analyses. Analytical results indicated each sidewall confirmation samples exhibited concentrations below NMOCD regulatory guidelines for each analyzed constituent. In addition, a total of twenty- four (24) five-point composite floor confirmation soil samples (FL-01 @ 9”, FL02 @ 9”, FL-03 @ 9”, FL04 @ 1’, FL-05 @ 9”, FL06 @ 1', FL07 @ 1', FL08 @ 1.5', FL-09 @ 9", FL10 @ 1.25', FL11 @ 2', FL-12 @ 15", FL-13 @ 15", FL-14 @ 15", FL-15 @ 15", FL015@2', FL-16 @ 15", FL-17 @ 15", FL-18 @ 15", FL-19 @ 40", FL20 @ 4.5', FL21 @ 4.5', FL22 @4', FL-23 @ 40", FL-24 @ 40") were collected from the base of the excavation. Collected soil samples were submitted to the laboratory for chloride and/or TPH and BTEX concentrations. A review of analytical results indicated concentrations were below NMOCD regulatory guidelines in submitted samples for each analyzed constituent, with the exception of soil sample FL-15 @ 15’’, which exhibited chloride concentration of 1,850 mg/kg. The area of the excavation represented by soil FL-15 @ 15’’ was vertically advanced to a depth of two (2) ft bgs. Soil sample FL-15 @ 2’ was collected from the base of the excavation and submitted to the laboratory for chloride analysis. A review of the

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analytical data indicated the soil sample exhibited a chloride concentration below NMOCD regulatory guidelines.

During excavation activities, excavated soil was staged on a poly-ethylene liner pending final disposition at an NMOCD approved disposal facility. Following a final review of the analytical data, the excavation was backfilled to grade with locally sourced non-impacted 'like' material. The impacted material was transported under manifest to R360 Red Bluff for disposal. A summary of the confirmation soil sample locations is depicted in **Figure 5**. A summary of analytical data is shown in **Table 1**. Laboratory analytical reports are provided in **Appendix D**.

SITE CLOSURE REQUEST

Remediation activities were conducted in accordance with NMCOD regulatory guidelines. Laboratory analytical results from excavation confirmation soil samples indicated TPH, BTEX, and/or chloride concentrations were below the NMOCD regulatory guidelines in the submitted confirmation soil samples. The impacted soil was transported under manifest to the R360 Red Bluff Facility, and the Site was returned to grade with locally sourced non-impacted backfill material. Based on laboratory analytical results and field activities conducted to date, TRC recommends COG provide copies of this Remediation Summary and Site Closure Request to the NMOCD and BLM and request closure status to the Road Runner Federal #003 & #013 CTB.

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.

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DISTRIBUTION

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Carlsbad Field Office
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Carlsbad, New Mexico 88220

Copy 3: Ike Tavarez
COG Operating, LLC
600 W. Illinois Avenue
Midland, Texas 79701

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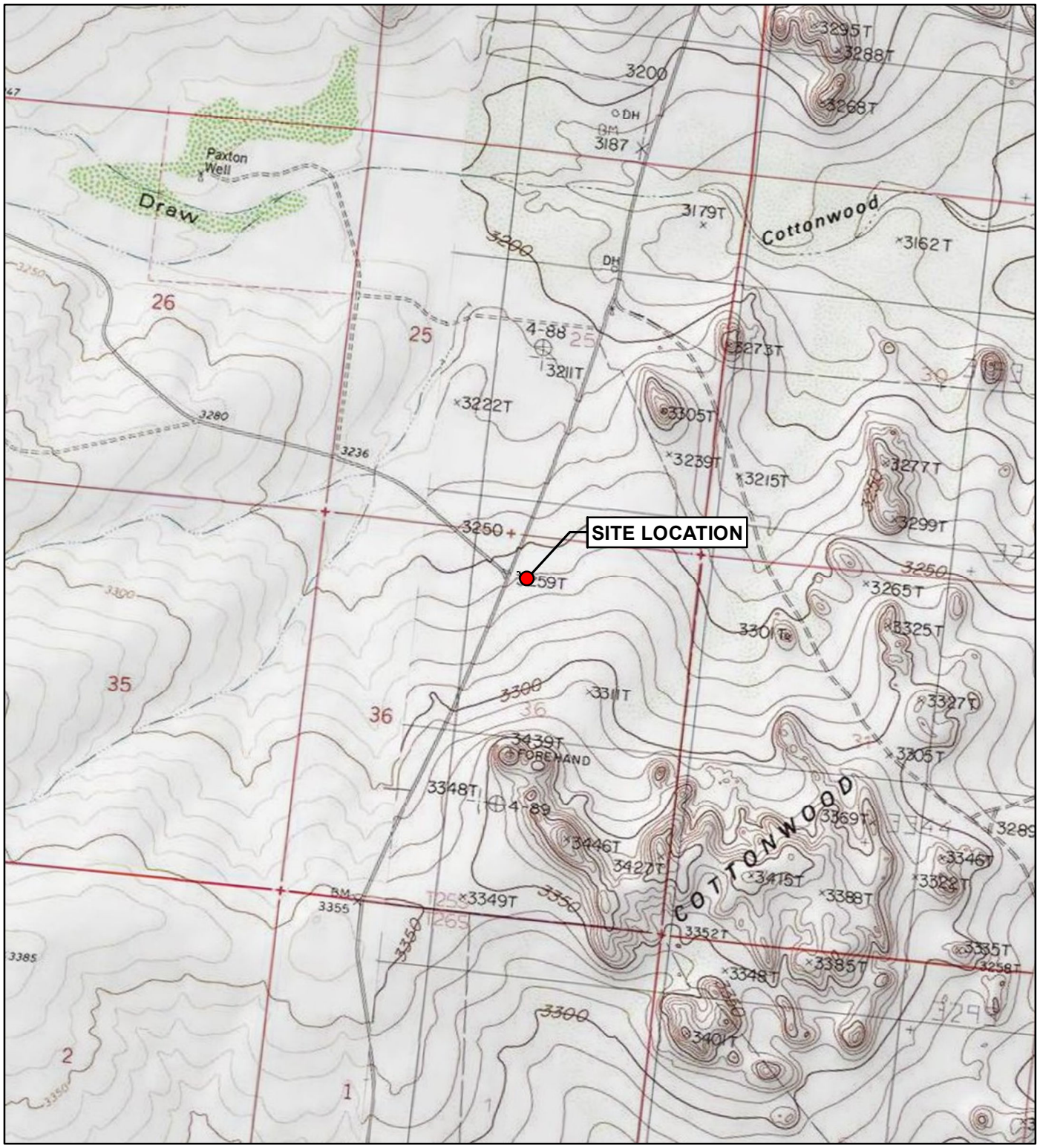
TABLE 1
Summary of Sampling Analytical Results (Delineation Samples)
Concentrations of BTEX, TPH, and/or Chloride in Soil

Sample ID	Date	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)
Delineation Samples											
AH-1 0-6"	11/18/19	0-6"	Excavated	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	**9,380**
AH-1 0-6" R	12/3/19	0-6"	Excavated	–	–	–	–	–	–	–	**9,140**
AH-1 6-12"	11/18/19	6-12"	Excavated	<0.00201	<0.00201	<49.8	<49.8	<49.8	<49.8	<49.8	**3,750**
AH-1 6-12" R	12/3/19	6-12"	Excavated	–	–	–	–	–	–	–	**4,600**
AH-1 12-18"	11/18/19	12-18"	Excavated	<0.00202	<0.00202	<49.9	<49.9	<49.9	<49.9	<49.9	**4,510**
AH-1 12-18" R	12/3/19	12-18"	Excavated	–	–	–	–	–	–	–	**5,420**
AH-1 18-24"	12/3/19	18-24"	Excavated	–	–	–	–	–	–	–	**7,660**
AH-1 24-30"	12/3/19	24-30"	Excavated	–	–	–	–	–	–	–	**3,890**
Trench-1 @ 5'	2/10/20	5'	In-Situ	–	–	–	–	–	–	–	224
AH-2 0-6"	11/18/19	0-6"	Excavated	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	**4,920**
AH-2 0-6" R	12/3/19	0-6"	Excavated	–	–	–	–	–	–	–	**7,900**
AH-2 6-12"	11/18/19	6-12"	Excavated	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	**924**
AH-2 6-12" R	12/3/19	6-12"	Excavated	–	–	–	–	–	–	–	**1,150**
AH-2 12-15"	12/3/19	12-15"	In-Situ	–	–	–	–	–	–	–	256
AH-3 0-6"	11/18/19	0-6"	Excavated	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	**5,020**
AH-3 6-12"	11/18/19	6-12"	In-Situ	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	132
AH-4 0-6"	11/18/19	0-6"	Excavated	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	**605**
AH-4 6-12"	11/18/19	6-12"	In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	8.21
AH-5 0-6"	11/18/19	0-6"	In-Situ	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	445
AH-5 6-12"	11/18/19	6-12"	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	44.4
Confirmation Samples											
FL-01 @ 9"	2/14/20	9"	In-Situ	-	-	-	-	-	-	-	279
FL02 @ 9"	2/17/20	9"	In-Situ	-	-	-	-	-	-	-	<9.98
FL-03 @ 9"	2/14/20	9"	In-Situ	-	-	-	-	-	-	-	211
FL04 @ 1'	2/17/20	12"	In-Situ	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50	106
FL-05 @ 9"	2/14/20	9"	In-Situ	-	-	-	-	-	-	-	461
FL06 @ 1'	2/17/20	12"	In-Situ	-	-	-	-	-	-	-	260
FL07 @ 1'	2/17/20	12"	In-Situ	-	-	-	-	-	-	-	198
NMOCD Closure Criteria				**10**	**50**	**-**	**-**	**-**	**-**	**100**	**600**

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

Sample ID	Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					E 300
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C_6-C_{10} (mg/kg)	DRO C_{10}-C_{28} (mg/kg)	GRO + DRO C_6-C_{28} (mg/kg)	ORO C_{28}-C_{35} (mg/kg)	TPH C_6-C_{35} (mg/kg)	Chloride (mg/kg)
FL08 @ 1.5'	2/17/20	18"	In-Situ	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50	349
FL-09 @ 9"	2/14/20	9"	In-Situ	-	-	-	-	-	-	-	317
FL10 @ 1.25'	2/17/20	15"	In-Situ	-	-	-	-	-	-	-	169
FL11 @ 2'	2/17/20	24"	In-Situ	-	-	-	-	-	-	-	130
FL-12 @ 15"	2/12/20	15"	In-Situ	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50	315
FL-13 @ 15"	2/12/20	15"	In-Situ	-	-	-	-	-	-	-	384
FL-14 @ 15"	2/12/20	15"	In-Situ	-	-	-	-	-	-	-	594
FL-15 @ 15"	2/12/20	15"	Excavated	-	-	-	-	-	-	-	**1,850**
FL-15 @ 2'	2/17/20	24"	In-Situ	-	-	-	-	-	-	-	91.7
FL-16 @ 15"	2/12/20	15"	In-Situ	<0.00200	<0.002	<49.9	<49.9	<49.9	<49.9	<49.9	164
FL-17 @ 15"	2/12/20	15"	In-Situ	-	-	-	-	-	-	-	66.7
FL-18 @ 15"	2/12/20	15"	In-Situ	-	-	-	-	-	-	-	269
FL-19 @ 40"	2/14/20	40"	In-Situ	-	-	-	-	-	-	-	181
FL20 @ 4.5'	2/17/20	54"	In-Situ	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50	100
FL21 @ 4.5'	2/17/20	54"	In-Situ	-	-	-	-	-	-	-	482
FL22 @4'	2/17/20	48"	In-Situ	-	-	-	-	-	-	-	95.0
FL-23 @ 40"	2/12/20	40"	In-Situ	-	-	-	-	-	-	-	126
FL-24 @ 40"	2/12/20	40"	In-Situ	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	49.9
NSW01	2/17/20	-	In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	321
NSW-02	2/14/20	-	In-Situ	-	-	-	-	-	-	-	43.8
SSW-01	2/12/20	-	In-Situ	<0.00200	<0.002	<49.8	<49.8	<49.8	<49.8	<49.8	141
ESW-01	2/12/20	-	In-Situ	-	-	-	-	-	-	-	7.78
ESW-02	2/17/20	-	In-Situ	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50	242
WSW-01	2/14/20	-	In-Situ	-	-	-	-	-	-	-	334
WSW-02	2/12/20	-	In-Situ	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50	396
NMOCD Closure Criteria				**10**	**50**	**-**	**-**	**-**	**-**	**100**	**600**



BASE MAP FROM USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES.

N

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

0 2,000 4,000
FEET

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Suite #250
Austin, TX 78752
Phone: 512.329.6080
TRC - GIS

PROJECT:
CONCHO RESOURCES
ROAD RUNNDER FEDERAL #003 & #013 CTB
EDDY COUNTY, NEW MEXICO

TITLE:
TOPOGRAPHIC MAP

DRAWN BY:	M. JAGOE
CHECKED BY:	
APPROVED BY:	
DATE:	MARCH 2020
PROJ. NO.:	372953
FILE:	372953_1.mxd

FIGURE 1

S:\1-PROJECTS\ConchoResources\372953\MXD\372953_1.mxd -- Saved By: MJAGOE on 3/27/2020, 11:20:47 AM

Plot Date: 3/27/2020, 11:26:57 AM by MJAGOE -- LAYOUT: ANSI B (11"x17")
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Coordinate System: NAD 1983 2011 StatePlane New Mexico East FIPS 3001 Ft US (Foot US)
Map Rotation: 0

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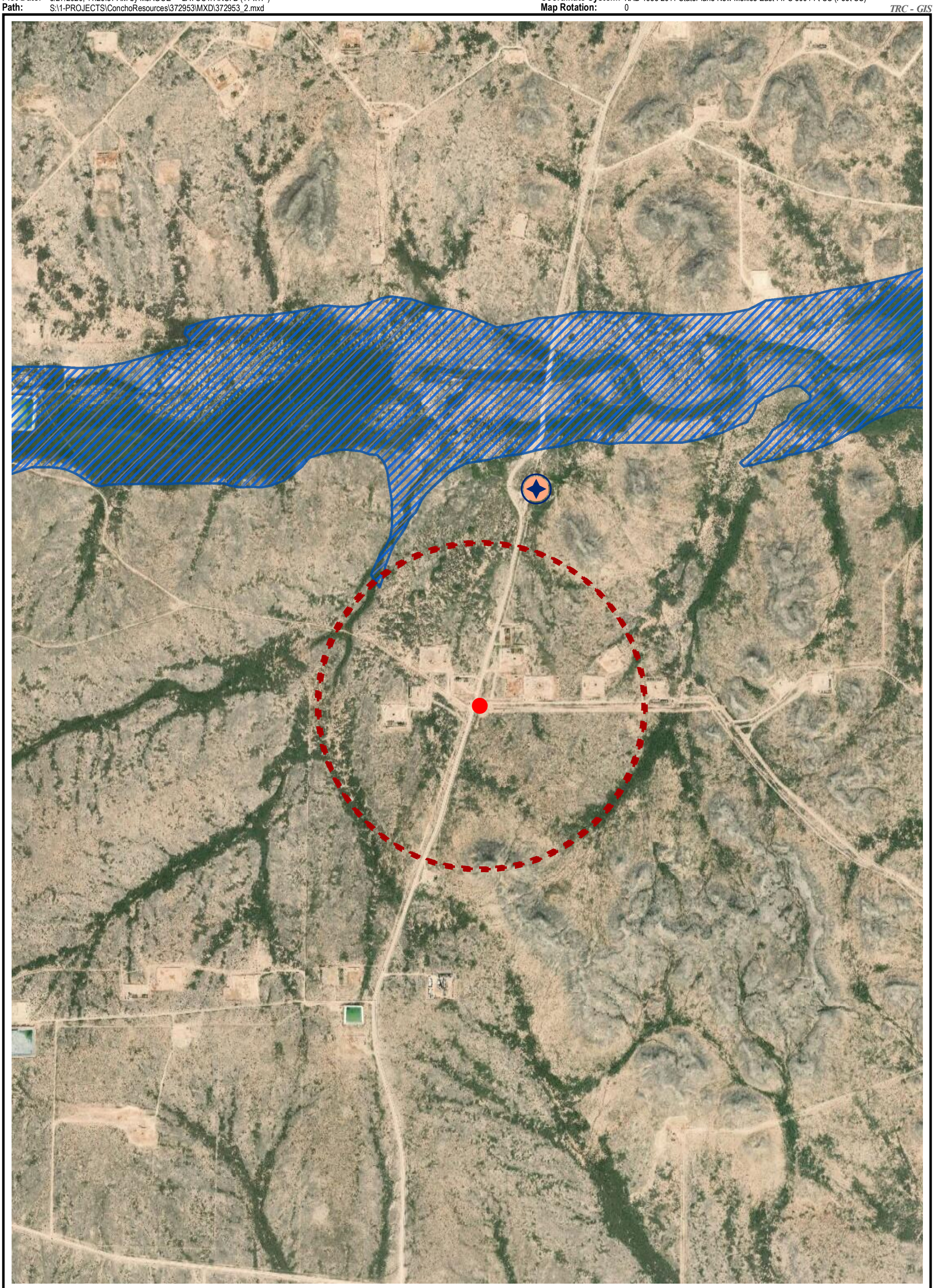

