

SITE INFORMATION

Report Type: Closure - NRM2019952683

General Site Information:

Site:	Tyrell Fee #1					
Company:	COG Operating LLC					
Section, Township and Range	Unit P	Sec. 11	T 24S	R 33E		
County:	Lea Co, New Mexico					
GPS:	32.225800			-103.538600		

Release Data:

Date Released:	7/4/2020
Type Release:	Flow line Release
Source of Contamination:	Produced Water
Fluid Released:	117 bbls PW
Fluids Recovered:	40 bbls PW

Official Communication:

Name:	Ike Tavaréz		Clair Gonzales
Company:	COG Operating, LLC		Tetra Tech
Address:	One Concho Center		901 West Wall Street
	600 W. Illinois Ave.		Suite 100
City:	Midland Texas, 79701		Midland, Texas
Phone number:	(432) 686-3023		(432) 687-8110
Fax:	(432) 684-7137		
Email:	itavarez@concho.com		Clair.Gonzales@tetrattech.com

Site Characterization

Depth to Groundwater:	60'
Karst Potential:	Low

Recommended Remedial Action Levels (RRALs)

Benzene	Total BTEX	TPH (GRO+DRO)	TPH (GRO+DRO+MRO)	Chlorides
10 mg/kg	50 mg/kg	1,000 mg/kg	2,500 mg/kg	10,000 mg/kg

**TETRA TECH**

January 26, 2021

Oil Conservation Division, District 1
1625 North French Drive
Hobbs, New Mexico 88240

Re: Closure Report for the COG Operating, LLC, Tyrell Fee #1, Unit P, Section 11, Township 24 South, Range 33 East, Lea County, New Mexico. NRM2019952683

To Whom It May Concern,

Tetra Tech, Inc. (Tetra Tech) was contacted by COG Operating, LLC (COG) to assess and remediate a release that occurred at the Tyrell Fee #1, Unit P, Section 11, Township 24 South, Range 33 East, Lea County, New Mexico (Site). The spill site coordinates are 32.22580°, -103.53860°. The site location is shown in Figures 1 and 2.

Background

According to the State of New Mexico, C-141 Initial Report, the release was discovered on July 4, 2020, and released approximately 117 barrels of produced water due to a hole in the flow line. A vacuum truck was dispatched to remove all freestanding fluids, recovering around 40 barrels of produced water. The release occurred in the pasture, impacting an area measuring approximately 500' x 53' and migrated south into the pasture, impacting an area measuring approximately 110' x 80'. The initial C-141 form is included in Appendix A.

Site Characterization

A site characterization was performed for the site, and no watercourses, lakebeds, sinkholes, playa lakes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, springs, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the specified distances. The site is in a low karst potential area.

Two wells are near the site and listed in the New Mexico Office of the State Engineers website. The nearest well is listed in Section 10, Township 24 South, Range 33 East, approximately 1.25 miles northwest of the site, and has a reported depth to groundwater of 22 feet below ground surface. However, it was completed in 1920. The other well is listed in Section 01, Township 24 South, Range 33 East, approximately 2.26 miles northeast of the site, and has a reported depth to groundwater of 81 feet below ground surface. The well was installed in February 2017. In addition, the surface elevation of this site is 3,628,' and the surface elevation of the 20' well is approximately 3,608. Based on the relative elevation the depth to groundwater is estimated to be approximately 60' below the surface. The groundwater data is shown in Appendix B.

Tetra Tech

901 W. Wall Street, Suite 100, Midland, TX 79701

Tel 432.682.4559 www.tetrattech.com



Depth to Water Determination

On July 30, 2020, Scarborough Drilling, Inc was onsite to drill a groundwater determination bore to 55' below ground surface and within a ½ mile radius of the location. The borehole was left open for 72 hours and checked for the presence of groundwater. No water was detected at 55' below the surface. The coordinates are 32.225714 -103.540550. The drillers log is shown in Appendix B

Regulatory

A risk-based evaluation was performed for the Site in accordance with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills, and Releases, updated August 14, 2018. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the site characterization, the proposed RRAL for TPH is 1,000 mg/kg (GRO + DRO) and 2,500 mg/kg (GRO + DRO+ MRO). Additionally, based on the site characterization, the proposed RRAL for chlorides is 10,000 mg/kg.

Remediation Activities

Tetra Tech personnel were onsite from January 5, 2021, and January 14, 2020, to supervise the remediation activities. The areas were excavated as shown on Figure 3. A total of one hundred seventeen (117) bottom hole composite samples (Bottomhole-1 through Bottomhole-117) and fifty-three (53) composite sidewall samples (Sidewall-1 through Sidewall-53) were collected every 200 square feet to ensure proper removal of the impacted soils.

Selected samples were submitted to the laboratory to be analyzed for TPH method 8015 extended, BTEX method 8021B, and Chloride by method EPA method 300.0. The sampling results are summarized in Table 1. The excavation depths and sample locations are shown in Figure 3. The excavation areas and depths are listed below:

- The areas of BH-1 through BH-22 were excavated to depth of 0.5'.
- The area of BH-23 through BH-30 was excavated to depth of 2-2.5' below surface.
- The area of BH-31 through BH-64 was excavated to depth of 4-4.5' below surface.
- The area of BH-65 through BH-75 was excavated to depth of 3-3.5' below surface.
- The area of BH-76 through BH-111 was excavated to depth of 4-4.5' below surface.
- The lease road area of AH-112 through AH-117 was excavated to a depth of 1.5' below surface.

**TETRA TECH**

Referring to Table 1, none of the confirmation samples showed benzene, total BTEX, or TPH chloride concentrations above the RRALs. Additionally, none of the bottom hole samples collected showed chloride concentrations above the RRALs.

Approximately 3,440 cubic yards of material were excavated and transported offsite for proper disposal. The area was then backfilled with clean material to surface grade.

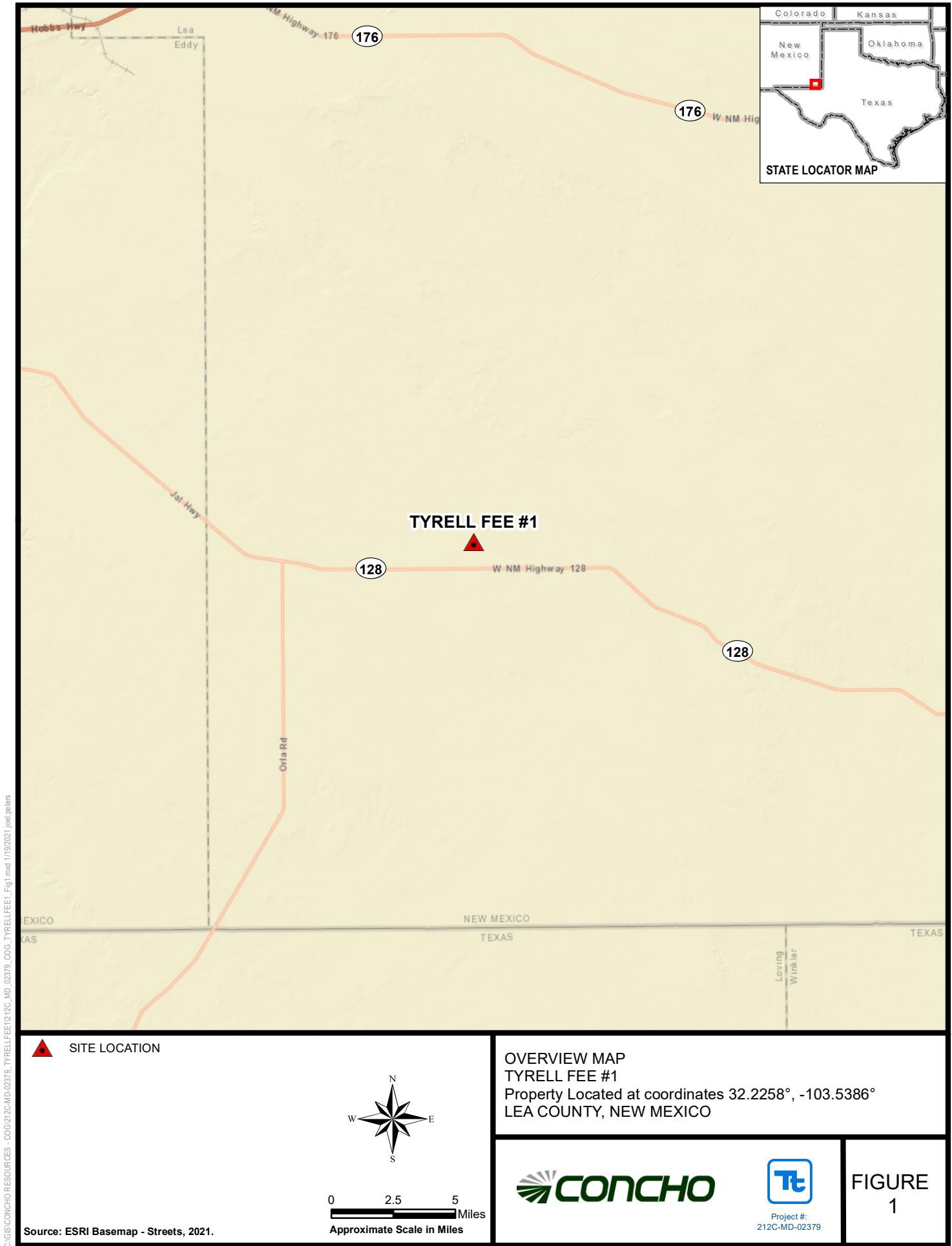
Conclusion

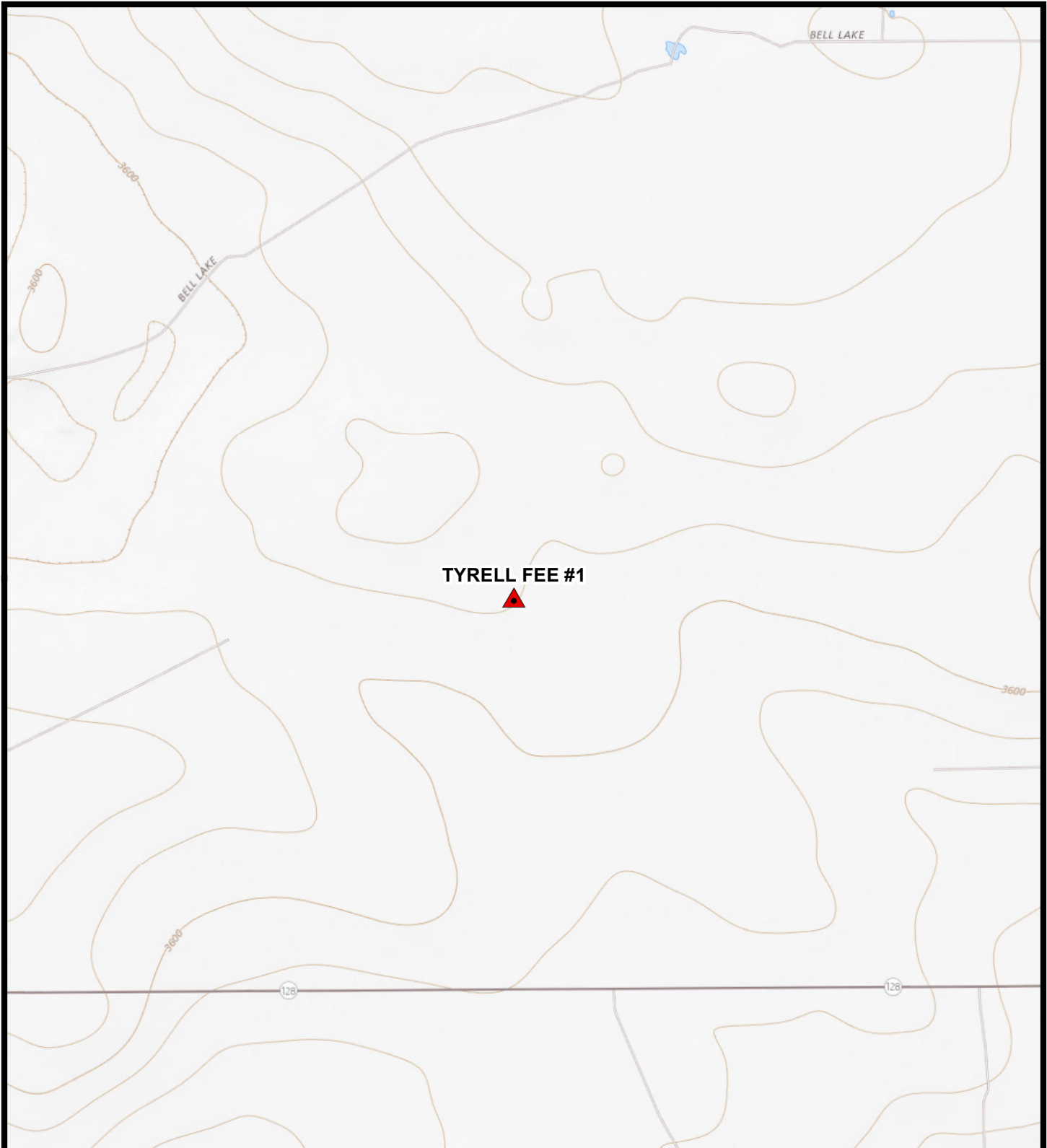
Based on the laboratory results and remediation activities performed, COG requests closure of this spill issue. The final C-141 is enclosed in Appendix A. If you have any questions or comments concerning the assessment or remediation activities for this site, please call at (432) 682-4559.

Respectfully submitted,
TETRA TECH

Clair Gonzales, P.G.,
Project Manager

Figures





C:\GIS\CONCHO\RESOURCES - COG\212C-MD-02379\TYRELLFEE#1.Fig2.mxd 1/19/2021 jeal.galvez

 SITE LOCATION



0 1,000 2,000
Feet
Approximate Scale in Feet

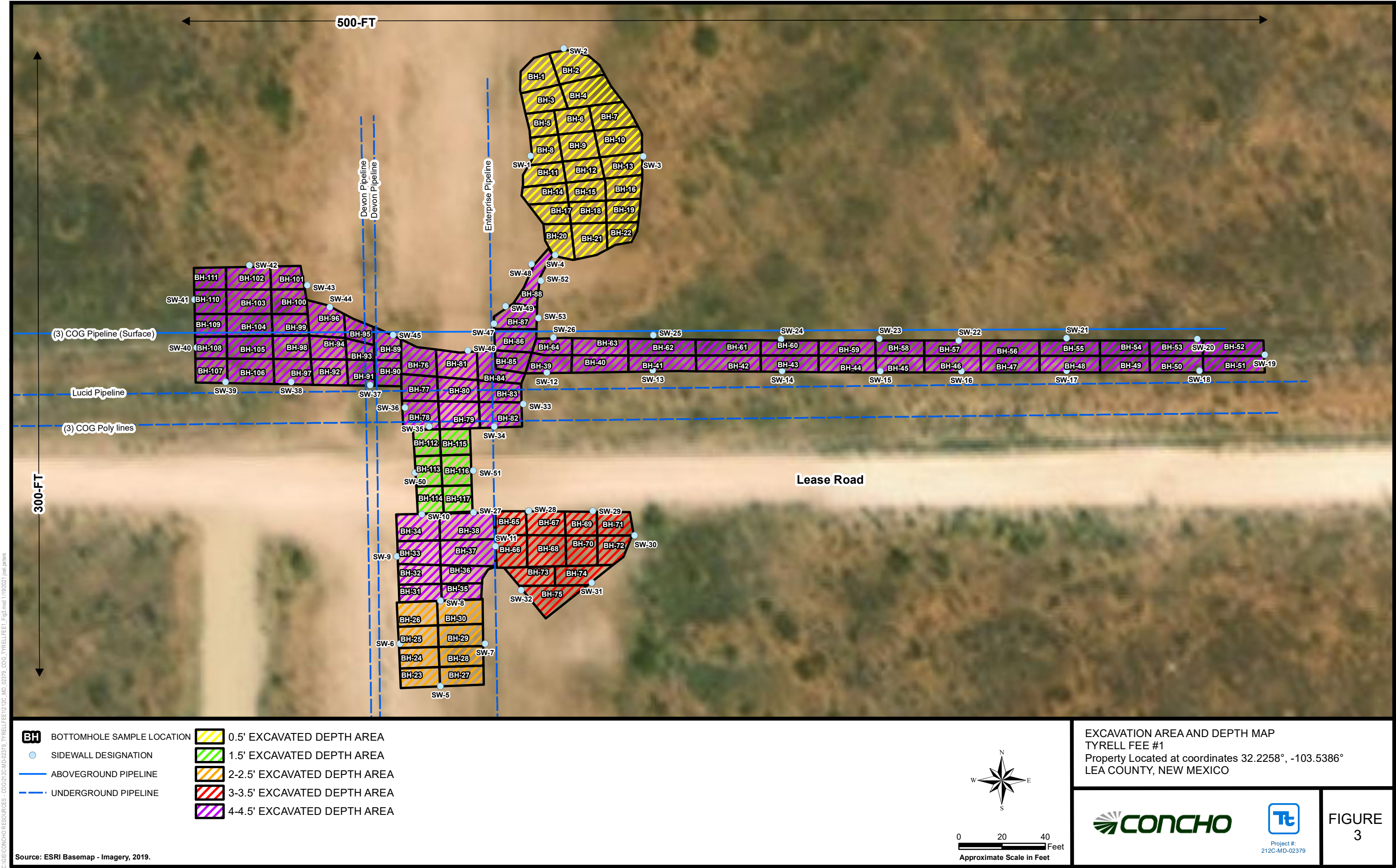
TOPOGRAPHIC MAP
TYRELL FEE #1
Property Located at coordinates 32.2258°, -103.5386°
LEA COUNTY, NEW MEXICO



Project #:
212C-MD-02379

FIGURE
2

Source: USGS, The National Map, Topo Base, 2021.



Tables

Table 1
COG Operating, LLC
Tyrell Fee #1
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total						
Bottom Hole-1	1/14/2021	0.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	12.2
Bottom Hole-2	1/14/2021	0.5	X		<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	13.4
Bottom Hole-3	1/14/2021	0.5	X		<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	7.58
Bottom Hole-4	1/14/2021	0.5	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	6.17
Bottom Hole-5	1/14/2021	0.5	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	7.38
Bottom Hole-6	1/14/2021	0.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	5.66
Bottom Hole-7	1/14/2021	0.5	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	6.08
Bottom Hole-8	1/14/2021	0.5	X		<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	48.6
Bottom Hole-9	1/14/2021	0.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	19.0
Bottom Hole-10	1/14/2021	0.5	X		<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	18.2
Bottom Hole-11	1/14/2021	0.5	X		<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	77.6
Bottom Hole-12	1/14/2021	0.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	123
Bottom Hole-13	1/14/2021	0.5	X		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	0.00614	0.00614	15.3
Bottom Hole-14	1/14/2021	0.5	X		<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	8.56
Bottom Hole-15	1/14/2021	0.5	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	35.4
Bottom Hole-16	1/14/2021	0.5	X		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	18.1
Bottom Hole-17	1/14/2021	0.5	X		<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	17.9
Bottom Hole-18	1/14/2021	0.5	X		<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	0.00502	0.00670	0.0117	30.5
Bottom Hole-19	1/14/2021	0.5	X		<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	11.7
Bottom Hole-20	1/14/2021	0.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	102
Bottom Hole-21	1/14/2021	0.5	X		<50.0	<50.0	<50.0	<50.0	0.00449	<0.00201	<0.00201	<0.00201	0.00449	12.9
Bottom Hole-22	1/14/2021	0.5	X		<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	45.5
Bottom Hole-23	1/14/2021	2-2.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	15.7
Bottom Hole-24	1/14/2021	2-2.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	13.2
Bottom Hole-25	1/14/2021	2-2.5	X		<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	12.2
Bottom Hole-26	1/14/2021	2-2.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	19.3
Bottom Hole-27	1/14/2021	2-2.5	X		<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	14.0
Bottom Hole-28	1/14/2021	2-2.5	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	11.2

Table 1
COG Operating, LLC
Tyrell Fee #1
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total						
Bottom Hole-29	1/14/2021	2-2.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	19.5
Bottom Hole-30	1/14/2021	2-2.5	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	11.1
Bottom Hole-31	1/14/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	1,430
Bottom Hole-32	1/14/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	1,630
Bottom Hole-33	1/14/2021	4-4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	656
Bottom Hole-34	1/14/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	1,160
Bottom Hole-35	1/14/2021	4-4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	947
Bottom Hole-36	1/14/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	1,030
Bottom Hole-37	1/14/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	862
Bottom Hole-38	1/14/2021	4-4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	1,480
Bottom Hole-39	1/11/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	997
Bottom Hole-40	1/11/2021	4-4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	1,130
Bottom Hole-41	1/11/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	876
Bottom Hole-42	1/11/2021	4-4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	1,010
Bottom Hole-43	1/11/2021	4-4.5	X		<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	808
Bottom Hole-44	1/11/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	839
Bottom Hole-45	1/11/2021	4-4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	1,480
Bottom Hole-46	1/11/2021	4-4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	1,210
Bottom Hole-47	1/11/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	536
Bottom Hole-48	1/11/2021	4-4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	745
Bottom Hole-49	1/11/2021	4-4.5	X		<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	778
Bottom Hole-50	1/11/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	760
Bottom Hole-51	1/11/2021	4-4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	499
Bottom Hole-52	1/11/2021	4-4.5	X		<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	528
Bottom Hole-53	1/11/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	58.9
Bottom Hole-54	1/11/2021	4-4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	62.5
Bottom Hole-55	1/11/2021	4-4.5	X		<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	498

Table 1
COG Operating, LLC
Tyrell Fee #1
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total						
Bottom Hole-56	1/11/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	481
Bottom Hole-57	1/11/2021	4-4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	528
Bottom Hole-58	1/11/2021	4-4.5	X		<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	525
Bottom Hole-59	1/11/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	591
Bottom Hole-60	1/11/2021	4-4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	603
Bottom Hole-61	1/11/2021	4-4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	544
Bottom Hole-62	1/11/2021	4-4.5	X		<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	559
Bottom Hole-63	1/11/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	529
Bottom Hole-64	1/11/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	430
Bottom Hole-65	1/14/2021	3-3.5	X		<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	11.2
Bottom Hole-66	1/14/2021	3-3.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	11.5
Bottom Hole-67	1/14/2021	3-3.5	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	17.7
Bottom Hole-68	1/14/2021	3-3.5	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	10.5
Bottom Hole-69	1/14/2021	3-3.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<5.02
Bottom Hole-70	1/14/2021	3-3.5	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<4.96
Bottom Hole-71	1/14/2021	3-3.5	X		<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	6.32
Bottom Hole-72	1/14/2021	3-3.5	X		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	6.36
Bottom Hole-73	1/14/2021	3-3.5	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<5.04
Bottom Hole-74	1/14/2021	3-3.5	X		<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	6.08
Bottom Hole-75	1/14/2021	3-3.5	X		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	7.36
Bottom Hole-76	1/14/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	2,080
Bottom Hole-77	1/14/2021	4-4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	1,200
Bottom Hole-78	1/14/2021	4-4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	1,640
Bottom Hole-79	1/14/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	1,410
Bottom Hole-80	1/14/2021	4-4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	2,150
Bottom Hole-81	1/14/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	2,640
Bottom Hole-82	1/14/2021	4-4.5	X		<49.9	<49.9	<49.9	<49.9	0.00238	<0.00199	<0.00199	<0.00199	0.00238	2,560
Bottom Hole-83	1/14/2021	4-4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	1,620
Bottom Hole-84	1/14/2021	4-4.5	X		<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	2,440
Bottom Hole-85	1/14/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	2,070
Bottom Hole-86	1/14/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	2,780
Bottom Hole-87	1/14/2021	4-4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	2,360

Table 1
COG Operating, LLC
Tyrell Fee #1
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total						
Bottom Hole-88	1/14/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	4,310
Bottom Hole-89	1/14/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	2,600
Bottom Hole-90	1/14/2021	4-4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	1,970
Bottom Hole-91	1/14/2021	4-4.5	X		<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	2,370
Bottom Hole-92	1/14/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	3,310
Bottom Hole-93	1/14/2021	4-4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	1,680
Bottom Hole-94	1/14/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	1,250
Bottom Hole-95	1/14/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	2,090
Bottom Hole-96	1/14/2021	4-4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	1,520
Bottom Hole-97	1/14/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	2,480
Bottom Hole-98	1/14/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	2,980
Bottom Hole-99	1/14/2021	4-4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	2,920
Bottom Hole-100	1/14/2021	4-4.5	X		<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	1,780
Bottom Hole-101	1/14/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	2,710
Bottom Hole-102	1/14/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	2,020
Bottom Hole-103	1/14/2021	4-4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	1,930
Bottom Hole-104	1/14/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	2,360
Bottom Hole-105	1/14/2021	4-4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	4,430
Bottom Hole-106	1/14/2021	4-4.5	X		<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	2,910
Bottom Hole-107	1/14/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	2,410
Bottom Hole-108	1/14/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	1,990
Bottom Hole-109	1/14/2021	4-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	1,490
Bottom Hole-110	1/14/2021	4-4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	1,900
Bottom Hole-111	1/14/2021	4-4.5	X		<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	1,130
Bottom Hole-112	1/14/2021	1.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	17.9

Table 1
COG Operating, LLC
Tyrell Fee #1
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total						
Bottom Hole-113	1/14/2021	1.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	16.6
Bottom Hole-114	1/14/2021	1.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	15.0
Bottom Hole-115	1/14/2021	1.5	X		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	12.0
Bottom Hole-116	1/14/2021	1.5	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	12.9
Bottom Hole-117	1/14/2021	1.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	12.8
Sidewall-1	1/14/2021	-	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<4.97
Sidewall-2	1/14/2021	-	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<5.04
Sidewall-3	1/14/2021	-	X		<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	7.47
Sidewall-4	1/14/2021	-	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	6.14
Sidewall-5	1/14/2021	-	X		<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	8.05
Sidewall-6	1/14/2021	-	X		<49.9	<49.9	<49.9	<49.9	<0.00200	0.00200	<0.00200	<0.00200	0.00200	<5.04
Sidewall-7	1/14/2021	-	X		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<4.99
Sidewall-8	1/14/2021	-	X		<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	6.18
Sidewall-9	1/14/2021	-	X		<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<4.97
Sidewall-10	1/14/2021	-	X		<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<4.97
Sidewall-11	1/14/2021	-	X		<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	5.40
Sidewall-12	1/11/2021	-	X		<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	40.7
Sidewall-13	1/11/2021	-	X		<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	50.0
Sidewall-14	1/11/2021	-	X		<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	55.3
Sidewall-15	1/11/2021	-	X		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	59.5
Sidewall-16	1/11/2021	-	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	56.0
Sidewall-17	1/11/2021	-	X		<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	50.5
Sidewall-18	1/11/2021	-	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	40.3
Sidewall-19	1/11/2021	-	X		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	56.7
Sidewall-20	1/11/2021	-	X		<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	49.4
Sidewall-21	1/11/2021	-	X		<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	50.4
Sidewall-22	1/11/2021	-	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	57.8
Sidewall-23	1/11/2021	-	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	51.9
Sidewall-24	1/11/2021	-	X		<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	36.8
Sidewall-25	1/11/2021	-	X		<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	44.2
Sidewall-26	1/11/2021	-	X		<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	42.6
Sidewall-27	1/14/2021	-	X		<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	6.12