LEGEND

SITE LOCATION
HALF MILE RADIUS
WATER WELL
AREA INSIDE 100 YEAR FLOODPLAIN

SOURCE: FLOODPLAIN - FEMA FLOOD MAP SERVICE CENTER (MSC); AERIAL IMAGERY - ESRI WORLD IMAGERY

0 1,500 FEET
1 " = 1,500 '
1:18,000

N

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Phone: 512.329.6080

PROJECT:
CONCHO RESOURCES
ROAD RUNNDER FEDERAL #003 & #013 CTB
EDDY COUNTY, NEW MEXICO

TITLE:
AERIAL MAP

DRAWN BY:	M. JAGOE
CHECKED BY:	
APPROVED BY:	
DATE:	MARCH 2020
PROJ. NO.:	372953
FILE:	372953_2.mxd

FIGURE 2

Plot Date: 3/27/2020, 11:28:56 AM by MJAGOE -- LAYOUT: ANSI B (11"x17")
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Coordinate System: NAD 1983 2011 StatePlane New Mexico East FIPS 3001 Ft US (Foot US)
Map Rotation: 0

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LEGEND

LOW KARST POTENTIAL

HIGH KARST POTENTIAL

MEDIUM KARST POTENTIAL

SOURCE: KARST DATA FROM NEW MEXICO BUREAU OF LAND MANAGEMENT; AERIAL IMAGERY - ESRI WORLD IMAGERY

0 2 MILES

1 " = 2 MILES

1:99,960

N

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PROJECT:

CONCHO RESOURCES
ROAD RUNNDER FEDERAL #003 & #013 CTB
EDDY COUNTY, NEW MEXICO

TITLE:

KARST POTENTIAL MAP

DRAWN BY:	M. JAGOE
CHECKED BY:	
APPROVED BY:	
DATE:	MARCH 2020
PROJ. NO.:	372953
FILE:	372953_3.mxd

FIGURE 3

Plot Date: 3/27/2020, 15:13:51 PM by MJAGOE -- LAYOUT: ANSI B (11"x17")
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Coordinate System: NAD 1983 2011 StatePlane New Mexico East FIPS 3001 Ft US (Foot US)
Map Rotation: 0

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LEGEND

DELINEATION SAMPLE

RELEASE AREA

SOURCE: AERIAL IMAGERY - GOOGLE AND THEIR DATA PARTNERS (3/12/2016)

N

0 15 FEET

1 " = 15 '

1:180

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PROJECT:

CONCHO RESOURCES
ROAD RUNNDER FEDERAL #003 & #013 CTB
EDDY COUNTY, NEW MEXICO

TITLE:

DELINEATION SAMPLE LOCATION MAP

DRAWN BY:	M. JAGOE
CHECKED BY:	
APPROVED BY:	
DATE:	MARCH 2020
PROJ. NO.:	376574
FILE:	372953_4.mxd

FIGURE 4

Plot Date: 3/27/2020, 15:37:23 PM by MJAGOE -- LAYOUT: ANSI B (11"x17")
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Coordinate System: NAD 1983 2011 StatePlane New Mexico East FIPS 3001 Ft US (Foot US)
Map Rotation: 0

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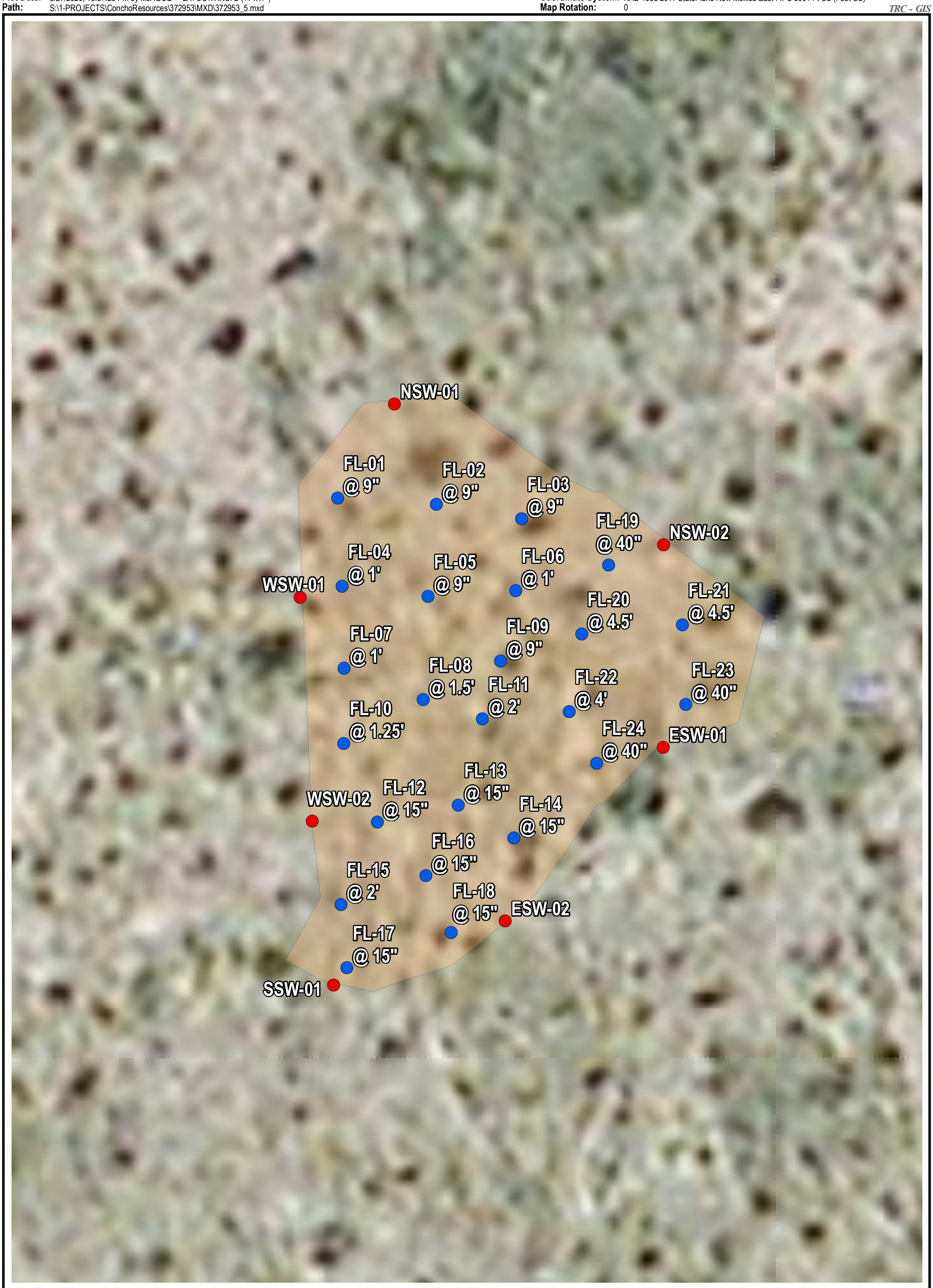

LEGEND

SIDE WALL SAMPLE

EXCAVATED AREA

SAMPLE LOCATION

SOURCE: AERIAL IMAGERY - GOOGLE AND THEIR DATA PARTNERS (3/12/2016)

0 15 FEET

1 " = 15 '

1:180

N

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PROJECT:

CONCHO RESOURCES
ROAD RUNNDER FEDERAL #003 & #013 CTB
EDDY COUNTY, NEW MEXICO

TITLE:

CONFIRMATION SAMPLE LOCATION MAP

DRAWN BY:	M. JAGOE
CHECKED BY:	
APPROVED BY:	
DATE:	MARCH 2020
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FILE:	372953_5.mxd

FIGURE 5

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

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	NRM2002143101
District RP	
Facility ID	
Application ID	

Release Notification

YGILG-191119-C-1410

Responsible Party

Responsible Party	COG Operating, LLC	OGRID	229137
Contact Name	Jennifer Knowlton	Contact Telephone	(575) 748-1570
Contact email	JKnowlton@concho.com	Incident # *(assigned by OCD)*	
Contact mailing address	600 West Illinois Avenue, Midland, Texas 79701		

Location of Release Source

Latitude 32.09207 Longitude -104.24589
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Road Runner Federal #003 & #013 CTB	Site Type	Flowline
Date Release Discovered	November 05, 2019	API# *(if applicable)*	

Unit Letter	Section	Township	Range	County
B	36	25S	26E	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) 23	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 an incompatible material application.
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.

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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: Brittany N. Esparza Title: HSE Administrative Assistant

Signature: Brittany Esparza Date: 11/19/2019

email: besparza@concho.com Telephone: (432) 221-0398

OCD Only

Received by: Ramona Marcus Date: 1/21/2020

****** LIQUID SPILLS - VOLUME CALCULATIONS ******

Location of spill: COG -Road Runner Fed. 3 & 13 CTB -Flow line **Date of Spill:** 5-Nov-2019

If the leak/spill is associated with production equipment, i.e. - wellhead, stuffing box, flowline, tank battery, production vessel, transfer pump, or storage tank **place an "X" here:** X

Input Data:

	OIL:	WATER:
If spill volumes from measurement, i.e. metering, tank volumes, etc. are known enter the volumes here:	0.0 BBL	0.0 BBL

If "known" spill volumes are given, input data for the following "Area Calculations" is optional. The above will override the calculated volumes.

Total Area Calculations

Total Surface Area	width		length		wet soil depth	oil (%)
Rectangle Area #1	95 ft		80 ft	X	1.50 in	0%
Rectangle Area #2	0 ft	X	0 ft	X	0.00 in	0%
Rectangle Area #3	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #4	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #5	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #6	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #7	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #8	0 ft	X	0 ft	X	0 in	0%

Standing Liquid Calculations

Standing Liquid Area	width		length		liquid depth	oil (%)
Rectangle Area #1	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #2	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #3	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #4	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #5	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #6	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #7	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #8	0 ft	X	0 ft	X	0 in	0%

okay

production system leak - DAILY PRODUCTION DATA REQUIRED

Average Daily Production: Oil 0 BBL Water 0 BBL 0 Gas (MCFD)

Total Hydrocarbon Content in gas: 0% (percentage)

Did leak occur before the separator?: YES N/A *(place an "X")*

H2S Content in Produced Gas: 0 PPM

H2S Content in Tank Vapors: 0 PPM

Amount of Free Liquid Recovered: 0 BBL okay

Percentage of Oil in Free Liquid Recovered: 0% (percentage)

Liquid holding factor *: 0.14 gal per gal

Use the following when the spill wets the grains of the soil.
* Sand = **0.08** gallon (gal.) liquid per gal. volume of soil.
* Gravelly (caliche) loam = **0.14** gal. liquid per gal. volume of soil.
* Sandy clay loam soil = **0.14** gal liquid per gal. volume of soil.
* Clay loam = **0.16** gal. liquid per gal. volume of soil.

Use the following when the liquid completely fills the pore space of the soil:
Occurs when the spill soaked soil is contained by barriers, natural (or not).
* Clay loam = **0.20** gal. liquid per gal. volume of soil.
* Gravelly (caliche) loam = **0.25** gal. liquid per gal. volume of soil.
* Sandy loam = **0.5** gal. liquid per gal. volume of soil.

Total Solid/Liquid Volume: 7,600 **sq. ft.** 950 **cu. ft.** **cu. ft.**

Total Free Liquid Volume: **sq. ft.** **cu. ft.** **cu. ft.**

Estimated Volumes Spilled

	H2O	OIL
Liquid in Soil:	23.7 BBL	0.0 BBL
Free Liquid:	0.0 BBL	0.0 BBL
Totals:	**23.7 BBL**	**0.0 BBL**
Total Liquid Spill Liquid:	**23.7 BBL**	**0.00 BBL**

Estimated Production Volumes Lost

	H2O	OIL
Estimated Production Spilled:	0.0 BBL	0.0 BBL

Estimated Surface Damage

Surface Area: 7,600 sq. ft.

Surface Area: .1745 acre

Recovered Volumes

Estimated oil recovered: **BBL** check - okay

Estimated water recovered: **BBL** check - okay

Estimated Weights, and Volumes

Saturated Soil =	106,400 lbs	950 cu. ft.	35 cu. yds.
Total Liquid =	24 BBL	995 gallon	8,277 lbs

Air Emission from flowline leaks:

Volume of oil spill:	-	BBL
Separator gas calculated:	-	MCF
Separator gas released:	-	MCF
Gas released from oil:	-	lb
H2S released:	-	lb
Total HC gas released:	-	lb
Total HC gas released:	-	MCF

Air Emission of Reporting Requirements:

	New Mexico	Texas
HC gas release reportable?	NO	NO
H2S release reportable?	NO	NO

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Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	30 (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.

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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 Supervisor

Signature: Date: 5/4/20

email: itavarez@concho.com Telephone: (432) 701- 8630

OCD Only

Received by: Cristina Eads Date: 05/04/2020

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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 Supervisor

Signature: Date: 5/4/20

email: itavarez@concho.com Telephone: (432) 701- 8630

OCD Only

Received by: Cristina Eads Date: 05/04/2020

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: 07/02/2020

Printed Name: Cristina Eads Title: Environmental Specialist

10 Desta Dr., Suite 150E
Midland, TX 79705
T 432.520.7720
TRCcompanies.com

Appendix B: Groundwater Database Results

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(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	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 01013	C	ED			4	25	25S	26E	571505	3551456*	663	245		
C 02221	CUB	ED	4	3	2	25	25S	26E	571412	3551961*	1100	35		

Average Depth to Water: --

Minimum Depth: --

Maximum Depth: --

Record Count: 2

UTMNAD83 Radius Search (in meters):

Easting (X): 571159.35 **Northing (Y):** 3550889.83 **Radius:** 1610

***UTM location was derived from PLSS - see Help**

10 Desta Dr., Suite 150E
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Appendix C: General Photographs

COG- Road Runner Federal #003 & 013
CTB Date: 04/03/20

Photographic Documentation

Photograph No. 1 **Date:** **11/18/2019** **Direction:** **Northwest** **Description:** **View of Release area**	
Photograph No. 2 **Date:** **11/18/2019** **Direction:** **West** **Description:** **View of Release area**	

COG- Road Runner Federal #003 & 013
CTB Date: 04/03/20

Photographic Documentation

Photograph No. 3 **Date:** **2/14/2020** **Direction:** **Northeast** **Description:** **View of excavation activities.**	
Photograph No. 4 **Date:** **2/14/2020** **Direction:** **Northeast** **Description:** **View of excvation activites.**	

COG- Road Runner Federal #003 & 013
CTB Date: 04/03/20

Photographic Documentation

Photograph No. 5 **Date:** **2/17/2020** **Direction:** **Northeast** **Description:** **View of remediated area.**	
Photograph No. 6 **Date:** **2/17/2020** **Direction:** **North** **Description:** **View of remediated area.**	

10 Desta Dr., Suite 150E
Midland, TX 79705
T 432.520.7720
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Appendix D: Laboratory Analytical Reports

Certificate of Analysis Summary 643583

TRC Solutions, Inc, Midland, TX

Project Name: Roadrunner 3-13

Project Id:

Contact: J Stoffel

Project Location: Malaga,NM

Date Received in Lab: Tue Nov-19-19 10:35 am

Report Date: 20-NOV-19

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	643583-001		643583-002		643583-003		643583-004		643583-005		643583-006	
	Field Id:	AH-1 0-6"		AH-1 6-12"		AH-1 12-18"		AH-2 0-6"		AH-2 6-12"		AH-3 0-6"	
	Depth:	0-6 In		6-12 In		12-18 In		0-6 In		6-12 In		0-6 In	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-18-19 11:00		Nov-18-19 11:05		Nov-18-19 11:50		Nov-18-19 11:10		Nov-18-19 11:15		Nov-18-19 11:20	
BTEX by EPA 8021B	***Extracted:***	Nov-19-19 14:30		Nov-19-19 14:30		Nov-19-19 14:30		Nov-19-19 14:30		Nov-19-19 14:30		Nov-19-19 14:30	
	Analyzed:	Nov-19-19 21:32		Nov-19-19 21:52		Nov-19-19 22:12		Nov-19-19 22:32		Nov-19-19 22:52		Nov-19-19 23:12	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00198	0.00198	<0.00201	0.00201	<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
Toluene		<0.00198	0.00198	<0.00201	0.00201	<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
Ethylbenzene		<0.00198	0.00198	<0.00201	0.00201	<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
m,p-Xylenes		<0.00396	0.00396	<0.00402	0.00402	<0.00404	0.00404	<0.00402	0.00402	<0.00399	0.00399	<0.00400	0.00400
o-Xylene		<0.00198	0.00198	<0.00201	0.00201	<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200
Total Xylenes		<0.00198	0.00198	<0.00201	0.00201	<0.00202	0.00202	<0.00201	0.00201	<0.002	0.002	<0.002	0.002
Total BTEX		<0.00198	0.00198	<0.00201	0.00201	<0.00202	0.00202	<0.00201	0.00201	<0.002	0.002	<0.002	0.002
Chloride by EPA 300	***Extracted:***	Nov-19-19 13:40		Nov-19-19 13:40		Nov-19-19 13:40		Nov-19-19 13:40		Nov-19-19 13:40		Nov-19-19 13:40	
	Analyzed:	Nov-19-19 16:45		Nov-19-19 16:52		Nov-19-19 16:58		Nov-19-19 17:05		Nov-19-19 17:25		Nov-19-19 17:31	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		9380	99.2	3750	50.3	4510	99.6	4920	100	924	50.0	5020	50.2
TPH by SW8015 Mod	***Extracted:***	Nov-19-19 12:00		Nov-19-19 12:00		Nov-19-19 12:00		Nov-19-19 12:00		Nov-19-19 12:00		Nov-19-19 12:00	
	Analyzed:	Nov-19-19 13:29		Nov-19-19 14:31		Nov-19-19 14:52		Nov-19-19 15:13		Nov-19-19 15:34		Nov-19-19 15:54	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<49.9	49.9	<49.8	49.8	<49.9	49.9	<50.0	50.0	<50.0	50.0	<49.9	49.9
Diesel Range Organics (DRO)		<49.9	49.9	<49.8	49.8	<49.9	49.9	<50.0	50.0	<50.0	50.0	<49.9	49.9
Motor Oil Range Hydrocarbons (MRO)		<49.9	49.9	<49.8	49.8	<49.9	49.9	<50.0	50.0	<50.0	50.0	<49.9	49.9
Total TPH		<49.9	49.9	<49.8	49.8	<49.9	49.9	<50	50	<50	50	<49.9	49.9

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

Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 643583

TRC Solutions, Inc, Midland, TX

Project Name: Roadrunner 3-13

Project Id:

Contact: J Stoffel

Project Location: Malaga,NM

Date Received in Lab: Tue Nov-19-19 10:35 am

Report Date: 20-NOV-19

Project Manager: Jessica Kramer

Analysis Requested											
	Lab Id:	643583-007		643583-008		643583-009		643583-010		643583-011	
	Field Id:	AH-3 6-12"		AH-4 0-6"		AH-4 6-12"		AH-5 0-6"		AH-5 6-12"	
	Depth:	6-12 In		0-6 In		6-12 In		0-6 In		6-12 In	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-18-19 11:25		Nov-18-19 11:30		Nov-18-19 11:35		Nov-18-19 11:40		Nov-18-19 11:45	
BTEX by EPA 8021B	***Extracted:***	Nov-19-19 14:30		Nov-19-19 14:30		Nov-19-19 14:30		Nov-19-19 14:30		Nov-19-19 14:30	
	Analyzed:	Nov-19-19 23:32		Nov-19-19 23:53		Nov-20-19 00:13		Nov-20-19 01:31		Nov-20-19 01:51	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200
Toluene		<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200
Ethylbenzene		<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200
m,p-Xylenes		<0.00403	0.00403	<0.00401	0.00401	<0.00398	0.00398	<0.00396	0.00396	<0.00401	0.00401
o-Xylene		<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200
Total Xylenes		<0.00202	0.00202	<0.002	0.002	<0.00199	0.00199	<0.00198	0.00198	<0.002	0.002
Total BTEX		<0.00202	0.00202	<0.002	0.002	<0.00199	0.00199	<0.00198	0.00198	<0.002	0.002
Chloride by EPA 300	***Extracted:***	Nov-19-19 13:40		Nov-19-19 13:40		Nov-19-19 13:40		Nov-19-19 13:40		Nov-19-19 13:40	
	Analyzed:	Nov-19-19 17:38		Nov-19-19 17:45		Nov-19-19 23:30		Nov-19-19 18:18		Nov-19-19 23:37	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		132	49.8	605	49.5	8.21	4.99	445	49.7	44.4	5.00
TPH by SW8015 Mod	***Extracted:***	Nov-19-19 12:00		Nov-19-19 12:00		Nov-19-19 12:00		Nov-19-19 12:00		Nov-19-19 12:00	
	Analyzed:	Nov-19-19 16:15		Nov-19-19 16:36		Nov-19-19 16:57		Nov-19-19 17:18		Nov-19-19 18:00	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<49.8	49.8	<49.9	49.9	<49.9	49.9	<50.0	50.0
Diesel Range Organics (DRO)		<50.0	50.0	<49.8	49.8	<49.9	49.9	<49.9	49.9	<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.8	49.8	<49.9	49.9	<49.9	49.9	<50.0	50.0
Total TPH		<50	50	<49.8	49.8	<49.9	49.9	<49.9	49.9	<50	50

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

Version: 1.%

Jessica Kramer
Project Assistant

Analytical Report 643583

for

TRC Solutions, Inc

Project Manager: J Stoffel

Roadrunner 3-13

20-NOV-19

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

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

20-NOV-19

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

Reference: XENCO Report No(s): **643583**
Roadrunner 3-13
Project Address: Malaga,NM

J 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) 643583. 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. 643583 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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

Sample Cross Reference 643583

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
AH-1 0-6"	S	11-18-19 11:00	0 - 6 In	643583-001
AH-1 6-12"	S	11-18-19 11:05	6 - 12 In	643583-002
AH-1 12-18"	S	11-18-19 11:50	12 - 18 In	643583-003
AH-2 0-6"	S	11-18-19 11:10	0 - 6 In	643583-004
AH-2 6-12"	S	11-18-19 11:15	6 - 12 In	643583-005
AH-3 0-6"	S	11-18-19 11:20	0 - 6 In	643583-006
AH-3 6-12"	S	11-18-19 11:25	6 - 12 In	643583-007
AH-4 0-6"	S	11-18-19 11:30	0 - 6 In	643583-008
AH-4 6-12"	S	11-18-19 11:35	6 - 12 In	643583-009
AH-5 0-6"	S	11-18-19 11:40	0 - 6 In	643583-010
AH-5 6-12"	S	11-18-19 11:45	6 - 12 In	643583-011

CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: Roadrunner 3-13

Project ID:
Work Order Number(s): *643583*

Report Date: *20-NOV-19*
Date Received: *11/19/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3108042 BTEX by EPA 8021B

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

Certificate of Analytical Results 643583

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**AH-1 0-6"**	Matrix:	Soil	Date Received:	11.19.19 10.35
Lab Sample Id:	643583-001	Date Collected:	11.18.19 11.00	Sample Depth:	0 - 6 In

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.19.19 13.40	Basis:	Wet Weight
Seq Number:	3108023				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**9380**	99.2	mg/kg	11.19.19 16.45		20

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.19.19 12.00	Basis:	Wet Weight
Seq Number:	3108108				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.19.19 13.29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.19.19 13.29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.19.19 13.29	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	11.19.19 13.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	11.19.19 13.29	
o-Terphenyl	84-15-1	115	%	70-135	11.19.19 13.29	

Certificate of Analytical Results 643583

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**AH-1 0-6"**	Matrix:	Soil	Date Received:	11.19.19 10.35
Lab Sample Id:	643583-001	Date Collected:	11.18.19 11.00	Sample Depth:	0 - 6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.19.19 14.30	Basis:	Wet Weight
Seq Number:	3108042				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	11.19.19 21.32	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	11.19.19 21.32	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	11.19.19 21.32	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	11.19.19 21.32	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	11.19.19 21.32	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	11.19.19 21.32	U	1
Total BTEX		<0.00198	0.00198	mg/kg	11.19.19 21.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	11.19.19 21.32	
1,4-Difluorobenzene	540-36-3	114	%	70-130	11.19.19 21.32	

Certificate of Analytical Results 643583

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**AH-1 6-12"**	Matrix:	Soil	Date Received:	11.19.19 10.35
Lab Sample Id:	643583-002	Date Collected:	11.18.19 11.05	Sample Depth:	6 - 12 In

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.19.19 13.40	Basis:	Wet Weight
Seq Number:	3108023				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3750**	50.3	mg/kg	11.19.19 16.52		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.19.19 12.00	Basis:	Wet Weight
Seq Number:	3108108				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	11.19.19 14.31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	11.19.19 14.31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	11.19.19 14.31	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	11.19.19 14.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	11.19.19 14.31	
o-Terphenyl	84-15-1	111	%	70-135	11.19.19 14.31	

Certificate of Analytical Results 643583

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**AH-1 6-12"**	Matrix:	Soil	Date Received:	11.19.19 10.35
Lab Sample Id:	643583-002	Date Collected:	11.18.19 11.05	Sample Depth:	6 - 12 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.19.19 14.30	Basis:	Wet Weight
Seq Number:	3108042				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	11.19.19 21.52	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	11.19.19 21.52	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	11.19.19 21.52	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	11.19.19 21.52	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	11.19.19 21.52	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	11.19.19 21.52	U	1
Total BTEX		<0.00201	0.00201	mg/kg	11.19.19 21.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	113	%	70-130	11.19.19 21.52	
4-Bromofluorobenzene	460-00-4	99	%	70-130	11.19.19 21.52	

Certificate of Analytical Results 643583

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**AH-1 12-18"**	Matrix:	Soil	Date Received:	11.19.19 10.35
Lab Sample Id:	643583-003	Date Collected:	11.18.19 11.50	Sample Depth:	12 - 18 In

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.19.19 13.40	Basis:	Wet Weight
Seq Number:	3108023				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4510**	99.6	mg/kg	11.19.19 16.58		20

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.19.19 12.00	Basis:	Wet Weight
Seq Number:	3108108				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.19.19 14.52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.19.19 14.52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.19.19 14.52	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	11.19.19 14.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	11.19.19 14.52	
o-Terphenyl	84-15-1	114	%	70-135	11.19.19 14.52	

Certificate of Analytical Results 643583

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**AH-1 12-18"**	Matrix:	Soil	Date Received:	11.19.19 10.35
Lab Sample Id:	643583-003	Date Collected:	11.18.19 11.50	Sample Depth:	12 - 18 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.19.19 14.30	Basis:	Wet Weight
Seq Number:	3108042				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	11.19.19 22.12	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	11.19.19 22.12	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	11.19.19 22.12	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	11.19.19 22.12	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	11.19.19 22.12	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	11.19.19 22.12	U	1
Total BTEX		<0.00202	0.00202	mg/kg	11.19.19 22.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	11.19.19 22.12	
4-Bromofluorobenzene	460-00-4	104	%	70-130	11.19.19 22.12	

Certificate of Analytical Results 643583

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**AH-2 0-6"**	Matrix:	Soil	Date Received:	11.19.19 10.35
Lab Sample Id:	643583-004	Date Collected:	11.18.19 11.10	Sample Depth:	0 - 6 In

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.19.19 13.40	Basis:	Wet Weight
Seq Number:	3108023				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4920**	100	mg/kg	11.19.19 17.05		20

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.19.19 12.00	Basis:	Wet Weight
Seq Number:	3108108				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	11.19.19 15.13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	11.19.19 15.13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	11.19.19 15.13	U	1
Total TPH	PHC635	<50	50	mg/kg	11.19.19 15.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	11.19.19 15.13	
o-Terphenyl	84-15-1	114	%	70-135	11.19.19 15.13	

Certificate of Analytical Results 643583

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**AH-2 0-6"**	Matrix:	Soil	Date Received:	11.19.19 10.35
Lab Sample Id:	643583-004	Date Collected:	11.18.19 11.10	Sample Depth:	0 - 6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.19.19 14.30	Basis:	Wet Weight
Seq Number:	3108042				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	11.19.19 22.32	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	11.19.19 22.32	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	11.19.19 22.32	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	11.19.19 22.32	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	11.19.19 22.32	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	11.19.19 22.32	U	1
Total BTEX		<0.00201	0.00201	mg/kg	11.19.19 22.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	101	%	70-130	11.19.19 22.32	
1,4-Difluorobenzene	540-36-3	110	%	70-130	11.19.19 22.32	

Certificate of Analytical Results 643583

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**AH-2 6-12"**	Matrix:	Soil	Date Received:	11.19.19 10.35
Lab Sample Id:	643583-005	Date Collected:	11.18.19 11.15	Sample Depth:	6 - 12 In

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.19.19 13.40	Basis:	Wet Weight
Seq Number:	3108023				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**924**	50.0	mg/kg	11.19.19 17.25		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.19.19 12.00	Basis:	Wet Weight
Seq Number:	3108108				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	11.19.19 15.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	11.19.19 15.34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	11.19.19 15.34	U	1
Total TPH	PHC635	<50	50	mg/kg	11.19.19 15.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	11.19.19 15.34	
o-Terphenyl	84-15-1	111	%	70-135	11.19.19 15.34	

Certificate of Analytical Results 643583

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**AH-2 6-12"**	Matrix:	Soil	Date Received:	11.19.19 10.35
Lab Sample Id:	643583-005	Date Collected:	11.18.19 11.15	Sample Depth:	6 - 12 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.19.19 14.30	Basis:	Wet Weight
Seq Number:	3108042				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.19.19 22.52	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.19.19 22.52	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.19.19 22.52	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	11.19.19 22.52	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.19.19 22.52	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	11.19.19 22.52	U	1
Total BTEX		<0.002	0.002	mg/kg	11.19.19 22.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	70-130	11.19.19 22.52	
1,4-Difluorobenzene	540-36-3	113	%	70-130	11.19.19 22.52	

Certificate of Analytical Results 643583

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**AH-3 0-6"**	Matrix:	Soil	Date Received:	11.19.19 10.35
Lab Sample Id:	643583-006	Date Collected:	11.18.19 11.20	Sample Depth:	0 - 6 In

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.19.19 13.40	Basis:	Wet Weight
Seq Number:	3108023				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5020**	50.2	mg/kg	11.19.19 17.31		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.19.19 12.00	Basis:	Wet Weight
Seq Number:	3108108				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.19.19 15.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.19.19 15.54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.19.19 15.54	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	11.19.19 15.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	11.19.19 15.54	
o-Terphenyl	84-15-1	117	%	70-135	11.19.19 15.54	

Certificate of Analytical Results 643583

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**AH-3 0-6"**	Matrix:	Soil	Date Received:	11.19.19 10.35
Lab Sample Id:	643583-006	Date Collected:	11.18.19 11.20	Sample Depth:	0 - 6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.19.19 14.30	Basis:	Wet Weight
Seq Number:	3108042				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.19.19 23.12	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.19.19 23.12	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.19.19 23.12	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	11.19.19 23.12	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.19.19 23.12	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	11.19.19 23.12	U	1
Total BTEX		<0.002	0.002	mg/kg	11.19.19 23.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	11.19.19 23.12	
1,4-Difluorobenzene	540-36-3	108	%	70-130	11.19.19 23.12	

Certificate of Analytical Results 643583

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**AH-3 6-12"**	Matrix:	Soil	Date Received:	11.19.19 10.35
Lab Sample Id:	643583-007	Date Collected:	11.18.19 11.25	Sample Depth:	6 - 12 In

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.19.19 13.40	Basis:	Wet Weight
Seq Number:	3108023				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**132**	49.8	mg/kg	11.19.19 17.38		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.19.19 12.00	Basis:	Wet Weight
Seq Number:	3108108				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	11.19.19 16.15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	11.19.19 16.15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	11.19.19 16.15	U	1
Total TPH	PHC635	<50	50	mg/kg	11.19.19 16.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	11.19.19 16.15	
o-Terphenyl	84-15-1	111	%	70-135	11.19.19 16.15	