Table 1
COG Operating, LLC
Tyrell Fee #1
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total						
Sidewall-28	1/14/2021	-	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	10.6
Sidewall-29	1/14/2021	-	X		<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<5.04
Sidewall-30	1/14/2021	-	X		<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	5.15
Sidewall-31	1/14/2021	-	X		<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	7.81
Sidewall-32	1/14/2021	-	X		<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<5.05
Sidewall-33	1/14/2021	-	X		<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<5.05
Sidewall-34	1/14/2021	-	X		<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	5.72
Sidewall-35	1/14/2021	-	X		<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<4.98
Sidewall-36	1/14/2021	-	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	9.95
Sidewall-37	1/14/2021	-	X		<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	15.0
Sidewall-38	1/14/2021	-	X		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	19.1
Sidewall-39	1/14/2021	-	X		<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	12.9
Sidewall-40	1/14/2021	-	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	16.6
Sidewall-41	1/14/2021	-	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	11.7
Sidewall-42	1/14/2021	-	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	12.5
Sidewall-43	1/14/2021	-	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	11.5
Sidewall-44	1/14/2021	-	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	10.5
Sidewall-45	1/14/2021	-	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	15.1
Sidewall-46	1/14/2021	-	X		<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	10.5
Sidewall-47	1/14/2021	-	X		<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	16.6
Sidewall-48	1/14/2021	-	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	12.8
Sidewall-49	1/14/2021	-	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	15.4
Sidewall-50	1/14/2021	-	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	11.6
Sidewall-51	1/14/2021	-	X		<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	11.4
Sidewall-52	1/14/2021	-	X		<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	11.1
Sidewall-53	1/14/2021	-	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	14.9

(-) Not Analyzed

Photos

COG Operating LLC
Tyrell Fee #1
Lea County, New Mexico



TETRA TECH



View West, of impacted area



View North, of impacted area

COG Operating LLC
Tyrell Fee #1
Lea County, New Mexico



TETRA TECH



View Southeast, of impacted area



View East, of impacted area

COG Operating LLC
Tyrell Fee #1
Lea County, New Mexico



TETRA TECH



View East, of impacted area



View South, of impacted area

COG Operating LLC
Tyrell Fee #1
Lea County, New Mexico



View North, areas of Bottom Holes (1-22)

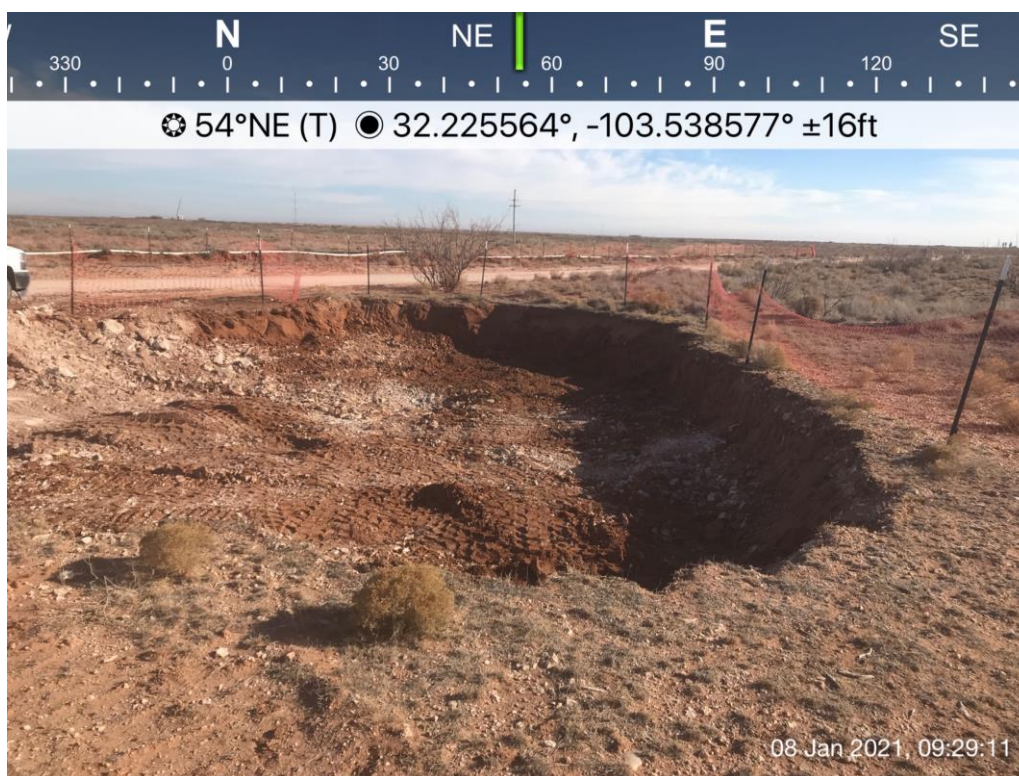


Site View Southwest, areas of Bottom Holes (23-28)

COG Operating LLC
Tyrell Fee #1
Lea County, New Mexico



View East, area of Bottom Holes (39-64)



View Northeast, area of Bottom Holes (65-75)

COG Operating LLC
Tyrell Fee #1
Lea County, New Mexico



View East, area of Bottom Holes (76-88)



View West, area of Bottom Holes (89-111)

Appendix A

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	NRM2019952683
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

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

Location of Release Source

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

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

Unit Letter	Section	Township	Range	County

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

Nature and Volume of Release

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

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

Incident ID	NRM2019952683
District RP	
Facility ID	
Application ID	

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

Initial Response

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

☐ The source of the release has been stopped.	
☐ The impacted area has been secured to protect human health and the environment.	
☐ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
☐ All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: _____	Title: _____
Signature: <u></u>	Date: _____
email: _____	Telephone: _____
<u>OCD Only</u>	
Received by: <u>Ramona Marcus</u>	Date: <u>7/17/2020</u>

NRM2019952683

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

Location of spill: COG -Tyrell Fee 1H

Date of Spill: 4-Jun-2020

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: ☒

Input Data:

If spill volumes from measurement, i.e. metering, tank volumes, etc. are known enter the volumes here: OIL: 0.0 BBL WATER: 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							Standing Liquid Calculations								
Total Surface Area		width	length	wet soil		oil (%)	Standing Liquid Area		width	length	liquid depth	oil (%)			
	Rectangle Area #1	360 ft	10 ft	X	2.50 in	0%		Rectangle Area #1	0 ft	X	0 ft	X	0 in	0%	
	Rectangle Area #2	100 ft	X	15 0	X	2.50 in	0%		Rectangle Area #2	0 ft	X	0 ft	X	0 in	0%
	Rectangle Area #3	45 ft	X	50 ft	X	2.50 in	0%		Rectangle Area #3	0 ft	X	0 ft	X	0 in	0%
	Rectangle Area #4	150 ft	X	50 ft	X	3 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 #5	0 ft	X	0 ft	X	0 in	0%
	Rectangle Area #6	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 #7	0 ft	X	0 ft	X	0 in	0%
	Rectangle Area #8	0 ft	X	0 ft	X	2 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: 14,850 sq. ft.			3,094 cu. ft.	cu. ft.	Total Free Liquid Volume: sq. ft.			cu. ft.	cu. ft.
<u>Estimated Volumes Spilled</u>				<u>Estimated Production Volumes Lost</u>					
		H2O	OIL			H2O	OIL		
Liquid in Soil:	77.1	BBL	0.0	BBL	Estimated Production Spilled:	0.0	BBL	0.0	BBL
Free Liquid:	0.0	BBL	0.0	BBL					
Totals:	77.1	BBL	0.0	BBL	<u>Estimated Surface Damage</u>				
					Surface Area:	14,850	sq. ft.		
Total Liquid Spill Liquid:	77.1	BBL	0.00	BBL	Surface Area:	.3409	acre		
<u>Recovered Volumes</u>				<u>Estimated Weights, and Volumes</u>					
Estimated oil recovered:	BBL	check - okay			Saturated Soil =	346,500	lbs	3,094	cu. ft.
Estimated water recovered:	BBL	check - okay			Total Liquid =	77	BBL	3,240	gallon
								115	cu. yds.
								26,955	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
 HC gas release reportable? NO
 H2S release reportable? NO
 Texas
 NO
 NO

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature:  _____ Date: 1/27/2021

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

Printed Name: _____ Title: _____

Signature: *He Tavaraz* Date: 1/27/2021

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

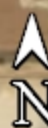
Appendix B

Legend

- 0.50 mile radius
- COG-Tyrell Fee #1
- Groundwater Determination Bore

Groundwater Determination Bore

COG-Tyrell Fee #1



TEST HOLES • WATER WELLS
P.O. Box 305 - Ph. 806-872-3285 or 872-9349
LAMESA, TEXAS 79331
2001 South Hwy. 87

[illegible]

Date 7-30-20 Driller Lee Searles
GIBBS PRINTING CO.-LAMESA, TX

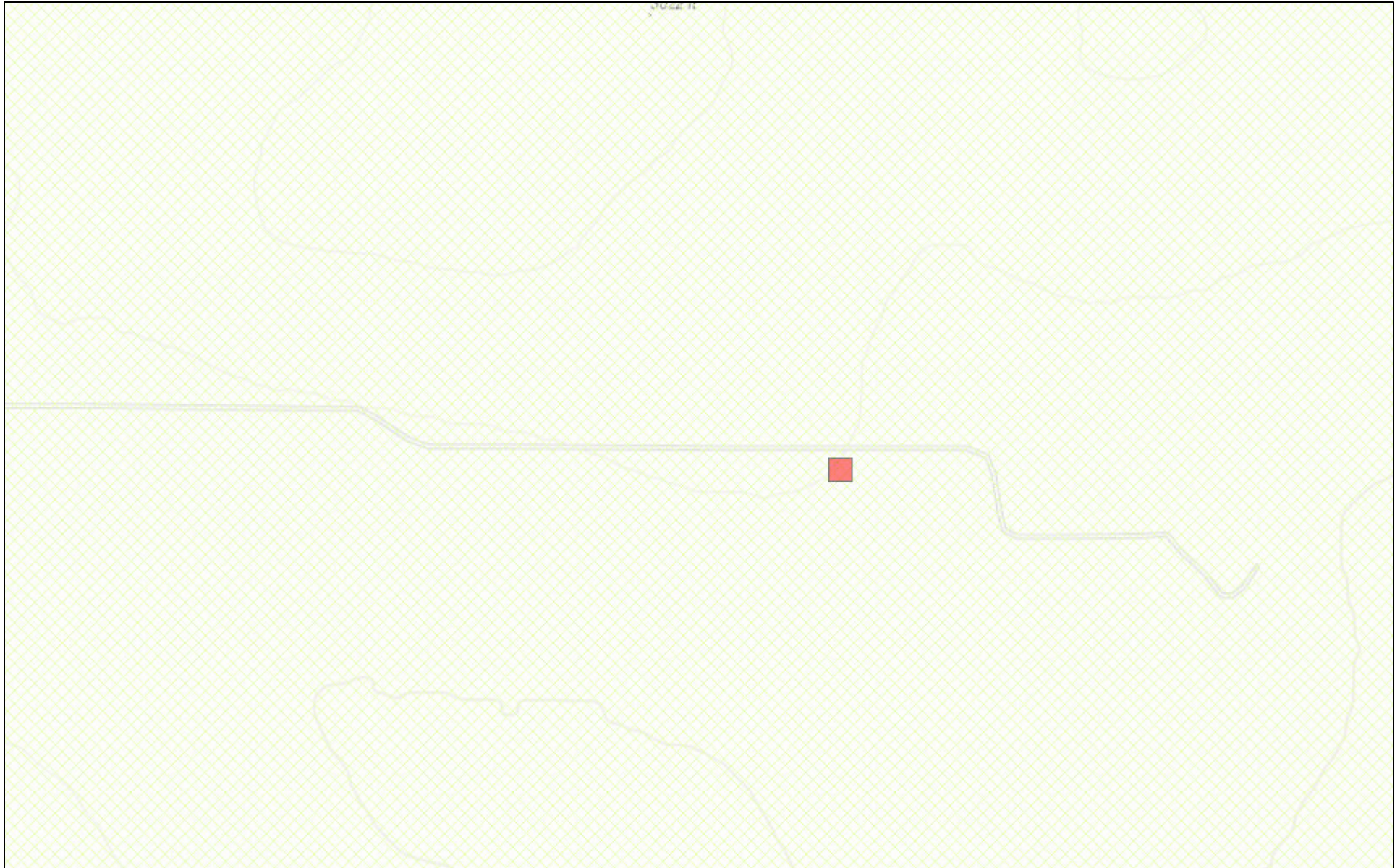


National Water Information System: Mapper

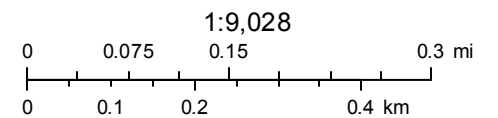


Site Information

New Mexico NFHL Data



January 13, 2021



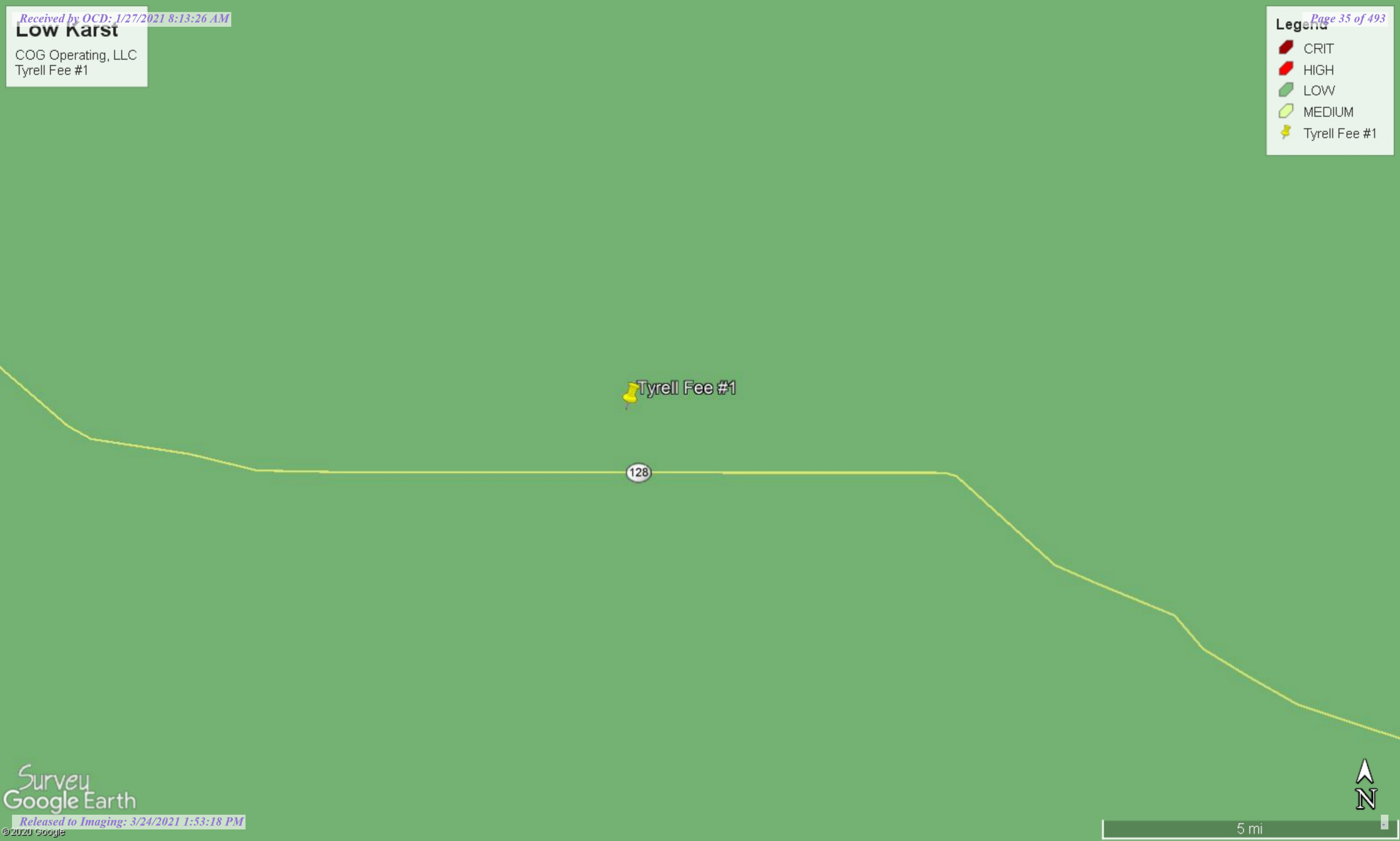
FEMA
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS,

Low Karst

COG Operating, LLC
Tyrell Fee #1

Legend

- CRIT
- HIGH
- LOW
- MEDIUM
- Tyrell Fee #1



128





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-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
C 02308		CUB	LE	1	3	1	10	24S	33E	634953	3567364*	40	20	20
C 02309		CUB	LE	2	2	2	25	24S	33E	639708	3562997	60	30	30
C 02310		CUB	LE	2	4	2	33	24S	33E	634420	3560893	120	70	50
C 02311		CUB	LE	2	3	2	33	24S	33E	634391	3560877	120	70	50
C 02430		CUB	LE	3	3	3	16	24S	33E	633377	3564732*	643	415	228
C 02431		CUB	LE	4	4	4	17	24S	33E	633175	3564728*	525	415	110
C 02432		CUB	LE	4	4	4	17	24S	33E	633175	3564728*	640	415	225
C 02563		CUB	LE	1	4	2	33	24S	33E	634639	3560923*	120		
C 02564		CUB	LE	2	4	2	33	24S	33E	634839	3560923*	120		
C 02890		C	LE	2	4	29	24S	33E	633114	3562012*		500		
C 03565 POD3		CUB	LE	3	4	08	24S	33E	632763	3566546			1533	
C 03591 POD1		CUB	LE	2	1	4	05	24S	33E	632731	3568518			
C 03600 POD1		CUB	LE	2	2	1	26	24S	33E	637275	3563023			
C 03600 POD2		CUB	LE	4	4	1	25	24S	33E	638824	3562329			
C 03600 POD3		CUB	LE	3	4	2	26	24S	33E	637784	3562340			
C 03600 POD4		CUB	LE	3	3	1	26	24S	33E	636617	3562293			
C 03600 POD5		CUB	LE	3	2	4	26	24S	33E	637857	3562020			
C 03600 POD6		CUB	LE	3	1	4	26	24S	33E	637383	3562026			
C 03600 POD7		CUB	LE	3	1	3	26	24S	33E	636726	3561968			
C 03601 POD1		CUB	LE	4	4	2	23	24S	33E	638124	3563937			
C 03601 POD2		CUB	LE	3	2	4	23	24S	33E	637846	3563588			
C 03601 POD3		CUB	LE	1	3	3	24	24S	33E	638142	3563413			
C 03601 POD4		CUB	LE	3	3	3	24	24S	33E	638162	3561375			
C 03601 POD5		CUB	LE	2	4	4	23	24S	33E	637988	3563334			
C 03601 POD6		CUB	LE	1	4	4	23	24S	33E	637834	3563338			
C 03601 POD7		CUB	LE	4	4	4	23	24S	33E	637946	3563170			

*UTM location was derived from PLSS - see Help

(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- Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
C 03602 POD2	CUB	LE	4	4	1	25	24S	33E	638824	3562329				
C 03603 POD1	CUB	LE	3	2	2	35	24S	33E	637805	3561225				
C 03603 POD2	CUB	LE	3	1	2	35	24S	33E	637384	3561167				
C 03603 POD3	CUB	LE	4	1	1	35	24S	33E	636890	3561092				
C 03603 POD4	CUB	LE	3	2	4	35	24S	33E	637789	3560461				
C 03603 POD5	CUB	LE	3	3	2	35	24S	33E	636745	3560767				
C 03603 POD6	CUB	LE	3	1	3	35	24S	33E	636749	3560447				
C 03662 POD1	C	LE	3	1	2	23	24S	33E	637342	3564428		550	110	440
C 03666 POD1	C	LE	2	3	4	13	24S	33E	639132	3565078		650	390	260
C 03679 POD1	C	ED	1	4	2	14	24S	33E	603567	3581547		700	575	125
C 03917 POD1	C	LE	4	1	3	13	24S	33E	638374	3565212		600	420	180
C 04014 POD2	CUB	LE	4	4	2	01	24S	33E	639656	3568917		95	81	14
C 04014 POD3	CUB	LE	2	4	2	01	24S	33E	639497	3569007		95	87	8
C 04014 POD4	CUB	LE	3	4	2	01	24S	33E	639295	3568859		96	86	10
C 04014 POD5	CUB	LE	1	4	2	01	24S	33E	639284	3569086		95	85	10
C 04339 POD1	CUB	LE	1	3	3	23	24S	33E	636525	3563309		47		
C 04339 POD10	CUB	LE	4	1	4	23	24S	33E	637688	3563503		49		
C 04339 POD2	CUB	LE	2	3	3	23	24S	33E	636789	3563315				
C 04339 POD3	CUB	LE	2	4	3	23	24S	33E	637273	3563323		38		
C 04339 POD4	CUB	LE	2	4	3	23	24S	33E	637273	3563323		47		
C 04339 POD5	CUB	LE	2	3	4	23	24S	33E	637580	3563328		54		
C 04339 POD6	CUB	LE	3	1	2	23	24S	33E	637340	3564386		60		
C 04339 POD7	CUB	LE	4	4	2	23	24S	33E	636473	3564011		43		
C 04339 POD8	CUB	LE	1	1	3	23	24S	33E	636519	3563681		30		
C 04339 POD9	CUB	LE	3	4	2	23	24S	33E	637731	3563913		45		

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

Average Depth to Water: **300 feet**

Minimum Depth: **20 feet**

Maximum Depth: **1533 feet**

Record Count: 51

PLSS Search:

Township: 24S

Range: 33E



USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category:
Groundwater

Geographic Area:
New Mexico

GO

Click to hideNews Bulletins

- Introducing The Next Generation of USGS Water Data for the Nation
- Full News

Groundwater levels for New Mexico

Click to hide state-specific text

Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 321348103340401

Minimum number of levels = 1
[Save file of selected sites](#) to local disk for future upload

USGS 321348103340401 24S.33E.10.13123

Lea County, New Mexico
Latitude 32°14'04.9", Longitude 103°34'02.4" NAD83
Land-surface elevation 3,592 feet above NAVD88
The depth of the well is 36 feet below land surface.
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status	
1953-11-27			D	72019	24.60				U		U	A
1973-04-17			D	72019	22.20				U		U	A
1976-01-21			D	72019	20.39				U		U	A
1981-03-20			D	72019	20.02				U		U	A
1986-03-07			D	72019	15.87				U		U	A
1991-05-24			D	72019	21.92				U		U	A
1996-03-13			D	72019	22.09				S		U	A
2015-12-18	15:45 MST		m	00000			O	S	USGS	S	A	

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level date-time accuracy	m	Date is accurate to the Minute
Parameter code	00000	Not determined
Parameter code	72019	Depth to water level, feet below land surface
Status		The reported water-level measurement represents a static level
Status	O	Complete obstruction was encountered in the well (no water level was recorded)
Method of measurement	S	Steel-tape measurement.
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Measuring agency	USGS	U.S. Geological Survey
Source of measurement	S	Measured by personnel of reporting agency.
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.

[Questions about sites/data?](#)
[Feedback on this web site](#)
[Automated retrievals](#)
[Help](#)
[Data Tips](#)
[Explanation of terms](#)
[Subscribe for system changes](#)
[News](#)

[Accessibility](#) [FOIA](#) [Privacy](#) [Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

Title: Groundwater for New Mexico: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?>

Page Contact Information: [New Mexico Water Data Maintainer](#)

Page Last Modified: 2021-01-13 23:33:18 EST

0.32 0.28 nadww01





New Mexico Office of the State Engineer Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
C	04014 POD2	4	4	2	01	24S	33E	639656	3568917

Driller License: 1186 **Driller Company:** ENVIRO-DRILL, INC.
Driller Name: HAMMER, RODNEY
Drill Start Date: 02/13/2017 **Drill Finish Date:** 02/17/2017 **Plug Date:**
Log File Date: 03/03/2017 **PCW Rcv Date:** **Source:** Shallow
Pump Type: **Pipe Discharge Size:** **Estimated Yield:**
Casing Size: 2.00 **Depth Well:** 95 feet **Depth Water:** 81 feet

Water Bearing Stratifications:	Top	Bottom	Description
	38	95	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	80	95

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

1/13/21 9:17 PM

POINT OF DIVERSION SUMMARY

Water Well Data
Average Depth to Groundwater (ft)
Tyrell Fee #1
Lea County, New Mexico

23 South			32 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

23 South			33 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

23 South			34 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

24 South			32 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

24 South			33 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

24 South			34 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

25 South			32 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

25 South			33 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

25 South			34 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

88 New Mexico State Engineers Well Reports

105 USGS Well Reports

90 Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6)
 Geology and Groundwater Resources of Eddy County, NM (Report 3)

34 NMOCD - Groundwater Data

123 Tetra Tech installed temporary wells and field water level

143 NMOCD Groundwater map well location

Appendix C

Certificate of Analysis Summary 684279



Tetra Tech- Midland, Midland, TX

Project Name: Tyrell Fee #1

Project Id: 212C-MD-02379

Contact: Mike Carmona

Project Location: Lea Co, NM

Date Received in Lab: Tue 01.12.2021 08:41

Report Date: 01.13.2021 15:49

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	684279-001	684279-002	684279-003	684279-004	684279-005	684279-006
	<i>Field Id:</i>	Sidewall #12	Sidewall #13	Sidewall #14	Sidewall #15	Sidewall #16	Sidewall #17
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	01.11.2021 00:00	01.11.2021 00:00	01.11.2021 00:00	01.11.2021 00:00	01.11.2021 00:00	01.11.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	01.12.2021 10:00	01.12.2021 10:00	01.12.2021 10:00	01.12.2021 10:00	01.12.2021 10:00	01.12.2021 10:00
	<i>Analyzed:</i>	01.12.2021 20:59	01.12.2021 21:25	01.12.2021 21:51	01.12.2021 22:17	01.12.2021 22:43	01.12.2021 23:09
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201
Toluene		<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201
Ethylbenzene		<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201
m,p-Xylenes		<0.00403 0.00403	<0.00404 0.00404	<0.00403 0.00403	<0.00402 0.00402	<0.00401 0.00401	<0.00402 0.00402
o-Xylene		<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201
Total Xylenes		<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201
Total BTEX		<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201
Chloride by EPA 300	<i>Extracted:</i>	01.12.2021 12:10	01.12.2021 12:10	01.12.2021 12:10	01.12.2021 12:10	01.12.2021 12:10	01.12.2021 12:10
	<i>Analyzed:</i>	01.12.2021 19:20	01.12.2021 19:26	01.12.2021 19:31	01.12.2021 19:47	01.12.2021 19:52	01.12.2021 20:08
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		40.7 5.04	50.0 5.00	55.3 5.00	59.5 4.98	56.0 5.03	50.5 4.95
TPH by SW8015 Mod	<i>Extracted:</i>	01.12.2021 17:00	01.12.2021 17:00	01.12.2021 17:00	01.12.2021 17:00	01.12.2021 17:00	01.12.2021 17:00
	<i>Analyzed:</i>	01.12.2021 23:46	01.13.2021 00:52	01.13.2021 01:14	01.13.2021 01:36	01.13.2021 01:57	01.13.2021 02:19
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9
Total TPH		<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 684279