Certificate of Analytical Results 643583

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**AH-3 6-12"**	Matrix:	Soil	Date Received:	11.19.19 10.35
Lab Sample Id:	643583-007	Date Collected:	11.18.19 11.25	Sample Depth:	6 - 12 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.19.19 14.30	Basis:	Wet Weight
Seq Number:	3108042				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	11.19.19 23.32	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	11.19.19 23.32	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	11.19.19 23.32	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	11.19.19 23.32	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	11.19.19 23.32	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	11.19.19 23.32	U	1
Total BTEX		<0.00202	0.00202	mg/kg	11.19.19 23.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	112	%	70-130	11.19.19 23.32	
4-Bromofluorobenzene	460-00-4	111	%	70-130	11.19.19 23.32	

Certificate of Analytical Results 643583

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**AH-4 0-6"**	Matrix:	Soil	Date Received:	11.19.19 10.35
Lab Sample Id:	643583-008	Date Collected:	11.18.19 11.30	Sample Depth:	0 - 6 In

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.19.19 13.40	Basis:	Wet Weight
Seq Number:	3108023				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**605**	49.5	mg/kg	11.19.19 17.45		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.19.19 12.00	Basis:	Wet Weight
Seq Number:	3108108				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	11.19.19 16.36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	11.19.19 16.36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	11.19.19 16.36	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	11.19.19 16.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	11.19.19 16.36	
o-Terphenyl	84-15-1	114	%	70-135	11.19.19 16.36	

Certificate of Analytical Results 643583

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**AH-4 0-6"**	Matrix:	Soil	Date Received:	11.19.19 10.35
Lab Sample Id:	643583-008	Date Collected:	11.18.19 11.30	Sample Depth:	0 - 6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.19.19 14.30	Basis:	Wet Weight
Seq Number:	3108042				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.19.19 23.53	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.19.19 23.53	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.19.19 23.53	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	11.19.19 23.53	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.19.19 23.53	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	11.19.19 23.53	U	1
Total BTEX		<0.002	0.002	mg/kg	11.19.19 23.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	11.19.19 23.53	
4-Bromofluorobenzene	460-00-4	109	%	70-130	11.19.19 23.53	

Certificate of Analytical Results 643583

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**AH-4 6-12"**	Matrix:	Soil	Date Received:	11.19.19 10.35
Lab Sample Id:	643583-009	Date Collected:	11.18.19 11.35	Sample Depth:	6 - 12 In

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.19.19 13.40	Basis:	Wet Weight
Seq Number:	3108023				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8.21**	4.99	mg/kg	11.19.19 23.30		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.19.19 12.00	Basis:	Wet Weight
Seq Number:	3108108				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.19.19 16.57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.19.19 16.57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.19.19 16.57	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	11.19.19 16.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	11.19.19 16.57	
o-Terphenyl	84-15-1	106	%	70-135	11.19.19 16.57	

Certificate of Analytical Results 643583

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**AH-4 6-12"**	Matrix:	Soil	Date Received:	11.19.19 10.35
Lab Sample Id:	643583-009	Date Collected:	11.18.19 11.35	Sample Depth:	6 - 12 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.19.19 14.30	Basis:	Wet Weight
Seq Number:	3108042				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	11.20.19 00.13	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	11.20.19 00.13	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	11.20.19 00.13	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	11.20.19 00.13	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	11.20.19 00.13	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	11.20.19 00.13	U	1
Total BTEX		<0.00199	0.00199	mg/kg	11.20.19 00.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	11.20.19 00.13	
4-Bromofluorobenzene	460-00-4	113	%	70-130	11.20.19 00.13	

Certificate of Analytical Results 643583

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**AH-5 0-6"**	Matrix:	Soil	Date Received:	11.19.19 10.35
Lab Sample Id:	643583-010	Date Collected:	11.18.19 11.40	Sample Depth:	0 - 6 In

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.19.19 13.40	Basis:	Wet Weight
Seq Number:	3108023				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**445**	49.7	mg/kg	11.19.19 18.18		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.19.19 12.00	Basis:	Wet Weight
Seq Number:	3108108				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.19.19 17.18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.19.19 17.18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.19.19 17.18	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	11.19.19 17.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	11.19.19 17.18	
o-Terphenyl	84-15-1	108	%	70-135	11.19.19 17.18	

Certificate of Analytical Results 643583

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**AH-5 0-6"**	Matrix:	Soil	Date Received:	11.19.19 10.35
Lab Sample Id:	643583-010	Date Collected:	11.18.19 11.40	Sample Depth:	0 - 6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.19.19 14.30	Basis:	Wet Weight
Seq Number:	3108042				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	11.20.19 01.31	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	11.20.19 01.31	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	11.20.19 01.31	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	11.20.19 01.31	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	11.20.19 01.31	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	11.20.19 01.31	U	1
Total BTEX		<0.00198	0.00198	mg/kg	11.20.19 01.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	11.20.19 01.31	
4-Bromofluorobenzene	460-00-4	101	%	70-130	11.20.19 01.31	

Certificate of Analytical Results 643583

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**AH-5 6-12"**	Matrix:	Soil	Date Received:	11.19.19 10.35
Lab Sample Id:	643583-011	Date Collected:	11.18.19 11.45	Sample Depth:	6 - 12 In

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.19.19 13.40	Basis:	Wet Weight
Seq Number:	3108023				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**44.4**	5.00	mg/kg	11.19.19 23.37		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.19.19 12.00	Basis:	Wet Weight
Seq Number:	3108108				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	11.19.19 18.00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	11.19.19 18.00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	11.19.19 18.00	U	1
Total TPH	PHC635	<50	50	mg/kg	11.19.19 18.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	11.19.19 18.00	
o-Terphenyl	84-15-1	109	%	70-135	11.19.19 18.00	

Certificate of Analytical Results 643583

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**AH-5 6-12"**	Matrix:	Soil	Date Received:	11.19.19 10.35
Lab Sample Id:	643583-011	Date Collected:	11.18.19 11.45	Sample Depth:	6 - 12 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.19.19 14.30	Basis:	Wet Weight
Seq Number:	3108042				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.20.19 01.51	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.20.19 01.51	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.20.19 01.51	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	11.20.19 01.51	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.20.19 01.51	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	11.20.19 01.51	U	1
Total BTEX		<0.002	0.002	mg/kg	11.20.19 01.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	11.20.19 01.51	
1,4-Difluorobenzene	540-36-3	102	%	70-130	11.20.19 01.51	

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 643583

TRC Solutions, Inc

Roadrunner 3-13

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3108023 — Matrix: Solid — Date Prep: 11.19.19
MB Sample Id: 7690652-1-BLK — LCS Sample Id: 7690652-1-BKS — LCSD Sample Id: 7690652-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	244	98	239	96	90-110	2	20	mg/kg	11.19.19 16:12	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3108023 — Matrix: Soil — Date Prep: 11.19.19
Parent Sample Id: 643511-059 — MS Sample Id: 643511-059 S — MSD Sample Id: 643511-059 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	423	250	650	91	654	92	90-110	1	20	mg/kg	11.19.19 16:32	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3108023 — Matrix: Soil — Date Prep: 11.19.19
Parent Sample Id: 643511-060 — MS Sample Id: 643511-060 S — MSD Sample Id: 643511-060 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	202	252	463	104	464	104	90-110	0	20	mg/kg	11.19.19 18:05	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3108108 — Matrix: Solid — Date Prep: 11.19.19
MB Sample Id: 7690625-1-BLK — LCS Sample Id: 7690625-1-BKS — LCSD Sample Id: 7690625-1-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	1010	101	1040	104	70-135	3	20	mg/kg	11.19.19 12:46	
Diesel Range Organics (DRO)	<15.0	1000	1050	105	1060	106	70-135	1	20	mg/kg	11.19.19 12:46	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	101		100		101		70-135	%	11.19.19 12:46
o-Terphenyl	109		108		104		70-135	%	11.19.19 12:46

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3108108 — Matrix: Solid — Date Prep: 11.19.19
MB Sample Id: 7690625-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	11.19.19 12:26	

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 643583

TRC Solutions, Inc

Roadrunner 3-13

Analytical Method: TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3108108 | Matrix: Soil | Date Prep: 11.19.19
Parent Sample Id: 643583-001 | MS Sample Id: 643583-001 S | MSD Sample Id: 643583-001 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	999	1020	102	1010	101	70-135	1	20	mg/kg	11.19.19 13:50	
Diesel Range Organics (DRO)	20.4	999	1060	104	1040	102	70-135	2	20	mg/kg	11.19.19 13:50	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	106		104		70-135	%	11.19.19 13:50
o-Terphenyl	108		110		70-135	%	11.19.19 13:50

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3108042 | Matrix: Solid | Date Prep: 11.19.19
MB Sample Id: 7690655-1-BLK | LCS Sample Id: 7690655-1-BKS | LCSD Sample Id: 7690655-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.104	104	0.103	103	70-130	1	35	mg/kg	11.19.19 17:06	
Toluene	<0.00200	0.100	0.101	101	0.104	104	70-130	3	35	mg/kg	11.19.19 17:06	
Ethylbenzene	<0.00200	0.100	0.106	106	0.112	112	70-130	6	35	mg/kg	11.19.19 17:06	
m,p-Xylenes	<0.00400	0.200	0.218	109	0.231	116	70-130	6	35	mg/kg	11.19.19 17:06	
o-Xylene	<0.00200	0.100	0.108	108	0.115	115	70-130	6	35	mg/kg	11.19.19 17:06	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		111		109		70-130	%	11.19.19 17:06
4-Bromofluorobenzene	101		108		109		70-130	%	11.19.19 17:06

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3108042 | Matrix: Soil | Date Prep: 11.19.19
Parent Sample Id: 643425-001 | MS Sample Id: 643425-001 S | MSD Sample Id: 643425-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.0106	0.0998	0.116	106	0.104	94	70-130	11	35	mg/kg	11.19.19 17:47	
Toluene	0.0273	0.0998	0.124	97	0.115	88	70-130	8	35	mg/kg	11.19.19 17:47	
Ethylbenzene	0.00776	0.0998	0.106	98	0.0930	86	70-130	13	35	mg/kg	11.19.19 17:47	
m,p-Xylenes	0.0298	0.200	0.241	106	0.208	90	70-130	15	35	mg/kg	11.19.19 17:47	
o-Xylene	0.0121	0.0998	0.114	102	0.0994	88	70-130	14	35	mg/kg	11.19.19 17:47	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	115		113		70-130	%	11.19.19 17:47
4-Bromofluorobenzene	118		115		70-130	%	11.19.19 17:47

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

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

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

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

Final 1.000

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334
Midland, TX (432) 704-5440, EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
Atlanta, GA (770) 449-8800

Work Order No: 643583

www.xenco.com 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 ☐ Brownfield ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level I ☐ Level II ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Roadrunner 3-13	Turn Around	
Project Number:		Routine: ☐	
Project Location	Malaga, NM	Rush: ☒ 3day	
Sampler's Name:	J. Stoffel	Due Date:	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	Yes No
Temperature (°C):	5.4/5.2	Thermometer ID	R8
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Total Containers:	

Preservative Codes

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

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	TPH (8015)	BTEX 8021B	Chloride E300	Sample Comments
AH-1 0-6"	Soil	11/18/2019	1100		1	x	x	x	
AH-1 6-12"	Soil	11/18/2019	1105		1	x	x	x	
AH-1 12-18"	Soil	11/18/2019	1150		1	x	x	x	
AH-2 0-6"	Soil	11/18/2019	1110		1	x	x	x	
AH-2 6-12"	Soil	11/18/2019	1115		1	x	x	x	
AH-3 0-6"	Soil	11/18/2019	1120		1	x	x	x	
AH-3 6-12"	Soil	11/18/2019	1125		1	x	x	x	
AH-4 0-6"	Soil	11/18/2019	1130		1	x	x	x	
AH-4 6-12"	Soil	11/18/2019	1135		1	x	x	x	
AH-5 0-6"	Soil	11/18/2019	1140		1	x	x	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			11.19.19. 10:35			
3				4		
5				6		

Revised Date101419 Rev. 2019.1

Chain of Custody

Work Order No: 643583

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334
Midland, TX (432) 704-5440, EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
Atlanta, GA (770) 449-8800
www.xenco.com

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 ☐ Brownfield ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level I ☐ Level II ☐ PST/US ☐ TRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Roadrunner 3-13	Turn Around	
Project Number:		Routine: ☐	
Project Location	Malaga, NM	Rush: ☒ 3 days	
Sampler's Name:	J. Stoffel	Due Date:	
PO #:			

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

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	TPH (8015)	BTEX 8021B	Chloride E300
AH-5 6-12"	Soil	11/18/2019	1145		1	x	x	x

Preservative Codes

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

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			11/19/19 10:35	2		
3				4		
5				6		

Revised Date 101419 Rev. 2019.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 11/19/2019 10:35:00 AM

Work Order #: 643583

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)?	5.2
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6*Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**No**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**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: Alexis Jaime Date: 11/19/2019

Checklist reviewed by: Jessica Kramer Date: 11/19/2019

Jessica Kramer

Certificate of Analysis Summary 644957

TRC Solutions, Inc, Midland, TX

Project Name: Roadrunner 3-13

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:	644957-001		644957-002		644957-003		644957-004		644957-005		644957-006	
	Field Id:	AH-1 0-6" R		AH-1 6-12" R		AH-1 12-18" R		AH-1 18-24"		AH-1 24-30"		AH-2 0-6" R	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Dec-03-19 11:00		Dec-03-19 11:05		Dec-03-19 11:10		Dec-03-19 11:15		Dec-03-19 11:20		Dec-03-19 11:25	
Chloride by EPA 300	***Extracted:***	Dec-04-19 13:00		Dec-04-19 13:00		Dec-04-19 13:00		Dec-04-19 13:00		Dec-04-19 13:00		Dec-04-19 13:00	
	Analyzed:	Dec-04-19 14:15		Dec-04-19 14:24		Dec-04-19 14:33		Dec-04-19 14:42		Dec-04-19 15:10		Dec-04-19 15:20	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		9140	252	4600	99.6	5420	99.8	7660	99.2	3890	101	7900	100

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 644957

TRC Solutions, Inc, Midland, TX

Project Name: Roadrunner 3-13

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:	644957-007		644957-008									
	Field Id:	AH-2 6-12" R		AH-2 12-15"									
	Depth:												
	Matrix:	SOIL		SOIL									
	Sampled:	Dec-03-19 11:30		Dec-03-19 11:35									
Chloride by EPA 300	***Extracted:***	Dec-04-19 13:00		Dec-04-19 13:00									
	Analyzed:	Dec-04-19 15:29		Dec-04-19 15:38									
	Units/RL:	mg/kg	RL	mg/kg	RL								
Chloride		1150	50.0	256	50.0								

Jessica Kramer
Project Assistant

Analytical Report 644957

for

TRC Solutions, Inc

Project Manager: Jared Stoffel

Roadrunner 3-13

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): **644957**
Roadrunner 3-13
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) 644957. 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. 644957 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 644957

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
AH-1 0-6" R	S	12-03-19 11:00		644957-001
AH-1 6-12" R	S	12-03-19 11:05		644957-002
AH-1 12-18" R	S	12-03-19 11:10		644957-003
AH-1 18-24"	S	12-03-19 11:15		644957-004
AH-1 24-30"	S	12-03-19 11:20		644957-005
AH-2 0-6" R	S	12-03-19 11:25		644957-006
AH-2 6-12" R	S	12-03-19 11:30		644957-007
AH-2 12-15"	S	12-03-19 11:35		644957-008

CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: Roadrunner 3-13

Project ID:
Work Order Number(s): *644957*

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

Certificate of Analytical Results 644957

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**AH-1 0-6" R**	Matrix:	Soil	Date Received:	12.04.19 09.04
Lab Sample Id:	644957-001	Date Collected:	12.03.19 11.00		
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	**9140**	252	mg/kg	12.04.19 14.15		50

Certificate of Analytical Results 644957

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**AH-1 6-12" R**	Matrix:	Soil	Date Received:	12.04.19 09.04
Lab Sample Id:	644957-002	Date Collected:	12.03.19 11.05		
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	**4600**	99.6	mg/kg	12.04.19 14.24		20

Certificate of Analytical Results 644957

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**AH-1 12-18" R**	Matrix:	Soil	Date Received:	12.04.19 09.04
Lab Sample Id:	644957-003	Date Collected:	12.03.19 11.10		
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	**5420**	99.8	mg/kg	12.04.19 14.33		20