Tetra Tech- Midland, Midland, TX

Project Name: Tyrell Fee #1

Project Id: 212C-MD-02379

Contact: Mike Carmona

Project Location: Lea Co, NM

Date Received in Lab: Tue 01.12.2021 08:41

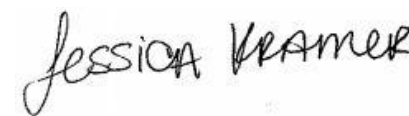
Report Date: 01.13.2021 15:49

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	684279-007	684279-008	684279-009	684279-010	684279-011	684279-012
	<i>Field Id:</i>	Sidewall #18	Sidewall #19	Sidewall #20	Sidewall #21	Sidewall #22	Sidewall#23
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	01.11.2021 00:00	01.11.2021 00:00	01.11.2021 00:00	01.11.2021 00:00	01.11.2021 00:00	01.11.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	01.12.2021 10:00	01.12.2021 10:00	01.12.2021 10:00	01.12.2021 10:00	01.12.2021 15:00	01.12.2021 15:00
	<i>Analyzed:</i>	01.12.2021 23:35	01.13.2021 00:02	01.13.2021 00:28	01.13.2021 00:54	01.13.2021 00:30	01.13.2021 00:50
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00401 0.00401	<0.00402 0.00402	<0.00401 0.00401	<0.00403 0.00403	<0.00401 0.00401	<0.00400 0.00400
o-Xylene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	01.12.2021 12:10	01.12.2021 12:10	01.12.2021 12:10	01.12.2021 12:10	01.12.2021 12:10	01.12.2021 12:10
	<i>Analyzed:</i>	01.12.2021 20:14	01.12.2021 20:19	01.12.2021 20:24	01.12.2021 20:30	01.12.2021 20:35	01.12.2021 20:40
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		40.3 5.05	56.7 4.96	49.4 4.95	50.4 5.02	57.8 4.99	51.9 4.96
TPH by SW8015 Mod	<i>Extracted:</i>	01.12.2021 17:00	01.12.2021 17:00	01.12.2021 17:00	01.12.2021 17:00	01.12.2021 17:00	01.12.2021 17:00
	<i>Analyzed:</i>	01.13.2021 02:41	01.13.2021 03:03	01.13.2021 03:25	01.13.2021 03:46	01.13.2021 04:30	01.13.2021 04:52
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0	<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0
Total TPH		<50.0 50.0	<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0

BRL - Below Reporting Limit

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



Certificate of Analysis Summary 684279

Tetra Tech- Midland, Midland, TX

Project Name: Tyrell Fee #1

Project Id: 212C-MD-02379

Contact: Mike Carmona

Project Location: Lea Co, NM

Date Received in Lab: Tue 01.12.2021 08:41

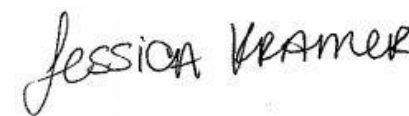
Report Date: 01.13.2021 15:49

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	684279-013	684279-014	684279-015			
	Field Id:	Sidewall #24	Sidewall #25	Sidewall #26			
	Depth:						
	Matrix:	SOIL	SOIL	SOIL			
	Sampled:	01.11.2021 00:00	01.11.2021 00:00	01.11.2021 00:00			
BTEX by EPA 8021B	Extracted:	01.12.2021 15:00	01.12.2021 15:00	01.12.2021 15:00			
	Analyzed:	01.13.2021 01:11	01.13.2021 01:31	01.13.2021 01:51			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
Benzene		<0.00202 0.00202	<0.00198 0.00198	<0.00198 0.00198			
Toluene		<0.00202 0.00202	<0.00198 0.00198	<0.00198 0.00198			
Ethylbenzene		<0.00202 0.00202	<0.00198 0.00198	<0.00198 0.00198			
m,p-Xylenes		<0.00403 0.00403	<0.00397 0.00397	<0.00396 0.00396			
o-Xylene		<0.00202 0.00202	<0.00198 0.00198	<0.00198 0.00198			
Total Xylenes		<0.00202 0.00202	<0.00198 0.00198	<0.00198 0.00198			
Total BTEX		<0.00202 0.00202	<0.00198 0.00198	<0.00198 0.00198			
Chloride by EPA 300	Extracted:	01.12.2021 14:55	01.12.2021 14:55	01.12.2021 14:55			
	Analyzed:	01.12.2021 15:26	01.12.2021 15:42	01.12.2021 15:47			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
Chloride		36.8 5.05	44.2 4.99	42.6 4.96			
TPH by SW8015 Mod	Extracted:	01.12.2021 17:00	01.12.2021 17:00	01.12.2021 17:00			
	Analyzed:	01.13.2021 05:14	01.13.2021 05:36	01.13.2021 05:58			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0			
Diesel Range Organics (DRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0			
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0			
Total TPH		<49.9 49.9	<49.8 49.8	<50.0 50.0			

BRL - Below Reporting Limit

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



Analytical Report 684279

for

Tetra Tech- Midland

Project Manager: Mike Carmona

Tyrell Fee #1

212C-MD-02379

01.13.2021

Collected By: Client



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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



01.13.2021

Project Manager: **Mike Carmona**

Tetra Tech- Midland

901 West Wall ST

Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **684279**

Tyrell Fee #1

Project Address: Lea Co, NM

Mike Carmona:

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 Eurofins Xenco, LLC Report Number(s) 684279. 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 Eurofins Xenco, LLC. 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. 684279 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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

**Sample Cross Reference 684279****Tetra Tech- Midland, Midland, TX**

Tyrell Fee #1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Sidewall #12	S	01.11.2021 00:00		684279-001
Sidewall #13	S	01.11.2021 00:00		684279-002
Sidewall #14	S	01.11.2021 00:00		684279-003
Sidewall #15	S	01.11.2021 00:00		684279-004
Sidewall #16	S	01.11.2021 00:00		684279-005
Sidewall #17	S	01.11.2021 00:00		684279-006
Sidewall #18	S	01.11.2021 00:00		684279-007
Sidewall #19	S	01.11.2021 00:00		684279-008
Sidewall #20	S	01.11.2021 00:00		684279-009
Sidewall #21	S	01.11.2021 00:00		684279-010
Sidewall #22	S	01.11.2021 00:00		684279-011
Sidewall#23	S	01.11.2021 00:00		684279-012
Sidewall #24	S	01.11.2021 00:00		684279-013
Sidewall #25	S	01.11.2021 00:00		684279-014
Sidewall #26	S	01.11.2021 00:00		684279-015

**CASE NARRATIVE****Client Name: Tetra Tech- Midland****Project Name: Tyrell Fee #1**

Project ID: 212C-MD-02379
Work Order Number(s): 684279

Report Date: 01.13.2021
Date Received: 01.12.2021

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3147606 BTEX by EPA 8021B

Lab Sample ID 684279-011 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 684279-011, -012, -013, -014, -015.

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

Batch: LBA-3147611 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered above QC limits . Samples affected are: 7719034-1-BLK,684278-017 S,684279-005,684279-006,684279-001.

Batch: LBA-3147672 TPH by SW8015 Mod

Surrogate o-Terphenyl recovered above QC limits Data confirmed by re-analysis. Samples affected are: 7719052-1-BKS,7719052-1-BLK,7719052-1-BSD,684279-008,684279-012.



Certificate of Analytical Results 684279

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Sidewall #12**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684279-001

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 12:10

% Moisture:

Seq Number: 3147627

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	40.7	5.04	mg/kg	01.12.2021 19:20		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 17:00

% Moisture:

Seq Number: 3147672

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.12.2021 23:46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.12.2021 23:46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.12.2021 23:46	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.12.2021 23:46	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	119	%	70-130	01.12.2021 23:46		
o-Terphenyl	84-15-1	126	%	70-130	01.12.2021 23:46		



Certificate of Analytical Results 684279

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Sidewall #12**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684279-001

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147611

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.12.2021 20:59	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.12.2021 20:59	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.12.2021 20:59	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.12.2021 20:59	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.12.2021 20:59	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.12.2021 20:59	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.12.2021 20:59	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	134	%	70-130	01.12.2021 20:59	**	
1,4-Difluorobenzene	540-36-3	88	%	70-130	01.12.2021 20:59		



Certificate of Analytical Results 684279

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Sidewall #13**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684279-002

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 12:10

% Moisture:

Seq Number: 3147627

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	50.0	5.00	mg/kg	01.12.2021 19:26		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 17:00

% Moisture:

Seq Number: 3147672

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.13.2021 00:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.13.2021 00:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.13.2021 00:52	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.13.2021 00:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-130	01.13.2021 00:52	
o-Terphenyl	84-15-1	124	%	70-130	01.13.2021 00:52	



Certificate of Analytical Results 684279

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Sidewall #13**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684279-002

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.12.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3147611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.12.2021 21:25	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.12.2021 21:25	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.12.2021 21:25	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	01.12.2021 21:25	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.12.2021 21:25	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.12.2021 21:25	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.12.2021 21:25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	89	%	70-130	01.12.2021 21:25		
4-Bromofluorobenzene	460-00-4	102	%	70-130	01.12.2021 21:25		



Certificate of Analytical Results 684279

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Sidewall #14**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684279-003

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 12:10

% Moisture:

Seq Number: 3147627

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	55.3	5.00	mg/kg	01.12.2021 19:31		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 17:00

% Moisture:

Seq Number: 3147672

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.13.2021 01:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.13.2021 01:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.13.2021 01:14	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.13.2021 01:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-130	01.13.2021 01:14	
o-Terphenyl	84-15-1	120	%	70-130	01.13.2021 01:14	



Certificate of Analytical Results 684279

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Sidewall #14**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684279-003

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147611

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.12.2021 21:51	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.12.2021 21:51	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.12.2021 21:51	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.12.2021 21:51	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.12.2021 21:51	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.12.2021 21:51	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.12.2021 21:51	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	90	%	70-130	01.12.2021 21:51		
4-Bromofluorobenzene	460-00-4	110	%	70-130	01.12.2021 21:51		



Certificate of Analytical Results 684279

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Sidewall #15**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684279-004

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 12:10

% Moisture:

Seq Number: 3147627

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	59.5	4.98	mg/kg	01.12.2021 19:47		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 17:00

% Moisture:

Seq Number: 3147672

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.13.2021 01:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.13.2021 01:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.13.2021 01:36	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.13.2021 01:36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	118	%	70-130	01.13.2021 01:36		
o-Terphenyl	84-15-1	126	%	70-130	01.13.2021 01:36		



Certificate of Analytical Results 684279

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Sidewall #15**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684279-004

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147611

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.12.2021 22:17	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.12.2021 22:17	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.12.2021 22:17	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.12.2021 22:17	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.12.2021 22:17	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.12.2021 22:17	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.12.2021 22:17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	113	%	70-130	01.12.2021 22:17		
4-Bromofluorobenzene	460-00-4	128	%	70-130	01.12.2021 22:17		



Certificate of Analytical Results 684279

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Sidewall #16**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684279-005

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 12:10

% Moisture:

Seq Number: 3147627

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	56.0	5.03	mg/kg	01.12.2021 19:52		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 17:00

% Moisture:

Seq Number: 3147672

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.13.2021 01:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.13.2021 01:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.13.2021 01:57	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.13.2021 01:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-130	01.13.2021 01:57	
o-Terphenyl	84-15-1	127	%	70-130	01.13.2021 01:57	



Certificate of Analytical Results 684279

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Sidewall #16**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684279-005

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147611

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.12.2021 22:43	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.12.2021 22:43	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.12.2021 22:43	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.12.2021 22:43	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.12.2021 22:43	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.12.2021 22:43	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.12.2021 22:43	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	98	%	70-130	01.12.2021 22:43		
4-Bromofluorobenzene	460-00-4	132	%	70-130	01.12.2021 22:43	**	



Certificate of Analytical Results 684279

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Sidewall #17**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684279-006

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 12:10

% Moisture:

Seq Number: 3147627

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	50.5	4.95	mg/kg	01.12.2021 20:08		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 17:00

% Moisture:

Seq Number: 3147672

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.13.2021 02:19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.13.2021 02:19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.13.2021 02:19	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.13.2021 02:19	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	110	%	70-130	01.13.2021 02:19		
o-Terphenyl	84-15-1	116	%	70-130	01.13.2021 02:19		



Certificate of Analytical Results 684279

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Sidewall #17**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684279-006

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147611

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.12.2021 23:09	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.12.2021 23:09	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.12.2021 23:09	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.12.2021 23:09	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.12.2021 23:09	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.12.2021 23:09	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.12.2021 23:09	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	135	%	70-130	01.12.2021 23:09	**	
1,4-Difluorobenzene	540-36-3	97	%	70-130	01.12.2021 23:09		



Certificate of Analytical Results 684279

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Sidewall #18**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684279-007

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 12:10

% Moisture:

Seq Number: 3147627

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	40.3	5.05	mg/kg	01.12.2021 20:14		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 17:00

% Moisture:

Seq Number: 3147672

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.13.2021 02:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.13.2021 02:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.13.2021 02:41	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.13.2021 02:41	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	111	%	70-130	01.13.2021 02:41		
o-Terphenyl	84-15-1	124	%	70-130	01.13.2021 02:41		



Certificate of Analytical Results 684279

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Sidewall #18**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684279-007

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147611

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.12.2021 23:35	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.12.2021 23:35	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.12.2021 23:35	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.12.2021 23:35	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.12.2021 23:35	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.12.2021 23:35	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.12.2021 23:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	82	%	70-130	01.12.2021 23:35	
4-Bromofluorobenzene	460-00-4	124	%	70-130	01.12.2021 23:35	



Certificate of Analytical Results 684279

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Sidewall #19**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684279-008

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 12:10

% Moisture:

Seq Number: 3147627

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	56.7	4.96	mg/kg	01.12.2021 20:19		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 17:00

% Moisture:

Seq Number: 3147672

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.13.2021 03:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.13.2021 03:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.13.2021 03:03	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.13.2021 03:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	121	%	70-130	01.13.2021 03:03	
o-Terphenyl	84-15-1	133	%	70-130	01.13.2021 03:03	**



Certificate of Analytical Results 684279

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Sidewall #19**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684279-008

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147611

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.13.2021 00:02	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.13.2021 00:02	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.13.2021 00:02	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.13.2021 00:02	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.13.2021 00:02	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.13.2021 00:02	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.13.2021 00:02	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	101	%	70-130	01.13.2021 00:02		
1,4-Difluorobenzene	540-36-3	78	%	70-130	01.13.2021 00:02		



Certificate of Analytical Results 684279

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Sidewall #20**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684279-009

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 12:10

% Moisture:

Seq Number: 3147627

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	49.4	4.95	mg/kg	01.12.2021 20:24		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 17:00

% Moisture:

Seq Number: 3147672

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.13.2021 03:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.13.2021 03:25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.13.2021 03:25	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.13.2021 03:25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	107	%	70-130	01.13.2021 03:25		
o-Terphenyl	84-15-1	122	%	70-130	01.13.2021 03:25		