Certificate of Analytical Results 644957

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**AH-1 18-24"**	Matrix:	Soil	Date Received:	12.04.19 09.04
Lab Sample Id:	644957-004	Date Collected:	12.03.19 11.15		
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	**7660**	99.2	mg/kg	12.04.19 14.42		20

Certificate of Analytical Results 644957

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**AH-1 24-30"**	Matrix:	Soil	Date Received:	12.04.19 09.04
Lab Sample Id:	644957-005	Date Collected:	12.03.19 11.20		
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	**3890**	101	mg/kg	12.04.19 15.10		20

Certificate of Analytical Results 644957

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**AH-2 0-6" R**	Matrix:	Soil	Date Received:	12.04.19 09.04
Lab Sample Id:	644957-006	Date Collected:	12.03.19 11.25		
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	**7900**	100	mg/kg	12.04.19 15.20		20

Certificate of Analytical Results 644957

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**AH-2 6-12" R**	Matrix:	Soil	Date Received:	12.04.19 09.04
Lab Sample Id:	644957-007	Date Collected:	12.03.19 11.30		
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	**1150**	50.0	mg/kg	12.04.19 15.29		10

Certificate of Analytical Results 644957

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**AH-2 12-15"**	Matrix:	Soil	Date Received:	12.04.19 09.04
Lab Sample Id:	644957-008	Date Collected:	12.03.19 11.35		
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	**256**	50.0	mg/kg	12.04.19 15.38		10

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 644957

TRC Solutions, Inc

Roadrunner 3-13

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: 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	

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

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: 414957

Page 1 of 1

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:	Jared, Ike

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:	Roadrunner 3-13	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:	

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	Chloride (4500)	Sample Comments
	AH-1 0-6" R	Soil	12/3/19	1100		1		X	
	AH-1 6-12" R			1105					
	AH-1 12-18" R			1110					
	AH-1 18-24"			1115					
	AH-1 24-30"			1120					
	AH-2 0-6" R			1125					
	AH-2 6-12" R			1130					
	AH-2 12-15"			1135					

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	2		
3				4		
5				6		

Revised Date 022619 Rev. 2019.1

Certificate of Analysis Summary 651872

TRC Solutions, Inc, Midland, TX

Project Name: Roadrunner

Project Id:

Contact: Jared Stoffel

Project Location: Carlsbad

Date Received in Lab: Mon Feb-10-20 02:25 pm

Report Date: 11-FEB-20

Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	651872-001					
	Field Id:	Trench 1 @5.0'					
	Depth:	5- ft					
	Matrix:	SOIL					
	Sampled:	Feb-10-20 12:55					
Chloride by EPA 300	***Extracted:***	Feb-10-20 16:00					
	Analyzed:	Feb-10-20 16:55					
	Units/RL:	mg/kg	RL				
Chloride		224	50.1				

Jessica Kramer
Project Assistant

Analytical Report 651872

for

TRC Solutions, Inc

Project Manager: Jared Stoffel

Roadrunner

11-FEB-20

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

11-FEB-20

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

Reference: XENCO Report No(s): **651872**
Roadrunner
Project Address: Carlsbad

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) 651872. 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. 651872 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 651872

TRC Solutions, Inc, Midland, TX

Roadrunner

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Trench 1 @5.0'	S	02-10-20 12:55	5 ft	651872-001
Trench 1 @5.5'	S	02-10-20 13:00	5.5 ft	Not Analyzed
Trench 1 @6.5'	S	02-10-20 13:05	6.5 ft	Not Analyzed

CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: Roadrunner

Project ID:
Work Order Number(s): *651872*

Report Date: *11-FEB-20*
Date Received: *02/10/2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analytical Results 651872

TRC Solutions, Inc, Midland, TX

Roadrunner

Sample Id:	**Trench 1 @5.0'**	Matrix:	Soil	Date Received:	02.10.20 14.25
Lab Sample Id:	651872-001	Date Collected:	02.10.20 12.55	Sample Depth:	5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.10.20 16.00	Basis:	Wet Weight
Seq Number:	3116092				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**224**	50.1	mg/kg	02.10.20 16.55		5

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 651872

TRC Solutions, Inc

Roadrunner

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3116092 Matrix: Solid Date Prep: 02.10.20
MB Sample Id: 7696353-1-BLK LCS Sample Id: 7696353-1-BKS LCSD Sample Id: 7696353-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	256	102	259	104	90-110	1	20	mg/kg	02.10.20 15:30	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3116092 Matrix: Soil Date Prep: 02.10.20
Parent Sample Id: 651865-001 MS Sample Id: 651865-001 S MSD Sample Id: 651865-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	355	200	574	110	580	113	90-110	1	20	mg/kg	02.10.20 15:48	X

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3116092 Matrix: Soil Date Prep: 02.10.20
Parent Sample Id: 651882-001 MS Sample Id: 651882-001 S MSD Sample Id: 651882-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	74.0	201	287	106	292	108	90-110	2	20	mg/kg	02.10.20 17:33	

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

* PLEASE INCLUDE RSIEBRINGHE@TRCCOMPANIES.COM ITAVAREZ@CONCHO.COM

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

Work Order No: 651872

RUSSELL 432.250.4465

www.xenco.com Page _____ of _____

Project Manager:	JARED STAFFEL	Bill to: (If different)	ITZE TAVAREZ
Company Name:	TRC MIDLAND	Company Name:	COG - MIDLAND
Address:		Address:	
City, State ZIP:		City, State ZIP:	
Phone:	Email:	JSTAFFEL@TRCCOMPANIES	

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:	ROADRUNNER	Turn Around	
Project Number:		Routine ☐	
Project Location	CARLSBAD	Rush: ASAP	
Sampler's Name:	R. SIEBRINGHE	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	3.6	Thermometer ID	TNM007
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	3

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	Chlorides 300	Sample Comments
	TRENCH 1 @ 5.0'	S	10 FEB 2020	1255	5'	1		✓	IF HOT RUN
	TRENCH 1 @ 5.5'			1300	5.5'	1			DEEPER
	TRENCH 1 @ 6.5'			1305	6.5'	1			

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr 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			2/10/20 14:25	2		
3				4		
5				6		

Revised Date 022619 Rev. 2019.1

Final 1.000

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 02.10.2020 02.25.00 PM

Work Order #: 651872

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

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.6
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**
#5 Custody Seals intact on sample bottles?	**Yes**
#6*Custody Seals Signed and dated?	**Yes**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**No**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**No**
#18 Water VOC samples have zero headspace?	**N/A**

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

Analyst: PH Device/Lot#:

Checklist completed by: Elizabeth McClellan Date: 02.10.2020

Checklist reviewed by: Jessica Kramer Date: 02.11.2020

Jessica Kramer

Certificate of Analysis Summary 652361

TRC Solutions, Inc, Midland, TX

Project Name: Roadrunner 3-13

Project Id:

Contact: Jared Stoffel

Project Location: Carlsbad

Date Received in Lab: Thu Feb-13-20 04:10 pm

Report Date: 18-FEB-20

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	652361-001		652361-002		652361-003		652361-004		652361-005		652361-006	
	Field Id:	SSW-01		FL-12 @15"		FL-13 15"		FL-14 @ 15"		FL-15 @ 15"		FL-16 @ 15"	
	Depth:			1.25- ft		1.25- ft		1.25- ft		1.25- ft		1.25- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-12-20 12:00		Feb-12-20 12:10		Feb-12-20 12:20		Feb-12-20 12:30		Feb-12-20 12:40		Feb-12-20 12:50	
BTEX by EPA 8021B	Extracted:	Feb-14-20 10:00		Feb-14-20 10:00								Feb-14-20 10:00	
	Analyzed:	Feb-14-20 12:17		Feb-14-20 12:37								Feb-14-20 12:58	
	Units/RL:	mg/kg	RL	mg/kg	RL							mg/kg	RL
Benzene		<0.00200	0.00200	<0.00202	0.00202							<0.00200	0.00200
Toluene		<0.00200	0.00200	<0.00202	0.00202							<0.00200	0.00200
Ethylbenzene		<0.00200	0.00200	<0.00202	0.00202							<0.00200	0.00200
m,p-Xylenes		<0.00400	0.00400	<0.00403	0.00403							<0.00399	0.00399
o-Xylene		<0.00200	0.00200	<0.00202	0.00202							<0.00200	0.00200
Total Xylenes		<0.002	0.002	<0.00202	0.00202							<0.002	0.002
Total BTEX		<0.002	0.002	<0.00202	0.00202							<0.002	0.002
Chloride by EPA 300	Extracted:	Feb-13-20 18:35		Feb-13-20 18:35		Feb-13-20 18:35		Feb-13-20 18:35		Feb-13-20 18:35		Feb-13-20 18:35	
	Analyzed:	Feb-14-20 10:33		Feb-13-20 21:01		Feb-13-20 21:06		Feb-13-20 21:12		Feb-13-20 21:17		Feb-13-20 21:33	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		141	4.96	315	50.4	384	50.1	594	49.8	1850	50.3	164	25.1
TPH by SW8015 Mod	Extracted:	Feb-13-20 16:20		Feb-13-20 16:20								Feb-13-20 16:20	
	Analyzed:	Feb-14-20 00:27		Feb-14-20 00:49								Feb-14-20 01:10	
	Units/RL:	mg/kg	RL	mg/kg	RL							mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<49.8	49.8	<50.0	50.0							<49.9	49.9
Diesel Range Organics (DRO)		<49.8	49.8	<50.0	50.0							<49.9	49.9
Motor Oil Range Hydrocarbons (MRO)		<49.8	49.8	<50.0	50.0							<49.9	49.9
Total TPH		<49.8	49.8	<50	50							<49.9	49.9

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 652361

TRC Solutions, Inc, Midland, TX

Project Name: Roadrunner 3-13

Project Id:

Contact: Jared Stoffel

Project Location: Carlsbad

Date Received in Lab: Thu Feb-13-20 04:10 pm

Report Date: 18-FEB-20

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	652361-007		652361-008		652361-009		652361-010		652361-011		652361-012	
	Field Id:	FL-17 @ 15"		FL-18 @ 15"		FL-23 @ 40"		FL-24 @40"		ESW-01		WSW-02	
	Depth:	1.25- ft		1.25- ft		3.3- ft		3.3- ft					
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-12-20 13:00		Feb-12-20 13:10		Feb-12-20 13:20		Feb-12-20 13:40		Feb-12-20 13:30		Feb-13-20 10:00	
BTEX by EPA 8021B	*Extracted:*							Feb-14-20 10:00				Feb-14-20 16:45	
	Analyzed:							Feb-14-20 13:18				Feb-17-20 16:03	
	Units/RL:							mg/kg	RL			mg/kg	RL
Benzene								<0.00199	0.00199			<0.00201	0.00201
Toluene								<0.00199	0.00199			<0.00201	0.00201
Ethylbenzene								<0.00199	0.00199			<0.00201	0.00201
m,p-Xylenes								<0.00398	0.00398			<0.00402	0.00402
o-Xylene								<0.00199	0.00199			<0.00201	0.00201
Total Xylenes								<0.00199	0.00199			<0.00201	0.00201
Total BTEX								<0.00199	0.00199			<0.00201	0.00201
Chloride by EPA 300	*Extracted:*	Feb-13-20 18:35		Feb-13-20 18:35		Feb-13-20 18:35		Feb-13-20 18:35		Feb-13-20 18:35		Feb-13-20 18:35	
	Analyzed:	Feb-13-20 21:38		Feb-13-20 21:43		Feb-13-20 21:48		Feb-14-20 10:12		Feb-14-20 10:17		Feb-13-20 22:15	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		66.7	50.0	269	50.2	126	50.0	49.9	5.00	7.78	4.97	396	50.4
TPH by SW8015 Mod	*Extracted:*							Feb-13-20 16:20				Feb-13-20 16:20	
	Analyzed:							Feb-14-20 01:31				Feb-14-20 01:52	
	Units/RL:							mg/kg	RL			mg/kg	RL
Gasoline Range Hydrocarbons (GRO)								<49.8	49.8			<50.0	50.0
Diesel Range Organics (DRO)								<49.8	49.8			<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)								<49.8	49.8			<50.0	50.0
Total TPH								<49.8	49.8			<50	50

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

Jessica Kramer
Project Assistant

Analytical Report 652361

for

TRC Solutions, Inc

Project Manager: Jared Stoffel

Roadrunner 3-13

18-FEB-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)

18-FEB-20

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

Reference: XENCO Report No(s): **652361**
Roadrunner 3-13
Project Address: Carlsbad

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) 652361. 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. 652361 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 652361

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SSW-01	S	02-12-20 12:00		652361-001
FL-12 @15"	S	02-12-20 12:10	1.25 ft	652361-002
FL-13 15"	S	02-12-20 12:20	1.25 ft	652361-003
FL-14 @ 15"	S	02-12-20 12:30	1.25 ft	652361-004
FL-15 @ 15"	S	02-12-20 12:40	1.25 ft	652361-005
FL-16 @ 15"	S	02-12-20 12:50	1.25 ft	652361-006
FL-17 @ 15"	S	02-12-20 13:00	1.25 ft	652361-007
FL-18 @ 15"	S	02-12-20 13:10	1.25 ft	652361-008
FL-23 @ 40"	S	02-12-20 13:20	3.3 ft	652361-009
FL-24 @40"	S	02-12-20 13:40	3.3 ft	652361-010
ESW-01	S	02-12-20 13:30		652361-011
WSW-02	S	02-13-20 10:00		652361-012

CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: Roadrunner 3-13

Project ID:
Work Order Number(s): *652361*

Report Date: *18-FEB-20*
Date Received: *02/13/2020*

Sample receipt non conformances and comments:

V1.001 - Reported BTEX on incorrect sample, Revision includes sample 012 BTEX data.

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3116597 BTEX by EPA 8021B
Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected.
Samples affected are: 652361-001,652361-011,652361-010,652361-006.
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3116769 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analytical Results 652361

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**SSW-01**	Matrix:	Soil	Date Received:	02.13.20 16.10
Lab Sample Id:	652361-001	Date Collected:	02.12.20 12.00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	02.13.20 18.35	Basis:	Wet Weight
Seq Number:	3116526				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**141**	4.96	mg/kg	02.14.20 10.33		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	02.13.20 16.20	Basis:	Wet Weight
Seq Number:	3116504				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.14.20 00.27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.14.20 00.27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.14.20 00.27	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.14.20 00.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-135	02.14.20 00.27	
o-Terphenyl	84-15-1	99	%	70-135	02.14.20 00.27	

Certificate of Analytical Results 652361

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**SSW-01**	Matrix:	Soil	Date Received:	02.13.20 16.10
Lab Sample Id:	652361-001	Date Collected:	02.12.20 12.00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.14.20 10.00	Basis:	Wet Weight
Seq Number:	3116597				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.14.20 12.17	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.14.20 12.17	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.14.20 12.17	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.14.20 12.17	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.14.20 12.17	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	02.14.20 12.17	U	1
Total BTEX		<0.002	0.002	mg/kg	02.14.20 12.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	85	%	70-130	02.14.20 12.17	
4-Bromofluorobenzene	460-00-4	142	%	70-130	02.14.20 12.17	**

Certificate of Analytical Results 652361

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**FL-12 @15"**	Matrix:	Soil	Date Received:	02.13.20 16.10
Lab Sample Id:	652361-002	Date Collected:	02.12.20 12.10	Sample Depth:	1.25 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	02.13.20 18.35	Basis:	Wet Weight
Seq Number:	3116526				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**315**	50.4	mg/kg	02.13.20 21.01		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	02.13.20 16.20	Basis:	Wet Weight
Seq Number:	3116504				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.14.20 00.49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.14.20 00.49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.14.20 00.49	U	1
Total TPH	PHC635	<50	50	mg/kg	02.14.20 00.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	02.14.20 00.49	
o-Terphenyl	84-15-1	97	%	70-135	02.14.20 00.49	

Certificate of Analytical Results 652361

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**FL-12 @15"**	Matrix:	Soil	Date Received:	02.13.20 16.10
Lab Sample Id:	652361-002	Date Collected:	02.12.20 12.10	Sample Depth:	1.25 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.14.20 10.00	Basis:	Wet Weight
Seq Number:	3116597				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.14.20 12.37	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.14.20 12.37	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.14.20 12.37	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	02.14.20 12.37	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.14.20 12.37	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	02.14.20 12.37	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.14.20 12.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	87	%	70-130	02.14.20 12.37	
4-Bromofluorobenzene	460-00-4	129	%	70-130	02.14.20 12.37	