Certificate of Analytical Results 684279

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Sidewall #20**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684279-009

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147611

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.13.2021 00:28	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.13.2021 00:28	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.13.2021 00:28	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.13.2021 00:28	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.13.2021 00:28	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.13.2021 00:28	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.13.2021 00:28	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	82	%	70-130	01.13.2021 00:28		
1,4-Difluorobenzene	540-36-3	87	%	70-130	01.13.2021 00:28		



Certificate of Analytical Results 684279

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Sidewall #21**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684279-010

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 12:10

% Moisture:

Seq Number: 3147627

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	50.4	5.02	mg/kg	01.12.2021 20:30		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 17:00

% Moisture:

Seq Number: 3147672

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.13.2021 03:46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.13.2021 03:46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.13.2021 03:46	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.13.2021 03:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-130	01.13.2021 03:46	
o-Terphenyl	84-15-1	125	%	70-130	01.13.2021 03:46	



Certificate of Analytical Results 684279

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Sidewall #21**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684279-010

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147611

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.13.2021 00:54	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.13.2021 00:54	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.13.2021 00:54	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.13.2021 00:54	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.13.2021 00:54	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.13.2021 00:54	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.13.2021 00:54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	91	%	70-130	01.13.2021 00:54		
4-Bromofluorobenzene	460-00-4	84	%	70-130	01.13.2021 00:54		



Certificate of Analytical Results 684279

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Sidewall #22**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684279-011

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 12:10

% Moisture:

Seq Number: 3147627

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	57.8	4.99	mg/kg	01.12.2021 20:35		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 17:00

% Moisture:

Seq Number: 3147672

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.13.2021 04:30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.13.2021 04:30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.13.2021 04:30	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.13.2021 04:30	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	104	%	70-130	01.13.2021 04:30		
o-Terphenyl	84-15-1	120	%	70-130	01.13.2021 04:30		



Certificate of Analytical Results 684279

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Sidewall #22**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684279-011

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.12.2021 15:00

% Moisture:

Seq Number: 3147606

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.13.2021 00:30	UX	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.13.2021 00:30	UX	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.13.2021 00:30	UX	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.13.2021 00:30	UX	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.13.2021 00:30	UX	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.13.2021 00:30	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.13.2021 00:30	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	96	%	70-130	01.13.2021 00:30		
4-Bromofluorobenzene	460-00-4	104	%	70-130	01.13.2021 00:30		



Certificate of Analytical Results 684279

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Sidewall#23**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684279-012

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 12:10

% Moisture:

Seq Number: 3147627

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	51.9	4.96	mg/kg	01.12.2021 20:40		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 17:00

% Moisture:

Seq Number: 3147672

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.13.2021 04:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.13.2021 04:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.13.2021 04:52	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.13.2021 04:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-130	01.13.2021 04:52	
o-Terphenyl	84-15-1	136	%	70-130	01.13.2021 04:52	**



Certificate of Analytical Results 684279

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Sidewall#23**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684279-012

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.12.2021 15:00

% Moisture:

Seq Number: 3147606

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.13.2021 00:50	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.13.2021 00:50	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.13.2021 00:50	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.13.2021 00:50	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.13.2021 00:50	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.13.2021 00:50	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.13.2021 00:50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	96	%	70-130	01.13.2021 00:50		
4-Bromofluorobenzene	460-00-4	110	%	70-130	01.13.2021 00:50		



Certificate of Analytical Results 684279

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Sidewall #24**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684279-013

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 14:55

% Moisture:

Seq Number: 3147628

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	36.8	5.05	mg/kg	01.12.2021 15:26		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 17:00

% Moisture:

Seq Number: 3147672

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.13.2021 05:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.13.2021 05:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.13.2021 05:14	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.13.2021 05:14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	100	%	70-130	01.13.2021 05:14		
o-Terphenyl	84-15-1	117	%	70-130	01.13.2021 05:14		



Certificate of Analytical Results 684279

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Sidewall #24**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684279-013

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.12.2021 15:00

% Moisture:

Seq Number: 3147606

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.13.2021 01:11	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.13.2021 01:11	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.13.2021 01:11	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.13.2021 01:11	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.13.2021 01:11	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.13.2021 01:11	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.13.2021 01:11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	107	%	70-130	01.13.2021 01:11		
1,4-Difluorobenzene	540-36-3	95	%	70-130	01.13.2021 01:11		



Certificate of Analytical Results 684279

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Sidewall #25**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684279-014

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 14:55

% Moisture:

Seq Number: 3147628

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	44.2	4.99	mg/kg	01.12.2021 15:42		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 17:00

% Moisture:

Seq Number: 3147672

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.13.2021 05:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.13.2021 05:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.13.2021 05:36	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.13.2021 05:36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	103	%	70-130	01.13.2021 05:36		
o-Terphenyl	84-15-1	118	%	70-130	01.13.2021 05:36		



Certificate of Analytical Results 684279

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Sidewall #25**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684279-014

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.12.2021 15:00

% Moisture:

Seq Number: 3147606

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.13.2021 01:31	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.13.2021 01:31	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.13.2021 01:31	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.13.2021 01:31	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.13.2021 01:31	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.13.2021 01:31	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.13.2021 01:31	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	91	%	70-130	01.13.2021 01:31		
4-Bromofluorobenzene	460-00-4	116	%	70-130	01.13.2021 01:31		



Certificate of Analytical Results 684279

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Sidewall #26**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684279-015

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 14:55

% Moisture:

Seq Number: 3147628

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	42.6	4.96	mg/kg	01.12.2021 15:47		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 17:00

% Moisture:

Seq Number: 3147672

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.13.2021 05:58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.13.2021 05:58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.13.2021 05:58	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.13.2021 05:58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-130	01.13.2021 05:58	
o-Terphenyl	84-15-1	121	%	70-130	01.13.2021 05:58	



Certificate of Analytical Results 684279

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Sidewall #26**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684279-015

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.12.2021 15:00

% Moisture:

Seq Number: 3147606

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.13.2021 01:51	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.13.2021 01:51	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.13.2021 01:51	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	01.13.2021 01:51	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.13.2021 01:51	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.13.2021 01:51	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.13.2021 01:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	96	%	70-130	01.13.2021 01:51	
4-Bromofluorobenzene	460-00-4	109	%	70-130	01.13.2021 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. **ND** Not Detected.

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



Tetra Tech- Midland

Tyrell Fee #1

Analytical Method: Chloride by EPA 300

Seq Number: 3147627

MB Sample Id: 7718969-1-BLK

Matrix: Solid

LCS Sample Id: 7718969-1-BKS

Prep Method: E300P

Date Prep: 01.12.2021

LCSD Sample Id: 7718969-1-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	247	99	247	99	90-110	0	20	mg/kg	01.12.2021 18:06	

Analytical Method: Chloride by EPA 300

Seq Number: 3147628

MB Sample Id: 7719000-1-BLK

Matrix: Solid

LCS Sample Id: 7719000-1-BKS

Prep Method: E300P

Date Prep: 01.12.2021

LCSD Sample Id: 7719000-1-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	247	99	247	99	90-110	0	20	mg/kg	01.12.2021 15:16	

Analytical Method: Chloride by EPA 300

Seq Number: 3147627

Parent Sample Id: 684278-019

Matrix: Soil

MS Sample Id: 684278-019 S

Prep Method: E300P

Date Prep: 01.12.2021

MSD Sample Id: 684278-019 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	528	250	768	96	767	96	90-110	0	20	mg/kg	01.12.2021 18:22	

Analytical Method: Chloride by EPA 300

Seq Number: 3147627

Parent Sample Id: 684279-003

Matrix: Soil

MS Sample Id: 684279-003 S

Prep Method: E300P

Date Prep: 01.12.2021

MSD Sample Id: 684279-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	55.3	250	319	105	319	105	90-110	0	20	mg/kg	01.12.2021 19:36	

Analytical Method: Chloride by EPA 300

Seq Number: 3147628

Parent Sample Id: 684229-002

Matrix: Soil

MS Sample Id: 684229-002 S

Prep Method: E300P

Date Prep: 01.12.2021

MSD Sample Id: 684229-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	3360	1250	4600	99	4720	109	90-110	3	20	mg/kg	01.12.2021 16:44	

Analytical Method: Chloride by EPA 300

Seq Number: 3147628

Parent Sample Id: 684279-013

Matrix: Soil

MS Sample Id: 684279-013 S

Prep Method: E300P

Date Prep: 01.12.2021

MSD Sample Id: 684279-013 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	36.8	253	293	101	294	102	90-110	0	20	mg/kg	01.12.2021 15:32	

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



Tetra Tech- Midland

Tyrell Fee #1

Analytical Method: TPH by SW8015 Mod

Seq Number: 3147672

MB Sample Id: 7719052-1-BLK

Matrix: Solid

Prep Method: SW8015P

Date Prep: 01.12.2021

LCS Sample Id: 7719052-1-BKS

LCSD Sample Id: 7719052-1-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	1130	113	1110	111	70-130	2	20	mg/kg	01.12.2021 23:02	
Diesel Range Organics (DRO)	<50.0	1000	1150	115	1180	118	70-130	3	20	mg/kg	01.12.2021 23:02	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	129		130		124		70-130	%	01.12.2021 23:02
o-Terphenyl	153	**	145	**	135	**	70-130	%	01.12.2021 23:02

Analytical Method: TPH by SW8015 Mod

Seq Number: 3147672

Matrix: Solid

Prep Method: SW8015P

Date Prep: 01.12.2021

MB Sample Id: 7719052-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.12.2021 22:40	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3147672

Matrix: Soil

Prep Method: SW8015P

Date Prep: 01.12.2021

Parent Sample Id: 684279-001

MS Sample Id: 684279-001 S

MSD Sample Id: 684279-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.8	996	1210	121	1130	113	70-130	7	20	mg/kg	01.13.2021 00:08	
Diesel Range Organics (DRO)	<49.8	996	1220	122	1200	120	70-130	2	20	mg/kg	01.13.2021 00:08	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	129		127		70-130	%	01.13.2021 00:08
o-Terphenyl	127		126		70-130	%	01.13.2021 00:08

Analytical Method: BTEX by EPA 8021B

Seq Number: 3147611

Matrix: Solid

Prep Method: SW5035A

Date Prep: 01.12.2021

MB Sample Id: 7719034-1-BLK

LCS Sample Id: 7719034-1-BKS

LCSD Sample Id: 7719034-1-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	0.0778	78	0.0741	74	70-130	5	35	mg/kg	01.12.2021 12:10	
Toluene	<0.00200	0.100	0.0897	90	0.0874	87	70-130	3	35	mg/kg	01.12.2021 12:10	
Ethylbenzene	<0.00200	0.100	0.0916	92	0.0890	89	70-130	3	35	mg/kg	01.12.2021 12:10	
m,p-Xylenes	<0.00400	0.200	0.182	91	0.179	90	70-130	2	35	mg/kg	01.12.2021 12:10	
o-Xylene	<0.00200	0.100	0.0960	96	0.0966	97	70-130	1	35	mg/kg	01.12.2021 12:10	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	75		89		88		70-130	%	01.12.2021 12:10
4-Bromofluorobenzene	139	**	125		126		70-130	%	01.12.2021 12:10

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

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



Tetra Tech- Midland

Tyrell Fee #1

Analytical Method: BTEX by EPA 8021B

Seq Number: 3147606

Matrix: Solid

Prep Method: SW5035A

Date Prep: 01.12.2021

MB Sample Id: 7719033-1-BLK

LCS Sample Id: 7719033-1-BKS

LCSD Sample Id: 7719033-1-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	0.0705	71	0.0727	73	70-130	3	35	mg/kg	01.12.2021 22:08	
Toluene	<0.00200	0.100	0.0714	71	0.0732	73	70-130	2	35	mg/kg	01.12.2021 22:08	
Ethylbenzene	<0.00200	0.100	0.0760	76	0.0782	78	70-130	3	35	mg/kg	01.12.2021 22:08	
m,p-Xylenes	<0.00400	0.200	0.150	75	0.154	77	70-130	3	35	mg/kg	01.12.2021 22:08	
o-Xylene	<0.00200	0.100	0.0789	79	0.0802	80	70-130	2	35	mg/kg	01.12.2021 22:08	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	93		95		97		70-130	%	01.12.2021 22:08
4-Bromofluorobenzene	110		95		97		70-130	%	01.12.2021 22:08

Analytical Method: BTEX by EPA 8021B

Seq Number: 3147611

Matrix: Soil

Prep Method: SW5035A

Date Prep: 01.12.2021

Parent Sample Id: 684278-017

MS Sample Id: 684278-017 S

MSD Sample Id: 684278-017 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	0.0595	60	0.0510	51	70-130	15	35	mg/kg	01.12.2021 13:01	X
Toluene	<0.00200	0.0998	0.0685	69	0.0645	65	70-130	6	35	mg/kg	01.12.2021 13:01	X
Ethylbenzene	<0.00200	0.0998	0.0682	68	0.0657	66	70-130	4	35	mg/kg	01.12.2021 13:01	X
m,p-Xylenes	<0.00399	0.200	0.136	68	0.131	66	70-130	4	35	mg/kg	01.12.2021 13:01	X
o-Xylene	<0.00200	0.0998	0.0722	72	0.0708	71	70-130	2	35	mg/kg	01.12.2021 13:01	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	92		100		70-130	%	01.12.2021 13:01
4-Bromofluorobenzene	138	**	119		70-130	%	01.12.2021 13:01

Analytical Method: BTEX by EPA 8021B

Seq Number: 3147606

Matrix: Soil

Prep Method: SW5035A

Date Prep: 01.12.2021

Parent Sample Id: 684279-011

MS Sample Id: 684279-011 S

MSD Sample Id: 684279-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0992	0.0552	56	0.0475	48	70-130	15	35	mg/kg	01.12.2021 22:49	X
Toluene	<0.00198	0.0992	0.0563	57	0.0488	49	70-130	14	35	mg/kg	01.12.2021 22:49	X
Ethylbenzene	<0.00198	0.0992	0.0607	61	0.0522	52	70-130	15	35	mg/kg	01.12.2021 22:49	X
m,p-Xylenes	<0.00397	0.198	0.120	61	0.104	52	70-130	14	35	mg/kg	01.12.2021 22:49	X
o-Xylene	<0.00198	0.0992	0.0625	63	0.0548	55	70-130	13	35	mg/kg	01.12.2021 22:49	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		95		70-130	%	01.12.2021 22:49
4-Bromofluorobenzene	103		101		70-130	%	01.12.2021 22:49

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

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

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

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

Analysis Request of Custody Record



Tetra Tech, Inc.

901W Wall Street, Ste 100
Midland, Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

Page 1 of 2

Client Name: COG Site Manager: Conner Moehring

Project Name: Tyree Fee #1

Project Location: Lea Co, NM Project #: 212C-MD-02379

Invoice to: COG - Ike Tavaréz

Receiving Laboratory: Xenco Sampler Signature: Conner Moehring

Comments:

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD					# CONTAINERS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
		DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	None																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			

Relinquished by: *Conner Moehring* Date: 1/16/2021 Time: 1:00 PM
Received by: *Conner Moehring* Date: 1/22/2021 Time: 8:44 PM

Relinquished by: _____ Date: _____ Time: _____
Received by: _____ Date: _____ Time: _____

ANALYSIS REQUEST

(Circle or Specify Method No.)

1084279

BTEX 8021B	BTEX 8260B
TPH TX1005 (Ext to C35)	
TPH 8015M (GRO - DRO - ORO - MRO)	
PAH 8270C	
Total Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Volatiles	
TCLP Semi Volatiles	
RCI	
GC/MS Vol. 8260B / 624	
GC/MS Semi. Vol. 8270C/625	
PCB's 8082 / 608	
NORM	
PLM (Asbestos)	
Chloride	
Chloride Sulfate TDS	
General Water Chemistry (see attached list)	
Anion/Cation Balance	
Hold	

LAB USE ONLY

REMARKS:

STANDARD

☒ RUSH Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

ORIGINAL COPY

Analysis Request of Custody Record

Page 2 of 2



Tetra Tech, Inc.

 901 W. Wall Street, Ste 100
 Midland, Texas 79705
 Tel (432) 682-4559
 Fax (432) 682-3946

1034187c9

Client Name:

Site Manager:

Conner Moehring

Project Name:

Tyree Fee #1

Project Location:

Lea Co, NM

Project #:

212C-MD-02379

Invoice to:

COG - Ike Tavaraz

Receiving Laboratory:

Xenco

Sampler Signature:

Conner Moehring

Comments:

SAMPLE IDENTIFICATION

LAB #
(LAB USE ONLY)

SAMPLING

YEAR: 2021

DATE

TIME

MATRIX

PRESERVATIVE METHOD

WATER

SOIL

HCL

HNO₃

ICE

None

CONTAINERS

FILTERED (Y/N)

BTX 8021B BTX 8260B

TPH TX1005 (Ext to C35)

TPH 8015M (GRO - DRO - ORO - MRO)

PAH 8270C

Total Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8260B / 624

GC/MS Semi. Vol. 8270C/625

PCB's 8082 / 608

NORM

PLM (Asbestos)

Chloride

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

Hold

ANALYSIS REQUEST

(Circle or Specify Method No.)

Relinquished by:

Date: Time:

Received by:

Date: Time:

Relinquished by:

Date: Time:

Received by:

Date: Time:

Relinquished by:

Date: Time:

Received by:

Date: Time:

LAB USE ONLY

REMARKS:

STANDARD

Sample Temperature

☒ RUSH - Same Day 24 hr - 48 hr - 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

ORIGINAL COPY

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 01.12.2021 08.41.00 AM

Work Order #: 684279

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	4.1
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	N/A
#18 Water VOC samples have zero headspace?	N/A

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Brianna Teel

Date: 01.12.2021

Checklist reviewed by:



Jessica Kramer

Date: 01.12.2021

Certificate of Analysis Summary 684278

Tetra Tech- Midland, Midland, TX

Project Name: Tyrell Fee #1

Project Id: 212C-MD-02379

Contact: Mike Carmona

Project Location: Lea Co, NM

Date Received in Lab: Tue 01.12.2021 08:41

Report Date: 01.13.2021 15:49

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i> <i>Field Id:</i> <i>Depth:</i> <i>Matrix:</i> <i>Sampled:</i>	684278-001 Bottom Hole 39 (4-4.5') SOIL 01.11.2021 00:00	684278-002 Bottom Hole 40 (4-4.5') SOIL 01.11.2021 00:00	684278-003 Bottom Hole 41 (4-4.5') SOIL 01.11.2021 00:00	684278-004 Bottom Hole 42 (4-4.5') SOIL 01.11.2021 00:00	684278-005 Bottom Hole 43 (4-4.5') SOIL 01.11.2021 00:00	684278-006 Bottom Hole 44 (4-4.5') SOIL 01.11.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.12.2021 12:00 01.12.2021 14:15 mg/kg RL	01.12.2021 12:00 01.12.2021 14:36 mg/kg RL	01.12.2021 12:00 01.12.2021 14:56 mg/kg RL	01.12.2021 12:00 01.12.2021 15:17 mg/kg RL	01.12.2021 12:00 01.12.2021 15:37 mg/kg RL	01.12.2021 12:00 01.12.2021 15:58 mg/kg RL
Benzene		<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	<0.00199 0.00199
Toluene		<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	<0.00199 0.00199
Ethylbenzene		<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	<0.00199 0.00199
m,p-Xylenes		<0.00396 0.00396	<0.00402 0.00402	<0.00401 0.00401	<0.00399 0.00399	<0.00403 0.00403	<0.00398 0.00398
o-Xylene		<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	<0.00199 0.00199
Total Xylenes		<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	<0.00199 0.00199
Total BTEX		<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	<0.00199 0.00199
Chloride by EPA 300	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.12.2021 11:55 01.12.2021 14:16 mg/kg RL	01.12.2021 11:55 01.12.2021 14:21 mg/kg RL	01.12.2021 11:55 01.12.2021 15:53 mg/kg RL	01.12.2021 11:55 01.12.2021 16:09 mg/kg RL	01.12.2021 11:55 01.12.2021 16:14 mg/kg RL	01.12.2021 11:55 01.12.2021 16:19 mg/kg RL
Chloride		997 4.99	1130 5.00	876 5.02	1010 4.98	808 4.95	839 5.05
TPH by SW8015 Mod	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.12.2021 11:00 01.12.2021 12:45 mg/kg RL	01.12.2021 11:00 01.12.2021 15:02 mg/kg RL	01.12.2021 11:00 01.12.2021 15:24 mg/kg RL	01.12.2021 11:00 01.12.2021 15:45 mg/kg RL	01.12.2021 11:00 01.12.2021 16:08 mg/kg RL	01.12.2021 11:00 01.12.2021 16:29 mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Total TPH		<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0

BRL - Below Reporting Limit

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



Certificate of Analysis Summary 684278

Tetra Tech- Midland, Midland, TX

Project Name: Tyrell Fee #1

Project Id: 212C-MD-02379

Contact: Mike Carmona

Project Location: Lea Co, NM

Date Received in Lab: Tue 01.12.2021 08:41

Report Date: 01.13.2021 15:49

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	684278-007	684278-008	684278-009	684278-010	684278-011	684278-012
	<i>Field Id:</i>	Bottom Hole 45 (4-4.5')	Bottom Hole 46 (4-4.5')	Bottom Hole 47 (4-4.5')	Bottom Hole 48 (4-4.5')	Bottom Hole 49 (4-4.5')	Bottom Hole 50 (4-4.5')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	01.11.2021 00:00	01.11.2021 00:00	01.11.2021 00:00	01.11.2021 00:00	01.11.2021 00:00	01.11.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	01.12.2021 12:00	01.12.2021 12:00	01.12.2021 12:00	01.12.2021 12:00	01.12.2021 12:00	01.12.2021 12:00
	<i>Analyzed:</i>	01.12.2021 16:18	01.12.2021 16:39	01.12.2021 18:02	01.12.2021 18:23	01.12.2021 18:43	01.12.2021 19:04
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198
Toluene		<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198
Ethylbenzene		<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198
m,p-Xylenes		<0.00398 0.00398	<0.00398 0.00398	<0.00399 0.00399	<0.00398 0.00398	<0.00401 0.00401	<0.00396 0.00396
o-Xylene		<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198
Total Xylenes		<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198
Total BTEX		<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198
Chloride by EPA 300	<i>Extracted:</i>	01.12.2021 11:55	01.12.2021 11:55	01.12.2021 11:55	01.12.2021 11:55	01.12.2021 11:55	01.12.2021 11:55
	<i>Analyzed:</i>	01.12.2021 16:25	01.12.2021 16:30	01.12.2021 16:35	01.12.2021 16:51	01.12.2021 16:57	01.12.2021 17:13
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		1480 24.9	1210 5.00	536 4.96	745 5.02	778 4.98	760 5.00
TPH by SW8015 Mod	<i>Extracted:</i>	01.12.2021 11:00	01.12.2021 11:00	01.12.2021 11:00	01.12.2021 11:00	01.12.2021 11:00	01.12.2021 11:00
	<i>Analyzed:</i>	01.12.2021 16:51	01.12.2021 17:13	01.12.2021 17:35	01.12.2021 17:57	01.12.2021 18:41	01.12.2021 19:02
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Diesel Range Organics (DRO)		<49.9 49.9	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Total TPH		<49.9 49.9	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0

BRL - Below Reporting Limit

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



Certificate of Analysis Summary 684278

Tetra Tech- Midland, Midland, TX

Project Name: Tyre11 Fee #1

Project Id: 212C-MD-02379

Contact: Mike Carmona

Project Location: Lea Co, NM

Date Received in Lab: Tue 01.12.2021 08:41

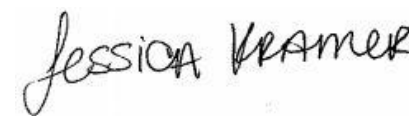
Report Date: 01.13.2021 15:49

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	684278-013	684278-014	684278-015	684278-016	684278-017	684278-018
	<i>Field Id:</i>	Bottom Hole 51 (4-4.5')	Bottom Hole 52 (4-4.5')	Bottom Hole 53 (4-4.5')	Bottom Hole 54 (4-4.5')	Bottom Hole 55 (4-4.5')	Bottom Hole 56 (4-4.5')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	01.11.2021 00:00	01.11.2021 00:00	01.11.2021 00:00	01.11.2021 00:00	01.11.2021 00:00	01.11.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	01.12.2021 12:00	01.12.2021 12:00	01.12.2021 12:00	01.12.2021 12:00	01.12.2021 10:00	01.12.2021 10:00
	<i>Analyzed:</i>	01.12.2021 19:24	01.12.2021 19:44	01.12.2021 20:05	01.12.2021 20:25	01.12.2021 15:23	01.12.2021 15:49
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Toluene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Ethylbenzene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
m,p-Xylenes		<0.00400 0.00400	<0.00402 0.00402	<0.00399 0.00399	<0.00398 0.00398	<0.00399 0.00399	<0.00398 0.00398
o-Xylene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Total Xylenes		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Total BTEX		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Chloride by EPA 300	<i>Extracted:</i>	01.12.2021 11:55	01.12.2021 11:55	01.12.2021 11:55	01.12.2021 11:55	01.12.2021 11:55	01.12.2021 11:55
	<i>Analyzed:</i>	01.12.2021 17:18	01.12.2021 17:23	01.12.2021 17:29	01.12.2021 17:34	01.12.2021 17:39	01.12.2021 17:44
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		499 5.05	528 5.05	58.9 4.97	62.5 5.00	498 4.96	481 5.03
TPH by SW8015 Mod	<i>Extracted:</i>	01.12.2021 11:00	01.12.2021 11:00	01.12.2021 11:00	01.12.2021 11:00	01.12.2021 11:00	01.12.2021 11:00
	<i>Analyzed:</i>	01.12.2021 19:24	01.12.2021 19:46	01.12.2021 20:07	01.12.2021 20:29	01.12.2021 20:51	01.12.2021 21:13
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Diesel Range Organics (DRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Total TPH		<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0

BRL - Below Reporting Limit

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



Certificate of Analysis Summary 684278

Tetra Tech- Midland, Midland, TX

Project Name: Tyrell Fee #1

Project Id: 212C-MD-02379

Contact: Mike Carmona

Project Location: Lea Co, NM

Date Received in Lab: Tue 01.12.2021 08:41

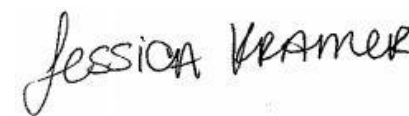
Report Date: 01.13.2021 15:49

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	684278-019	684278-020	684278-021	684278-022	684278-023	684278-024
	Field Id:	Bottom Hole 57 (4-4.5')	Bottom Hole 58 (4-4.5')	Bottom Hole 59 (4-4.5')	Bottom Hole 60 (4-4.5')	Bottom Hole 61 (4-4.5')	Bottom Hole 62 (4-4.5')
	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	01.11.2021 00:00	01.11.2021 00:00	01.11.2021 00:00	01.11.2021 00:00	01.11.2021 00:00	01.11.2021 00:00
BTEX by EPA 8021B	Extracted:	01.12.2021 10:00	01.12.2021 10:00	01.12.2021 13:00	01.12.2021 10:00	01.12.2021 10:00	01.12.2021 10:00
	Analyzed:	01.12.2021 16:14	01.12.2021 16:40	01.13.2021 08:44	01.12.2021 17:32	01.12.2021 17:58	01.12.2021 18:24
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00198 0.00198
Toluene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00198 0.00198
Ethylbenzene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00198 0.00198
m,p-Xylenes		<0.00401 0.00401	<0.00402 0.00402	<0.00400 0.00400	<0.00402 0.00402	<0.00398 0.00398	<0.00397 0.00397
o-Xylene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00198 0.00198
Total Xylenes		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00198 0.00198
Total BTEX		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00198 0.00198
Chloride by EPA 300	Extracted:	01.12.2021 12:10	01.12.2021 12:10	01.12.2021 12:10	01.12.2021 12:10	01.12.2021 12:10	01.12.2021 12:10
	Analyzed:	01.12.2021 18:16	01.12.2021 18:32	01.12.2021 18:38	01.12.2021 18:43	01.12.2021 18:48	01.12.2021 19:04
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		528 5.00	525 4.95	591 5.03	603 4.99	544 4.96	559 5.02
TPH by SW8015 Mod	Extracted:	01.12.2021 11:00	01.12.2021 11:00	01.12.2021 12:00	01.12.2021 12:00	01.12.2021 12:00	01.12.2021 12:00
	Analyzed:	01.12.2021 21:34	01.12.2021 21:56	01.12.2021 12:58	01.12.2021 13:54	01.12.2021 14:13	01.12.2021 14:31
	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	<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.8 49.8
Diesel Range Organics (DRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.8 49.8
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.8 49.8
Total TPH		<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.8 49.8