Certificate of Analytical Results 652361

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**FL-13 15"**	Matrix:	Soil	Date Received:	02.13.20 16.10
Lab Sample Id:	652361-003	Date Collected:	02.12.20 12.20	Sample Depth:	1.25 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	02.13.20 18.35	Basis:	Wet Weight
Seq Number:	3116526				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**384**	50.1	mg/kg	02.13.20 21.06		10

Certificate of Analytical Results 652361

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**FL-14 @ 15"**	Matrix:	Soil	Date Received:	02.13.20 16.10
Lab Sample Id:	652361-004	Date Collected:	02.12.20 12.30	Sample Depth:	1.25 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	02.13.20 18.35	Basis:	Wet Weight
Seq Number:	3116526				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**594**	49.8	mg/kg	02.13.20 21.12		10

Certificate of Analytical Results 652361

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**FL-15 @ 15"**	Matrix:	Soil	Date Received:	02.13.20 16.10
Lab Sample Id:	652361-005	Date Collected:	02.12.20 12.40	Sample Depth:	1.25 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	02.13.20 18.35	Basis:	Wet Weight
Seq Number:	3116526				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1850**	50.3	mg/kg	02.13.20 21.17		10

Certificate of Analytical Results 652361

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**FL-16 @ 15"**	Matrix:	Soil	Date Received:	02.13.20 16.10
Lab Sample Id:	652361-006	Date Collected:	02.12.20 12.50	Sample Depth:	1.25 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	02.13.20 18.35	Basis:	Wet Weight
Seq Number:	3116526				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**164**	25.1	mg/kg	02.13.20 21.33		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	02.13.20 16.20	Basis:	Wet Weight
Seq Number:	3116504				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.14.20 01.10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.14.20 01.10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.14.20 01.10	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.14.20 01.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-135	02.14.20 01.10	
o-Terphenyl	84-15-1	98	%	70-135	02.14.20 01.10	

Certificate of Analytical Results 652361

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**FL-16 @ 15"**	Matrix:	Soil	Date Received:	02.13.20 16.10
Lab Sample Id:	652361-006	Date Collected:	02.12.20 12.50	Sample Depth:	1.25 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.14.20 10.00	Basis:	Wet Weight
Seq Number:	3116597				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.14.20 12.58	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.14.20 12.58	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.14.20 12.58	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.14.20 12.58	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.14.20 12.58	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	02.14.20 12.58	U	1
Total BTEX		<0.002	0.002	mg/kg	02.14.20 12.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	132	%	70-130	02.14.20 12.58	**
1,4-Difluorobenzene	540-36-3	84	%	70-130	02.14.20 12.58	

Certificate of Analytical Results 652361

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**FL-17 @ 15"**	Matrix:	Soil	Date Received:	02.13.20 16.10
Lab Sample Id:	652361-007	Date Collected:	02.12.20 13.00	Sample Depth:	1.25 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	02.13.20 18.35	Basis:	Wet Weight
Seq Number:	3116526				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**66.7**	50.0	mg/kg	02.13.20 21.38		10

Certificate of Analytical Results 652361

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**FL-18 @ 15"**	Matrix:	Soil	Date Received:	02.13.20 16.10
Lab Sample Id:	652361-008	Date Collected:	02.12.20 13.10	Sample Depth:	1.25 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	02.13.20 18.35	Basis:	Wet Weight
Seq Number:	3116526				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**269**	50.2	mg/kg	02.13.20 21.43		10

Certificate of Analytical Results 652361

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**FL-23 @ 40"**	Matrix:	Soil	Date Received:	02.13.20 16.10
Lab Sample Id:	652361-009	Date Collected:	02.12.20 13.20	Sample Depth:	3.3 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	02.13.20 18.35	Basis:	Wet Weight
Seq Number:	3116526				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**126**	50.0	mg/kg	02.13.20 21.48		10

Certificate of Analytical Results 652361

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**FL-24 @40"**	Matrix:	Soil	Date Received:	02.13.20 16.10
Lab Sample Id:	652361-010	Date Collected:	02.12.20 13.40	Sample Depth:	3.3 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	02.13.20 18.35	Basis:	Wet Weight
Seq Number:	3116526				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**49.9**	5.00	mg/kg	02.14.20 10.12		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	02.13.20 16.20	Basis:	Wet Weight
Seq Number:	3116504				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.14.20 01.31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.14.20 01.31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.14.20 01.31	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.14.20 01.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-135	02.14.20 01.31	
o-Terphenyl	84-15-1	101	%	70-135	02.14.20 01.31	

Certificate of Analytical Results 652361

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**FL-24 @40"**	Matrix:	Soil	Date Received:	02.13.20 16.10
Lab Sample Id:	652361-010	Date Collected:	02.12.20 13.40	Sample Depth:	3.3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.14.20 10.00	Basis:	Wet Weight
Seq Number:	3116597				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.14.20 13.18	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.14.20 13.18	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.14.20 13.18	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.14.20 13.18	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.14.20 13.18	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.14.20 13.18	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.14.20 13.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	134	%	70-130	02.14.20 13.18	**
1,4-Difluorobenzene	540-36-3	83	%	70-130	02.14.20 13.18	

Certificate of Analytical Results 652361

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**ESW-01**	Matrix:	Soil	Date Received:	02.13.20 16.10
Lab Sample Id:	652361-011	Date Collected:	02.12.20 13.30		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	02.13.20 18.35	Basis:	Wet Weight
Seq Number:	3116526				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**7.78**	4.97	mg/kg	02.14.20 10.17		1

Certificate of Analytical Results 652361

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**WSW-02**	Matrix:	Soil	Date Received:	02.13.20 16.10
Lab Sample Id:	652361-012	Date Collected:	02.13.20 10.00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	02.13.20 18.35	Basis:	Wet Weight
Seq Number:	3116526				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**396**	50.4	mg/kg	02.13.20 22.15		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	02.13.20 16.20	Basis:	Wet Weight
Seq Number:	3116504				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.14.20 01.52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.14.20 01.52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.14.20 01.52	U	1
Total TPH	PHC635	<50	50	mg/kg	02.14.20 01.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	02.14.20 01.52	
o-Terphenyl	84-15-1	98	%	70-135	02.14.20 01.52	

Certificate of Analytical Results 652361

TRC Solutions, Inc, Midland, TX

Roadrunner 3-13

Sample Id:	**WSW-02**	Matrix:	Soil	Date Received:	02.13.20 16.10
Lab Sample Id:	652361-012	Date Collected:	02.13.20 10.00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.14.20 16.45	Basis:	Wet Weight
Seq Number:	3116769				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.17.20 16.03	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.17.20 16.03	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.17.20 16.03	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.17.20 16.03	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.17.20 16.03	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.17.20 16.03	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.17.20 16.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	74	%	70-130	02.17.20 16.03	
1,4-Difluorobenzene	540-36-3	114	%	70-130	02.17.20 16.03	

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 652361

TRC Solutions, Inc

Roadrunner 3-13

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116526 — Matrix: Solid — Date Prep: 02.13.20
MB Sample Id: 7696646-1-BLK — LCS Sample Id: 7696646-1-BKS — LCSD Sample Id: 7696646-1-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	260	104	260	104	90-110	0	20	mg/kg	02.13.20 20:35	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116526 — Matrix: Soil — Date Prep: 02.13.20
Parent Sample Id: 652361-001 — MS Sample Id: 652361-001 S — MSD Sample Id: 652361-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	141	248	403	106	401	105	90-110	0	20	mg/kg	02.14.20 10:38	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116526 — Matrix: Soil — Date Prep: 02.13.20
Parent Sample Id: 652361-011 — MS Sample Id: 652361-011 S — MSD Sample Id: 652361-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	7.78	249	272	106	271	106	90-110	0	20	mg/kg	02.14.20 10:22	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3116504 — Matrix: Solid — Date Prep: 02.13.20
MB Sample Id: 7696636-1-BLK — LCS Sample Id: 7696636-1-BKS — LCSD Sample Id: 7696636-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	837	84	840	84	70-135	0	20	mg/kg	02.13.20 17:29	
Diesel Range Organics (DRO)	<50.0	1000	934	93	909	91	70-135	3	20	mg/kg	02.13.20 17:29	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	97		104		101		70-135	%	02.13.20 17:29
o-Terphenyl	102		111		106		70-135	%	02.13.20 17:29

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3116504 — Matrix: Solid — Date Prep: 02.13.20
MB Sample Id: 7696636-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	02.13.20 17:01	

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 652361

TRC Solutions, Inc

Roadrunner 3-13

Analytical Method: TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3116504 | Matrix: Soil | Date Prep: 02.13.20
Parent Sample Id: 652236-001 | MS Sample Id: 652236-001 S | MSD Sample Id: 652236-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	998	832	83	836	84	70-135	0	20	mg/kg	02.13.20 18:31	
Diesel Range Organics (DRO)	<49.9	998	863	86	948	95	70-135	9	20	mg/kg	02.13.20 18:31	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	91		99		70-135	%	02.13.20 18:31
o-Terphenyl	95		127		70-135	%	02.13.20 18:31

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3116597 | Matrix: Solid | Date Prep: 02.14.20
MB Sample Id: 7696673-1-BLK | LCS Sample Id: 7696673-1-BKS | LCSD Sample Id: 7696673-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.107	107	0.108	108	70-130	1	35	mg/kg	02.14.20 09:44	
Toluene	<0.00200	0.100	0.0991	99	0.101	101	70-130	2	35	mg/kg	02.14.20 09:44	
Ethylbenzene	<0.00200	0.100	0.0984	98	0.0993	99	70-130	1	35	mg/kg	02.14.20 09:44	
m,p-Xylenes	<0.00400	0.200	0.196	98	0.198	99	70-130	1	35	mg/kg	02.14.20 09:44	
o-Xylene	<0.00200	0.100	0.0960	96	0.0970	97	70-130	1	35	mg/kg	02.14.20 09:44	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	87		92		93		70-130	%	02.14.20 09:44
4-Bromofluorobenzene	127		96		96		70-130	%	02.14.20 09:44

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3116769 | Matrix: Solid | Date Prep: 02.14.20
MB Sample Id: 7696674-1-BLK | LCS Sample Id: 7696674-1-BKS | LCSD Sample Id: 7696674-1-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	0.113	113	0.118	118	70-130	4	35	mg/kg	02.17.20 13:06	
Toluene	<0.000456	0.100	0.112	112	0.113	113	70-130	1	35	mg/kg	02.17.20 13:06	
Ethylbenzene	<0.000565	0.100	0.105	105	0.106	106	70-130	1	35	mg/kg	02.17.20 13:06	
m,p-Xylenes	<0.00101	0.200	0.211	106	0.212	106	70-130	0	35	mg/kg	02.17.20 13:06	
o-Xylene	<0.000344	0.100	0.106	106	0.104	104	70-130	2	35	mg/kg	02.17.20 13:06	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		112		115		70-130	%	02.17.20 13:06
4-Bromofluorobenzene	72		88		87		70-130	%	02.17.20 13:06

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

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

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

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

QC Summary 652361

TRC Solutions, Inc

Roadrunner 3-13

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

Seq Number: 3116597 Matrix: Soil Date Prep: 02.14.20

Parent Sample Id: 652361-001 MS Sample Id: 652361-001 S MSD Sample Id: 652361-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0958	96	0.102	102	70-130	6	35	mg/kg	02.14.20 10:25	
Toluene	<0.00199	0.0996	0.0892	90	0.0948	95	70-130	6	35	mg/kg	02.14.20 10:25	
Ethylbenzene	<0.00199	0.0996	0.0873	88	0.0930	93	70-130	6	35	mg/kg	02.14.20 10:25	
m,p-Xylenes	<0.00398	0.199	0.173	87	0.184	92	70-130	6	35	mg/kg	02.14.20 10:25	
o-Xylene	<0.00199	0.0996	0.0848	85	0.0903	91	70-130	6	35	mg/kg	02.14.20 10:25	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	93		94		70-130	%	02.14.20 10:25
4-Bromofluorobenzene	95		94		70-130	%	02.14.20 10:25

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

Seq Number: 3116769 Matrix: Soil Date Prep: 02.14.20

Parent Sample Id: 652384-002 MS Sample Id: 652384-002 S MSD Sample Id: 652384-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.000709	0.100	0.0105	10	0.0955	95	70-130	160	35	mg/kg	02.17.20 14:43	XF
Toluene	0.000709	0.100	0.0151	14	0.102	101	70-130	148	35	mg/kg	02.17.20 14:43	XF
Ethylbenzene	<0.000566	0.100	0.0222	22	0.102	102	70-130	129	35	mg/kg	02.17.20 14:43	XF
m,p-Xylenes	<0.00102	0.200	0.0367	18	0.173	87	70-130	130	35	mg/kg	02.17.20 14:43	XF
o-Xylene	0.000848	0.100	0.0292	28	0.122	121	70-130	123	35	mg/kg	02.17.20 14:43	XF

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	106		107		70-130	%	02.17.20 14:43
4-Bromofluorobenzene	99		96		70-130	%	02.17.20 14:43

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

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

* PLEASE INCLUDE RSEBRING@TRCCOMPANIES.COM ITAVAREZ@CONCHO.COM

Work Order No: 1052341

Page 1 of 2

Project Manager:	JERRID STOFFEL	Bill to: (if different)	COG - IKE TAVAREZ
Company Name:	TRC - MIDLAND	Company Name:	
Address:		Address:	
City, State ZIP:		City, State ZIP:	
Phone:		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:	ROADRUNNER 3-13	Turn Around	
Project Number:		Routine ☐	
Project Location	NM CARLSBAD	Rush: 24 HR	
Sampler's Name:	RUSSELL SEBRING	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	1.9	Thermometer ID	VE
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	
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	Pres. Code	300 Chlorides	TPH	BTEX	Sample Comments
	SSW-01	S	12FEB2020	1200	—	1		✓	✓	✓	
	FL-12 @ 15"		12FEB2020	1210	1.25'	1		✓	✓	✓	
	FL-13 @ 15"			1220	1.25'	1		✓			
	FL-14 @ 15"			1230	1.25'	1		✓			
	FL-15 @ 15"			1240	1.25'	1		✓			
	FL-16 @ 15"			1250	1.25'	1		✓	✓	✓	
	FL-17 @ 15"			1300	1.25'	1		✓			
	FL-18 @ 15"			1310	1.25'	1		✓			
	FL-23 @ 40"			1320	3.3	1		✓			
	FL-24 @ 40"	↓		1340	3.3	1		✓	✓	✓	

ANALYSIS REQUEST

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			2/13/20	2			
3			1610	4			
5				6			

Revised Date 022619 Rev. 2019.1

Chain of Custody

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Craslbad, NM (432) 704-5440
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Work Order No: 052241

Page 2 of 2

Project Manager:	Jerrod Stoffel	Bill to: (if different)	Coc- Ike Tavarez
Company Name:	TRC - Midland	Company Name:	
Address:		Address:	
City, State ZIP:		City, State ZIP:	
Phone:	Email:	JStoffel@trcompanies.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:	Road Runner 3-13	Turn Around	
Project Number:		Routine ☐	
Project Location	Carlsbad NM	Rush: 24	
Sampler's Name:	Russell Sebring	Due Date:	
PO #:	Quote #:		

SAMPLE RECEIPT

Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	1.9	Thermometer ID	VE
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	
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	Chlorides 300	TPH	BTEX	Sample Comments
	ESW-01	S	12Feb2020	1330	—	1		✓			
	WSW-01	↓	13Feb2020	1000	—	1		✓	✓	✓	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr 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			2/13/20	2		
3				4		
5			1600	6		

Revised Date 022619 Rev. 2019.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 02.13.2020 04.10.00 PM

Work Order #: 652361

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

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.9
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6*Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**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: 02.13.2020

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 02.14.2020

Jessica Kramer

Certificate of Analysis Summary 652513

TRC Solutions, Inc, Midland, TX

Project Name: RoadRunner

Project Id:

Contact: Jared Stoffel

Project Location: Carlsbad

Date Received in Lab: Fri Feb-14-20 04:50 pm

Report Date: 17-FEB-20

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	652513-001		652513-002		652513-003		652513-004		652513-005		652513-006	
	Field Id:	FL-01@ 9"		FL-03@ 9"		FL-05@ 9"		FL-09@ 9"		FL-19@ 40"		WSW-01	
	Depth:	.75- ft		.75- ft		.75- ft		.75- ft		1.3- ft			
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-14-20 13:45		Feb-14-20 13:55		Feb-14-20 14:05		Feb-14-20 14:15		Feb-14-20 14:25		Feb-14-20 14:35	
Chloride by EPA 300	***Extracted:***	Feb-14-20 20:00		Feb-14-20 20:00		Feb-14-20 20:00		Feb-14-20 20:00		Feb-14-20 20:00		Feb-14-20 20:00	
	Analyzed:	Feb-15-20 00:43		Feb-15-20 01:02		Feb-15-20 01:08		Feb-15-20 01:15		Feb-15-20 01:21		Feb-15-20 01:28	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		279	99.4	211	99.8	461	99.8	317	99.2	181	98.4	334	99.4

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

Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 652513

TRC Solutions, Inc, Midland, TX

Project Name: RoadRunner

Project Id:

Contact: Jared Stoffel

Project Location: Carlsbad

Date Received in Lab: Fri Feb-14-20 04:50 pm

Report Date: 17-FEB-20

Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	652513-007					
	Field Id:	NSW-02					
	Depth:						
	Matrix:	SOIL					
	Sampled:	Feb-14-20 14:45					
Chloride by EPA 300	***Extracted:***	Feb-14-20 20:00					
	Analyzed:	Feb-15-20 01:34					
	Units/RL:	mg/kg	RL				
Chloride		43.8	9.84				

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

Version: 1.%

Jessica Kramer
Project Assistant

Analytical Report 652513

for

TRC Solutions, Inc

Project Manager: Jared Stoffel

RoadRunner

17-FEB-20

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

17-FEB-20

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

Reference: XENCO Report No(s): **652513**
RoadRunner
Project Address: Carlsbad

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) 652513. 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. 652513 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

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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

Sample Cross Reference 652513

TRC Solutions, Inc, Midland, TX

RoadRunner

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FL-01@ 9"	S	02-14-20 13:45	.75 ft	652513-001
FL-03@ 9"	S	02-14-20 13:55	.75 ft	652513-002
FL-05@ 9"	S	02-14-20 14:05	.75 ft	652513-003
FL-09@ 9"	S	02-14-20 14:15	.75 ft	652513-004
FL-19@ 40"	S	02-14-20 14:25	1.3 ft	652513-005
WSW-01	S	02-14-20 14:35	ft	652513-006
NSW-02	S	02-14-20 14:45	ft	652513-007

Version: 1.%

CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: RoadRunner

Project ID:
Work Order Number(s): *652513*

Report Date: *17-FEB-20*
Date Received: *02/14/2020*

Sample receipt non conformances and comments:

Please copy Rsebring@TRCcompanies.com

Sample receipt non conformances and comments per sample:

None

Certificate of Analytical Results 652513

TRC Solutions, Inc, Midland, TX

RoadRunner

Sample Id:	**FL-01@ 9"**	Matrix:	Soil	Date Received:	02.14.20 16.50
Lab Sample Id:	652513-001	Date Collected:	02.14.20 13.45	Sample Depth:	.75 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 20.00	Basis:	Wet Weight
Seq Number:	3116669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**279**	99.4	mg/kg	02.15.20 00.43		10

Certificate of Analytical Results 652513

TRC Solutions, Inc, Midland, TX

RoadRunner

Sample Id:	**FL-03@ 9"**	Matrix:	Soil	Date Received:	02.14.20 16.50
Lab Sample Id:	652513-002	Date Collected:	02.14.20 13.55	Sample Depth:	.75 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 20.00	Basis:	Wet Weight
Seq Number:	3116669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**211**	99.8	mg/kg	02.15.20 01.02		10

Certificate of Analytical Results 652513

TRC Solutions, Inc, Midland, TX

RoadRunner

Sample Id:	**FL-05@ 9"**	Matrix:	Soil	Date Received:	02.14.20 16.50
Lab Sample Id:	652513-003	Date Collected:	02.14.20 14.05	Sample Depth:	.75 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 20.00	Basis:	Wet Weight
Seq Number:	3116669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**461**	99.8	mg/kg	02.15.20 01.08		10

Certificate of Analytical Results 652513

TRC Solutions, Inc, Midland, TX

RoadRunner

Sample Id:	**FL-09@ 9"**	Matrix:	Soil	Date Received:	02.14.20 16.50
Lab Sample Id:	652513-004	Date Collected:	02.14.20 14.15	Sample Depth:	.75 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 20.00	Basis:	Wet Weight
Seq Number:	3116669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**317**	99.2	mg/kg	02.15.20 01.15		10

Certificate of Analytical Results 652513

TRC Solutions, Inc, Midland, TX

RoadRunner

Sample Id:	**FL-19@ 40"**	Matrix:	Soil	Date Received:	02.14.20 16.50
Lab Sample Id:	652513-005	Date Collected:	02.14.20 14.25	Sample Depth:	1.3 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 20.00	Basis:	Wet Weight
Seq Number:	3116669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**181**	98.4	mg/kg	02.15.20 01.21		10

Certificate of Analytical Results 652513

TRC Solutions, Inc, Midland, TX

RoadRunner

Sample Id:	**WSW-01**	Matrix:	Soil	Date Received:	02.14.20 16.50
Lab Sample Id:	652513-006	Date Collected:	02.14.20 14.35		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 20.00	Basis:	Wet Weight
Seq Number:	3116669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**334**	99.4	mg/kg	02.15.20 01.28		10

Certificate of Analytical Results 652513

TRC Solutions, Inc, Midland, TX

RoadRunner

Sample Id:	**NSW-02**	Matrix:	Soil	Date Received:	02.14.20 16.50
Lab Sample Id:	652513-007	Date Collected:	02.14.20 14.45		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.14.20 20.00	Basis:	Wet Weight
Seq Number:	3116669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**43.8**	9.84	mg/kg	02.15.20 01.34		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 652513

TRC Solutions, Inc

RoadRunner

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3116669 Matrix: Solid Date Prep: 02.14.20
MB Sample Id: 7696728-1-BLK LCS Sample Id: 7696728-1-BKS LCSD Sample Id: 7696728-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	261	104	261	104	90-110	0	20	mg/kg	02.14.20 22:48	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3116669 Matrix: Soil Date Prep: 02.14.20
Parent Sample Id: 652450-007 MS Sample Id: 652450-007 S MSD Sample Id: 652450-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	9160	200	9380	110	9360	99	90-110	0	20	mg/kg	02.14.20 23:07	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3116669 Matrix: Soil Date Prep: 02.14.20
Parent Sample Id: 652513-001 MS Sample Id: 652513-001 S MSD Sample Id: 652513-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	279	199	486	104	488	105	90-110	0	20	mg/kg	02.15.20 00:49	

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

* PLEASE COPY REBRAND TRC COMPANIES on

Work Order No: 652513

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 STORFEL	Bill to: (if different)	COG - LEE TAVAREZ
Company Name:	TRC - MIDLAND	Company Name:	
Address:		Address:	
City, State ZIP:		City, State ZIP:	
Phone:		Email:	JSTORFEL@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:	ROADRUNNER	Turn Around	
Project Number:		Routine ☐	
Project Location	CARLSBAD	Rush: 24HR	
Sampler's Name:	RUSSELL SEBRING	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	0.2	Thermometer ID	
Received Intact:	(Yes) No	TNM007	
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	7

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Chlorides
	FL-01 @ 9"	S	1/16/2020	1345	.75'	1	✓
	FL-03 @ 9"			1355	.75	1	✓
	FL05 @ 9"			1405	.75	1	✓
	FL09 @ 9"			1415	.75	1	✓
	FL19 @ 40"			1425	1.3'	1	✓
	WSW-01			1435	—	1	✓
	NSW-02	↓	↓	1445	—	1	✓

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

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
		2/14/20 16:50	2		
			4		
			6		

Revised Date 022619 Rev. 2019.1

Certificate of Analysis Summary 652644

TRC Solutions, Inc, Midland, TX

Project Name: RoadRunner

Project Id:

Contact: Jared Stoffel

Project Location: Carlsbad NM

Date Received in Lab: Mon Feb-17-20 03:10 pm

Report Date: 10-MAR-20

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	652644-001		652644-002		652644-003		652644-004		652644-005		652644-006	
	Field Id:	FL02@9"		FL04@1'		FL06@1'		FL08@1.5'		FL07@1'		FL10@1.25'	
	Depth:	9- In		1- ft		1- ft		1.5- ft		1- ft		1.25- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-17-20 11:00		Feb-17-20 11:10		Feb-17-20 11:20		Feb-17-20 11:40		Feb-17-20 11:30		Feb-17-20 11:50	
BTEX by EPA 8021B	***Extracted:***			Feb-17-20 17:00				Feb-17-20 17:00					
	Analyzed:			Feb-17-20 18:56				Feb-17-20 19:16					
	Units/RL:			mg/kg	RL			mg/kg	RL				
Benzene				<0.00198	0.00198			<0.00201	0.00201				
Toluene				<0.00198	0.00198			<0.00201	0.00201				
Ethylbenzene				<0.00198	0.00198			<0.00201	0.00201				
m,p-Xylenes				<0.00396	0.00396			<0.00402	0.00402				
o-Xylene				<0.00198	0.00198			<0.00201	0.00201				
Total Xylenes				<0.00198	0.00198			<0.00201	0.00201				
Total BTEX				<0.00198	0.00198			<0.00201	0.00201				
Chloride by EPA 300	***Extracted:***	Feb-17-20 16:30		Feb-17-20 16:30		Feb-17-20 16:30		Feb-17-20 16:30		Feb-17-20 16:30		Feb-17-20 16:30	
	Analyzed:	Feb-17-20 17:57		Feb-17-20 18:19		Feb-17-20 18:26		Feb-17-20 18:33		Feb-17-20 18:40		Feb-17-20 19:02	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		<9.98	9.98	106	9.92	260	9.96	349	9.98	198	10.0	169	10.1
TPH by SW8015 Mod	***Extracted:***			Feb-17-20 17:00				Feb-17-20 17:00					
	Analyzed:			Feb-17-20 18:01				Feb-17-20 18:41					
	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 Manager

Certificate of Analysis Summary 652644

TRC Solutions, Inc, Midland, TX

Project Name: RoadRunner

Project Id:

Contact: Jared Stoffel

Project Location: Carlsbad NM

Date Received in Lab: Mon Feb-17-20 03:10 pm

Report Date: 10-MAR-20

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	652644-007		652644-008		652644-009		652644-010		652644-011		652644-012	
	Field Id:	FL20@4.5'		FL11@2'		FL21@4.5'		FL22@4'		NSW01		ESW-02	
	Depth:	4.5- ft		2- ft		4.5- ft		4- ft					
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-17-20 12:45		Feb-17-20 12:20		Feb-17-20 12:55		Feb-17-20 13:10		Feb-17-20 13:20		Feb-17-20 13:30	
BTEX by EPA 8021B	***Extracted:***	Feb-17-20 17:00								Feb-17-20 17:00		Feb-17-20 17:00	
	Analyzed:	Feb-17-20 19:37								Feb-17-20 19:57		Feb-17-20 20:17	
	Units/RL:	mg/kg	RL							mg/kg	RL	mg/kg	RL
Benzene		<0.00201	0.00201							<0.00199	0.00199	<0.00201	0.00201
Toluene		<0.00201	0.00201							<0.00199	0.00199	<0.00201	0.00201
Ethylbenzene		<0.00201	0.00201							<0.00199	0.00199	<0.00201	0.00201
m,p-Xylenes		<0.00402	0.00402							<0.00398	0.00398	<0.00402	0.00402
o-Xylene		<0.00201	0.00201							<0.00199	0.00199	<0.00201	0.00201
Total Xylenes		<0.00201	0.00201							<0.00199	0.00199	<0.00201	0.00201
Total BTEX		<0.00201	0.00201							<0.00199	0.00199	<0.00201	0.00201
Chloride by EPA 300	***Extracted:***	Feb-17-20 16:30		Feb-17-20 16:30		Feb-17-20 16:30		Feb-17-20 16:30		Feb-17-20 16:30		Feb-17-20 16:30	
	Analyzed:	Feb-17-20 19:10		Feb-17-20 19:18		Feb-17-20 19:25		Feb-17-20 19:33		Feb-17-20 19:40		Feb-17-20 20:02	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		100	10.0	130	9.96	482	9.98	95.0	9.96	321	10.0	242	10.0
TPH by SW8015 Mod	***Extracted:***	Feb-17-20 17:00								Feb-17-20 17:00		Feb-17-20 17:00	
	Analyzed:	Feb-17-20 18:41								Feb-17-20 19:01		Feb-17-20 19:01	
	Units/RL:	mg/kg	RL							mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0							<49.9	49.9	<50.0	50.0
Diesel Range Organics (DRO)		<50.0	50.0							<49.9	49.9	<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0							<49.9	49.9	<50.0	50.0
Total TPH		<50	50							<49.9	49.9	<50	50

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

Jessica Kramer
Project Manager

Certificate of Analysis Summary 652644

TRC Solutions, Inc, Midland, TX

Project Name: RoadRunner

Project Id:

Contact: Jared Stoffel

Project Location: Carlsbad NM

Date Received in Lab: Mon Feb-17-20 03:10 pm

Report Date: 10-MAR-20

Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	652644-013					
	Field Id:	FL-15@2'					
	Depth:	2- ft					
	Matrix:	SOIL					
	Sampled:	Feb-17-20 13:45					
Chloride by EPA 300	***Extracted:***	Feb-17-20 16:30					
	Analyzed:	Feb-17-20 20:10					
	Units/RL:	mg/kg	RL				
Chloride		91.7	9.94				

Jessica Kramer
Project Manager

Analytical Report 652644

for

TRC Solutions, Inc

Project Manager: Jared Stoffel

RoadRunner

10-MAR-20

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

10-MAR-20

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

Reference: XENCO Report No(s): **652644**
RoadRunner
Project Address: Carlsbad 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) 652644. 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. 652644 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 Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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

Sample Cross Reference 652644

TRC Solutions, Inc, Midland, TX

RoadRunner

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FL02@9"	S	02-17-20 11:00	9 In	652644-001
FL04@1'	S	02-17-20 11:10	1 ft	652644-002
FL06@1'	S	02-17-20 11:20	1 ft	652644-003
FL08@1.5'	S	02-17-20 11:40	1.5 ft	652644-004
FL07@1'	S	02-17-20 11:30	1 ft	652644-005
FL10@1.25'	S	02-17-20 11:50	1.25 ft	652644-006
FL20@4.5'	S	02-17-20 12:45	4.5 ft	652644-007
FL11@2'	S	02-17-20 12:20	2 ft	652644-008
FL21@4.5'	S	02-17-20 12:55	4.5 ft	652644-009
FL22@4'	S	02-17-20 13:10	4 ft	652644-010
NSW01	S	02-17-20 13:20	ft	652644-011
ESW-02	S	02-17-20 13:30	ft	652644-012
FL-15@2'	S	02-17-20 13:45	2 ft	652644-013

CASE NARRATIVE

Client Name: TRC Solutions, Inc

Project Name: RoadRunner

Project ID:
Work Order Number(s): *652644*

Report Date: *10-MAR-20*
Date Received: *02/17/2020*

Sample receipt non conformances and comments:

V1.001 Revision - Corrected sample name from FL015@2' to FL-15 @2' JK 03/10/20

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3116798 BTEX by EPA 8021B

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

Certificate of Analytical Results 652644

TRC Solutions, Inc, Midland, TX

RoadRunner

Sample Id:	**FL02@9"**	Matrix:	Soil	Date Received:	02.17.20 15.10
Lab Sample Id:	652644-001	Date Collected:	02.17.20 11.00	Sample Depth:	9 In
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 16.30	Basis:	Wet Weight
Seq Number:	3116794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.98	9.98	mg/kg	02.17.20 17.57	U	1

Certificate of Analytical Results 652644

TRC Solutions, Inc, Midland, TX

RoadRunner

Sample Id:	**FL04@1'**	Matrix:	Soil	Date Received:	02.17.20 15.10
Lab Sample Id:	652644-002	Date Collected:	02.17.20 11.10	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 16.30	Basis:	Wet Weight
Seq Number:	3116794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**106**	9.92	mg/kg	02.17.20 18.19		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.17.20 17.00	Basis:	Wet Weight
Seq Number:	3116808				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.17.20 18.01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.17.20 18.01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.17.20 18.01	U	1
Total TPH	PHC635	<50	50	mg/kg	02.17.20 18.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	02.17.20 18.01	
o-Terphenyl	84-15-1	111	%	70-135	02.17.20 18.01	

Certificate of Analytical Results 652644

TRC Solutions, Inc, Midland, TX

RoadRunner

Sample Id:	**FL04@1'**	Matrix:	Soil	Date Received:	02.17.20 15.10
Lab Sample Id:	652644-002	Date Collected:	02.17.20 11.10	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 17.00	Basis:	Wet Weight
Seq Number:	3116798				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.17.20 18.56	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	02.17.20 18.56	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	02.17.20 18.56	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	02.17.20 18.56	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	02.17.20 18.56	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	02.17.20 18.56	U	1
Total BTEX		<0.00198	0.00198	mg/kg	02.17.20 18.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.17.20 18.56	
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.17.20 18.56	

Certificate of Analytical Results 652644

TRC Solutions, Inc, Midland, TX

RoadRunner

Sample Id:	**FL06@1'**	Matrix:	Soil	Date Received:	02.17.20 15.10
Lab Sample Id:	652644-003	Date Collected:	02.17.20 11.20	Sample Depth:	1 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 16.30	Basis:	Wet Weight
Seq Number:	3116794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**260**	9.96	mg/kg	02.17.20 18.26		1

Certificate of Analytical Results 652644

TRC Solutions, Inc, Midland, TX

RoadRunner

Sample Id:	**FL08@1.5'**	Matrix:	Soil	Date Received:	02.17.20 15.10
Lab Sample Id:	652644-004	Date Collected:	02.17.20 11.40	Sample Depth:	1.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 16.30	Basis:	Wet Weight
Seq Number:	3116794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**349**	9.98	mg/kg	02.17.20 18.33		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.17.20 17.00	Basis:	Wet Weight
Seq Number:	3116808				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.17.20 18.41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.17.20 18.41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.17.20 18.41	U	1
Total TPH	PHC635	<50	50	mg/kg	02.17.20 18.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	02.17.20 18.41	
o-Terphenyl	84-15-1	107	%	70-135	02.17.20 18.41	

Certificate of Analytical Results 652644

TRC Solutions, Inc, Midland, TX

RoadRunner

Sample Id:	**FL08@1.5'**	Matrix:	Soil	Date Received:	02.17.20 15.10
Lab Sample Id:	652644-004	Date Collected:	02.17.20 11.40	Sample Depth:	1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 17.00	Basis:	Wet Weight
Seq Number:	3116798				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.17.20 19.16	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.17.20 19.16	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.17.20 19.16	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.17.20 19.16	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.17.20 19.16	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.17.20 19.16	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.17.20 19.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.17.20 19.16	
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.17.20 19.16	

Certificate of Analytical Results 652644

TRC Solutions, Inc, Midland, TX

RoadRunner

Sample Id:	**FL07@1'**	Matrix:	Soil	Date Received:	02.17.20 15.10
Lab Sample Id:	652644-005	Date Collected:	02.17.20 11.30	Sample Depth:	1 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 16.30	Basis:	Wet Weight
Seq Number:	3116794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**198**	10.0	mg/kg	02.17.20 18.40		1

Certificate of Analytical Results 652644

TRC Solutions, Inc, Midland, TX

RoadRunner

Sample Id:	**FL10@1.25'**	Matrix:	Soil	Date Received:	02.17.20 15.10
Lab Sample Id:	652644-006	Date Collected:	02.17.20 11.50	Sample Depth:	1.25 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 16.30	Basis:	Wet Weight
Seq Number:	3116794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**169**	10.1	mg/kg	02.17.20 19.02		1

Certificate of Analytical Results 652644

TRC Solutions, Inc, Midland, TX

RoadRunner

Sample Id:	**FL20@4.5'**	Matrix:	Soil	Date Received:	02.17.20 15.10
Lab Sample Id:	652644-007	Date Collected:	02.17.20 12.45	Sample Depth:	4.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 16.30	Basis:	Wet Weight
Seq Number:	3116794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**100**	10.0	mg/kg	02.17.20 19.10		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.17.20 17.00	Basis:	Wet Weight
Seq Number:	3116808				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.17.20 18.41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.17.20 18.41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.17.20 18.41	U	1
Total TPH	PHC635	<50	50	mg/kg	02.17.20 18.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	02.17.20 18.41	
o-Terphenyl	84-15-1	108	%	70-135	02.17.20 18.41	

Certificate of Analytical Results 652644

TRC Solutions, Inc, Midland, TX

RoadRunner

Sample Id:	**FL20@4.5'**	Matrix:	Soil	Date Received:	02.17.20 15.10
Lab Sample Id:	652644-007	Date Collected:	02.17.20 12.45	Sample Depth:	4.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 17.00	Basis:	Wet Weight
Seq Number:	3116798				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.17.20 19.37	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.17.20 19.37	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.17.20 19.37	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.17.20 19.37	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.17.20 19.37	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.17.20 19.37	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.17.20 19.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.17.20 19.37	
4-Bromofluorobenzene	460-00-4	95	%	70-130	02.17.20 19.37	

Certificate of Analytical Results 652644

TRC Solutions, Inc, Midland, TX

RoadRunner

Sample Id:	**FL11@2'**	Matrix:	Soil	Date Received:	02.17.20 15.10
Lab Sample Id:	652644-008	Date Collected:	02.17.20 12.20	Sample Depth:	2 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 16.30	Basis:	Wet Weight
Seq Number:	3116794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**130**	9.96	mg/kg	02.17.20 19.18		1

Certificate of Analytical Results 652644

TRC Solutions, Inc, Midland, TX

RoadRunner

Sample Id:	**FL21@4.5'**	Matrix:	Soil	Date Received:	02.17.20 15.10
Lab Sample Id:	652644-009	Date Collected:	02.17.20 12.55	Sample Depth:	4.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 16.30	Basis:	Wet Weight
Seq Number:	3116794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**482**	9.98	mg/kg	02.17.20 19.25		1

Certificate of Analytical Results 652644

TRC Solutions, Inc, Midland, TX

RoadRunner

Sample Id:	**FL22@4'**	Matrix:	Soil	Date Received:	02.17.20 15.10
Lab Sample Id:	652644-010	Date Collected:	02.17.20 13.10	Sample Depth:	4 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 16.30	Basis:	Wet Weight
Seq Number:	3116794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**95.0**	9.96	mg/kg	02.17.20 19.33		1

Certificate of Analytical Results 652644

TRC Solutions, Inc, Midland, TX

RoadRunner

Sample Id:	**NSW01**	Matrix:	Soil	Date Received:	02.17.20 15.10
Lab Sample Id:	652644-011	Date Collected:	02.17.20 13.20		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 16.30	Basis:	Wet Weight
Seq Number:	3116794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**321**	10.0	mg/kg	02.17.20 19.40		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DTH			% Moisture:	
Analyst:	DTH	Date Prep:	02.17.20 17.00	Basis:	Wet Weight
Seq Number:	3116808				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.17.20 19.01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.17.20 19.01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.17.20 19.01	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.17.20 19.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	02.17.20 19.01	
o-Terphenyl	84-15-1	101	%	70-135	02.17.20 19.01	

Certificate of Analytical Results 652644

TRC Solutions, Inc, Midland, TX

RoadRunner

Sample Id:	**NSW01**	Matrix:	Soil	Date Received:	02.17.20 15.10
Lab Sample Id:	652644-011	Date Collected:	02.17.20 13.20		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 17.00	Basis:	Wet Weight
Seq Number:	3116798				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.17.20 19.57	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.17.20 19.57	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.17.20 19.57	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.17.20 19.57	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.17.20 19.57	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.17.20 19.57	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.17.20 19.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	93	%	70-130	02.17.20 19.57	
1,4-Difluorobenzene	540-36-3	107	%	70-130	02.17.20 19.57	

Certificate of Analytical Results 652644

TRC Solutions, Inc, Midland, TX

RoadRunner

Sample Id: **ESW-02** Matrix: Soil Date Received:02.17.20 15.10

Lab Sample Id: 652644-012 Date Collected: 02.17.20 13.30

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB % Moisture:

Analyst: MAB Date Prep: 02.17.20 16.30 Basis: Wet Weight

Seq Number: 3116794

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**242**	10.0	mg/kg	02.17.20 20.02		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DTH % Moisture:

Analyst: DTH Date Prep: 02.17.20 17.00 Basis: Wet Weight

Seq Number: 3116808

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.17.20 19.01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.17.20 19.01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.17.20 19.01	U	1
Total TPH	PHC635	<50	50	mg/kg	02.17.20 19.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	02.17.20 19.01	
o-Terphenyl	84-15-1	105	%	70-135	02.17.20 19.01	

Certificate of Analytical Results 652644

TRC Solutions, Inc, Midland, TX

RoadRunner

Sample Id:	**ESW-02**	Matrix:	Soil	Date Received:	02.17.20 15.10
Lab Sample Id:	652644-012	Date Collected:	02.17.20 13.30		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 17.00	Basis:	Wet Weight
Seq Number:	3116798				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.17.20 20.17	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.17.20 20.17	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.17.20 20.17	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.17.20 20.17	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.17.20 20.17	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.17.20 20.17	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.17.20 20.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	70-130	02.17.20 20.17	
1,4-Difluorobenzene	540-36-3	109	%	70-130	02.17.20 20.17	

Certificate of Analytical Results 652644

TRC Solutions, Inc, Midland, TX

RoadRunner

Sample Id:	**FL-15@2'**	Matrix:	Soil	Date Received:	02.17.20 15.10
Lab Sample Id:	652644-013	Date Collected:	02.17.20 13.45	Sample Depth:	2 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB			% Moisture:	
Analyst:	MAB	Date Prep:	02.17.20 16.30	Basis:	Wet Weight
Seq Number:	3116794				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**91.7**	9.94	mg/kg	02.17.20 20.10		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 652644

TRC Solutions, Inc

RoadRunner

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116794 — Matrix: Solid — Date Prep: 02.17.20
MB Sample Id: 7696841-1-BLK — LCS Sample Id: 7696841-1-BKS — LCSD Sample Id: 7696841-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	255	102	255	102	90-110	0	20	mg/kg	02.17.20 17:42	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116794 — Matrix: Soil — Date Prep: 02.17.20
Parent Sample Id: 652644-001 — MS Sample Id: 652644-001 S — MSD Sample Id: 652644-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	6.90	200	213	103	212	103	90-110	0	20	mg/kg	02.17.20 18:04	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3116794 — Matrix: Soil — Date Prep: 02.17.20
Parent Sample Id: 652644-011 — MS Sample Id: 652644-011 S — MSD Sample Id: 652644-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	321	200	529	104	535	107	90-110	1	20	mg/kg	02.17.20 19:48	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3116808 — Matrix: Solid — Date Prep: 02.17.20
MB Sample Id: 7696871-1-BLK — LCS Sample Id: 7696871-1-BKS — LCSD Sample Id: 7696871-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	936	94	741	74	70-135	23	35	mg/kg	02.17.20 17:40	
Diesel Range Organics (DRO)	<50.0	1000	1010	101	803	80	70-135	23	35	mg/kg	02.17.20 17:40	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	71		117		101		70-135	%	02.17.20 17:40
o-Terphenyl	77		113		93		70-135	%	02.17.20 17:40

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3116808 — Matrix: Solid — Date Prep: 02.17.20
MB Sample Id: 7696871-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	02.17.20 17:40	

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 652644

TRC Solutions, Inc

RoadRunner

Analytical Method: TPH by SW8015 Mod | Prep Method: SW8015P
Seq Number: 3116808 | Matrix: Soil | Date Prep: 02.17.20
Parent Sample Id: 652644-002 | MS Sample Id: 652644-002 S | MSD Sample Id: 652644-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.8	996	832	84	931	93	70-135	11	35	mg/kg	02.17.20 18:21	
Diesel Range Organics (DRO)	<49.8	996	883	89	992	99	70-135	12	35	mg/kg	02.17.20 18:21	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	113		114		70-135	%	02.17.20 18:21
o-Terphenyl	102		112		70-135	%	02.17.20 18:21

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3116798 | Matrix: Solid | Date Prep: 02.17.20
MB Sample Id: 7696814-1-BLK | LCS Sample Id: 7696814-1-BKS | LCSD Sample Id: 7696814-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.114	114	0.109	109	70-130	4	35	mg/kg	02.17.20 15:52	
Toluene	<0.00200	0.100	0.104	104	0.101	101	70-130	3	35	mg/kg	02.17.20 15:52	
Ethylbenzene	<0.00200	0.100	0.0990	99	0.0963	96	71-129	3	35	mg/kg	02.17.20 15:52	
m,p-Xylenes	<0.00400	0.200	0.193	97	0.188	94	70-135	3	35	mg/kg	02.17.20 15:52	
o-Xylene	<0.00200	0.100	0.0977	98	0.0952	95	71-133	3	35	mg/kg	02.17.20 15:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		108		107		70-130	%	02.17.20 15:52
4-Bromofluorobenzene	96		89		90		70-130	%	02.17.20 15:52

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3116798 | Matrix: Soil | Date Prep: 02.17.20
Parent Sample Id: 652515-001 | MS Sample Id: 652515-001 S | MSD Sample Id: 652515-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.129	129	0.121	121	70-130	6	35	mg/kg	02.17.20 16:33	
Toluene	<0.00200	0.0998	0.119	119	0.121	121	70-130	2	35	mg/kg	02.17.20 16:33	
Ethylbenzene	<0.00200	0.0998	0.115	115	0.115	115	71-129	0	35	mg/kg	02.17.20 16:33	
m,p-Xylenes	<0.00399	0.200	0.225	113	0.222	111	70-135	1	35	mg/kg	02.17.20 16:33	
o-Xylene	<0.00200	0.0998	0.113	113	0.111	111	71-133	2	35	mg/kg	02.17.20 16:33	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		108		70-130	%	02.17.20 16:33
4-Bromofluorobenzene	94		92		70-130	%	02.17.20 16:33

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

Please Copy RSebring@TRCcompanies w/ Result

XENCO LABORATORIES

Chain of Custody

Work Order No: 652644

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

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Project Manager:	Jario Stoffel
Company Name:	TRC-Midland
Address:	
City, State ZIP:	
Phone:	

Bill to: (if different)	COG - Ike Tavarez
Company Name:	Concho
Address:	
City, State ZIP:	
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:	Roadrunner	Turn Around	
Project Number:		Routine ☐	
Project Location	Carlsbad NM	Rush: 24 HR	
Sampler's Name:	Russell Sebring	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT

Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	4.0	Thermometer ID	tNM007
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	13

ANALYSIS REQUEST

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Chlorides	TPH	BTEX	Sample Comments
	FL-02 @ 9"	S	17Feb2020	1100	9"	1	✓			
	FL-04 @ 1'	↓	↓	1110	1'	1	✓	✓	✓	
	FL-06 @ 1'	↓	↓	1120	1'	1	✓			
	FL-08 @ 1.5'	↓	↓	1140	1.5'	1	✓			
	FL-07 @ 1'	↓	↓	1130	1'	1	✓	✓	✓	
	FL-10 @ 1.25'	↓	↓	1150	1.25'	1	✓			
	FL-20 @ 4.5'	↓	↓	1245	4.5'	1	✓	✓	✓	
	FL-11 @ 2.0'	↓	↓	1220	2.0'	1	✓	~~✓~~	~~✓~~	
	FL-21 @ 4.5'	↓	↓	1255	4.5'	1	✓			
	FL-22 @ 4'	↓	↓	1310	4'	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

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 [signature]	[signature]	2/17/20 15:10	2		
3			4		
5			6		

Revised Date 022619 Rev. 2019.1

1.002

Chain of Custody

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Craslbad, NM (432) 704-5440
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Work Order No: 652644

Page 2 of 2

Project Manager:	JARED STOFFEL	Bill to: (if different)	COG: IKE TAVAREZ
Company Name:	TRC - MIDLAND	Company Name:	CONOCO
Address:		Address:	
City, State ZIP:		City, State ZIP:	
Phone:		Email:	JSTOFFEL@TRCSOLUTIONS.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:	ROADRUNNER	Turn Around	
Project Number:		Routine ☐	
Project Location	CARLSBAD NM	Rush: 24	
Sampler's Name:	RUSSELL SEBRING	Due Date:	
PO #:		Quote #:	

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

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Pres. Code	Chlorides	TPH	BTEX
	NSW-01	S	1/7/20	1320		1		✓	✓	✓
	ESW-01			1330		1		✓	✓	✓
	FS-15 @ 2'			1345	2'	1		✓		

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

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

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		1/17/20 1510	2		
			4		
			6		

Revised Date 022619 Rev. 2019.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: TRC Solutions, Inc

Date/ Time Received: 02.17.2020 03.10.00 PM

Work Order #: 652644

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

Temperature Measuring device used : T NM 007

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

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

Analyst: PH Device/Lot#:

Checklist completed by: Martha Castro Date: 02.17.2020

Checklist reviewed by: Jessica Kramer Date: 02.18.2020