BRL - Below Reporting Limit

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



Certificate of Analysis Summary 684278

Tetra Tech- Midland, Midland, TX

Project Name: Tyrell Fee #1

Project Id: 212C-MD-02379

Contact: Mike Carmona

Project Location: Lea Co, NM

Date Received in Lab: Tue 01.12.2021 08:41

Report Date: 01.13.2021 15:49

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	684278-025	684278-026				
	Field Id:	Bottom Hole 63 (4-4.5')	Bottom Hole 64 (4-4.5')				
	Depth:						
	Matrix:	SOIL	SOIL				
	Sampled:	01.11.2021 00:00	01.11.2021 00:00				
BTEX by EPA 8021B	Extracted:	01.12.2021 10:00	01.12.2021 10:00				
	Analyzed:	01.12.2021 18:50	01.12.2021 19:16				
	Units/RL:	mg/kg RL	mg/kg RL				
	Benzene	<0.00202 0.00202	<0.00202 0.00202				
	Toluene	<0.00202 0.00202	<0.00202 0.00202				
	Ethylbenzene	<0.00202 0.00202	<0.00202 0.00202				
	m,p-Xylenes	<0.00404 0.00404	<0.00404 0.00404				
	o-Xylene	<0.00202 0.00202	<0.00202 0.00202				
	Total Xylenes	<0.00202 0.00202	<0.00202 0.00202				
	Total BTEX	<0.00202 0.00202	<0.00202 0.00202				
Chloride by EPA 300	Extracted:	01.12.2021 12:10	01.12.2021 12:10				
	Analyzed:	01.12.2021 19:10	01.12.2021 19:15				
	Units/RL:	mg/kg RL	mg/kg RL				
	Chloride	529 4.95	430 4.95				
TPH by SW8015 Mod	Extracted:	01.12.2021 12:00	01.12.2021 12:00				
	Analyzed:	01.12.2021 14:50	01.12.2021 15:09				
	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	<50.0 50.0	<50.0 50.0				

BRL - Below Reporting Limit

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



Analytical Report 684278

for

Tetra Tech- Midland

Project Manager: Mike Carmona

Tyrell Fee #1

212C-MD-02379

01.13.2021

Collected By: Client



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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



01.13.2021

Project Manager: **Mike Carmona**

Tetra Tech- Midland

901 West Wall ST

Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **684278**

Tyre11 Fee #1

Project Address: Lea Co, NM

Mike Carmona:

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 Eurofins Xenco, LLC Report Number(s) 684278. 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 Eurofins Xenco, LLC. 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. 684278 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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



Sample Cross Reference 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Bottom Hole 39 (4-4.5')	S	01.11.2021 00:00		684278-001
Bottom Hole 40 (4-4.5')	S	01.11.2021 00:00		684278-002
Bottom Hole 41 (4-4.5')	S	01.11.2021 00:00		684278-003
Bottom Hole 42 (4-4.5')	S	01.11.2021 00:00		684278-004
Bottom Hole 43 (4-4.5')	S	01.11.2021 00:00		684278-005
Bottom Hole 44 (4-4.5')	S	01.11.2021 00:00		684278-006
Bottom Hole 45 (4-4.5')	S	01.11.2021 00:00		684278-007
Bottom Hole 46 (4-4.5')	S	01.11.2021 00:00		684278-008
Bottom Hole 47 (4-4.5')	S	01.11.2021 00:00		684278-009
Bottom Hole 48 (4-4.5')	S	01.11.2021 00:00		684278-010
Bottom Hole 49 (4-4.5')	S	01.11.2021 00:00		684278-011
Bottom Hole 50 (4-4.5')	S	01.11.2021 00:00		684278-012
Bottom Hole 51 (4-4.5')	S	01.11.2021 00:00		684278-013
Bottom Hole 52 (4-4.5')	S	01.11.2021 00:00		684278-014
Bottom Hole 53 (4-4.5')	S	01.11.2021 00:00		684278-015
Bottom Hole 54 (4-4.5')	S	01.11.2021 00:00		684278-016
Bottom Hole 55 (4-4.5')	S	01.11.2021 00:00		684278-017
Bottom Hole 56 (4-4.5')	S	01.11.2021 00:00		684278-018
Bottom Hole 57 (4-4.5')	S	01.11.2021 00:00		684278-019
Bottom Hole 58 (4-4.5')	S	01.11.2021 00:00		684278-020
Bottom Hole 59 (4-4.5')	S	01.11.2021 00:00		684278-021
Bottom Hole 60 (4-4.5')	S	01.11.2021 00:00		684278-022
Bottom Hole 61 (4-4.5')	S	01.11.2021 00:00		684278-023
Bottom Hole 62 (4-4.5')	S	01.11.2021 00:00		684278-024
Bottom Hole 63 (4-4.5')	S	01.11.2021 00:00		684278-025
Bottom Hole 64 (4-4.5')	S	01.11.2021 00:00		684278-026

**CASE NARRATIVE****Client Name: Tetra Tech- Midland****Project Name: Tyrell Fee #1**

Project ID: 212C-MD-02379
Work Order Number(s): 684278

Report Date: 01.13.2021
Date Received: 01.12.2021

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3147611 BTEX by EPA 8021B

Lab Sample ID 684278-017 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, m,p-Xylenes recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 684278-017, -018, -019, -020, -022, -023, -024, -025, -026.

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

Surrogate 4-Bromofluorobenzene recovered above QC limits. Samples affected are: 7719034-1-BLK, 684278-017 S, 684278-023, 684278-024, 684278-025, 684278-019, 684278-020.

Batch: LBA-3147617 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered above QC limits . Samples affected are: 7719041-1-BLK, 7719041-1-BSD, 684278-021.

Batch: LBA-3147671 TPH by SW8015 Mod

Surrogate o-Terphenyl recovered above QC limits Data confirmed by re-analysis. Samples affected are: 7719051-1-BLK, 7719051-1-BSD.



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 39 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-001

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 11:55

% Moisture:

Seq Number: 3147626

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	997	4.99	mg/kg	01.12.2021 14:16		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 11:00

% Moisture:

Seq Number: 3147671

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.12.2021 12:45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.12.2021 12:45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.12.2021 12:45	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.12.2021 12:45	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	103	%	70-130	01.12.2021 12:45		
o-Terphenyl	84-15-1	120	%	70-130	01.12.2021 12:45		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 39 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-001

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.12.2021 12:00

% Moisture:

Seq Number: 3147515

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.12.2021 14:15	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.12.2021 14:15	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.12.2021 14:15	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	01.12.2021 14:15	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.12.2021 14:15	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.12.2021 14:15	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.12.2021 14:15	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	87	%	70-130	01.12.2021 14:15		
4-Bromofluorobenzene	460-00-4	115	%	70-130	01.12.2021 14:15		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 40 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-002

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 11:55

% Moisture:

Seq Number: 3147626

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1130	5.00	mg/kg	01.12.2021 14:21		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 11:00

% Moisture:

Seq Number: 3147671

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.12.2021 15:02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.12.2021 15:02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.12.2021 15:02	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.12.2021 15:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-130	01.12.2021 15:02	
o-Terphenyl	84-15-1	129	%	70-130	01.12.2021 15:02	



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 40 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-002

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.12.2021 12:00

% Moisture:

Seq Number: 3147515

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.12.2021 14:36	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.12.2021 14:36	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.12.2021 14:36	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.12.2021 14:36	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.12.2021 14:36	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.12.2021 14:36	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.12.2021 14:36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	116	%	70-130	01.12.2021 14:36		
1,4-Difluorobenzene	540-36-3	91	%	70-130	01.12.2021 14:36		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 41 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-003

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 11:55

% Moisture:

Seq Number: 3147626

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	876	5.02	mg/kg	01.12.2021 15:53		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 11:00

% Moisture:

Seq Number: 3147671

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.12.2021 15:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.12.2021 15:24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.12.2021 15:24	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.12.2021 15:24	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	97	%	70-130	01.12.2021 15:24		
o-Terphenyl	84-15-1	113	%	70-130	01.12.2021 15:24		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 41 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-003

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.12.2021 12:00

% Moisture:

Seq Number: 3147515

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.12.2021 14:56	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.12.2021 14:56	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.12.2021 14:56	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.12.2021 14:56	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.12.2021 14:56	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.12.2021 14:56	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.12.2021 14:56	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	94	%	70-130	01.12.2021 14:56		
4-Bromofluorobenzene	460-00-4	106	%	70-130	01.12.2021 14:56		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 42 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-004

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 11:55

% Moisture:

Seq Number: 3147626

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1010	4.98	mg/kg	01.12.2021 16:09		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 11:00

% Moisture:

Seq Number: 3147671

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.12.2021 15:45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.12.2021 15:45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.12.2021 15:45	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.12.2021 15:45	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	100	%	70-130	01.12.2021 15:45		
o-Terphenyl	84-15-1	116	%	70-130	01.12.2021 15:45		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 42 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-004

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.12.2021 12:00

% Moisture:

Seq Number: 3147515

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.12.2021 15:17	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.12.2021 15:17	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.12.2021 15:17	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.12.2021 15:17	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.12.2021 15:17	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.12.2021 15:17	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.12.2021 15:17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	93	%	70-130	01.12.2021 15:17		
4-Bromofluorobenzene	460-00-4	103	%	70-130	01.12.2021 15:17		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 43 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-005

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 11:55

% Moisture:

Seq Number: 3147626

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	808	4.95	mg/kg	01.12.2021 16:14		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 11:00

% Moisture:

Seq Number: 3147671

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.12.2021 16:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.12.2021 16:08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.12.2021 16:08	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.12.2021 16:08	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	97	%	70-130	01.12.2021 16:08		
o-Terphenyl	84-15-1	112	%	70-130	01.12.2021 16:08		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 43 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-005

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.12.2021 12:00

% Moisture:

Seq Number: 3147515

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.12.2021 15:37	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.12.2021 15:37	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.12.2021 15:37	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.12.2021 15:37	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.12.2021 15:37	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.12.2021 15:37	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.12.2021 15:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	93	%	70-130	01.12.2021 15:37	
4-Bromofluorobenzene	460-00-4	115	%	70-130	01.12.2021 15:37	



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 44 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-006

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 11:55

% Moisture:

Seq Number: 3147626

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	839	5.05	mg/kg	01.12.2021 16:19		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 11:00

% Moisture:

Seq Number: 3147671

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.12.2021 16:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.12.2021 16:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.12.2021 16:29	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.12.2021 16:29	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	90	%	70-130	01.12.2021 16:29		
o-Terphenyl	84-15-1	103	%	70-130	01.12.2021 16:29		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 44 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-006

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.12.2021 12:00

% Moisture:

Seq Number: 3147515

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.12.2021 15:58	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.12.2021 15:58	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.12.2021 15:58	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.12.2021 15:58	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.12.2021 15:58	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.12.2021 15:58	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.12.2021 15:58	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	110	%	70-130	01.12.2021 15:58		
1,4-Difluorobenzene	540-36-3	93	%	70-130	01.12.2021 15:58		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 45 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-007

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 11:55

% Moisture:

Seq Number: 3147626

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1480	24.9	mg/kg	01.12.2021 16:25		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 11:00

% Moisture:

Seq Number: 3147671

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.12.2021 16:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.12.2021 16:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.12.2021 16:51	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.12.2021 16:51	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	104	%	70-130	01.12.2021 16:51		
o-Terphenyl	84-15-1	122	%	70-130	01.12.2021 16:51		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 45 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-007

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.12.2021 12:00

% Moisture:

Seq Number: 3147515

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.12.2021 16:18	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.12.2021 16:18	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.12.2021 16:18	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.12.2021 16:18	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.12.2021 16:18	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.12.2021 16:18	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.12.2021 16:18	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	86	%	70-130	01.12.2021 16:18		
1,4-Difluorobenzene	540-36-3	119	%	70-130	01.12.2021 16:18		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 46 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-008

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 11:55

% Moisture:

Seq Number: 3147626

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1210	5.00	mg/kg	01.12.2021 16:30		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 11:00

% Moisture:

Seq Number: 3147671

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.12.2021 17:13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.12.2021 17:13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.12.2021 17:13	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.12.2021 17:13	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	105	%	70-130	01.12.2021 17:13		
o-Terphenyl	84-15-1	122	%	70-130	01.12.2021 17:13		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 46 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-008

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.12.2021 12:00

% Moisture:

Seq Number: 3147515

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.12.2021 16:39	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.12.2021 16:39	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.12.2021 16:39	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.12.2021 16:39	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.12.2021 16:39	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.12.2021 16:39	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.12.2021 16:39	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	113	%	70-130	01.12.2021 16:39		
1,4-Difluorobenzene	540-36-3	90	%	70-130	01.12.2021 16:39		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 47 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-009

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 11:55

% Moisture:

Seq Number: 3147626

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	536	4.96	mg/kg	01.12.2021 16:35		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 11:00

% Moisture:

Seq Number: 3147671

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.12.2021 17:35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.12.2021 17:35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.12.2021 17:35	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.12.2021 17:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-130	01.12.2021 17:35	
o-Terphenyl	84-15-1	115	%	70-130	01.12.2021 17:35	



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 47 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-009

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.12.2021 12:00

% Moisture:

Seq Number: 3147515

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.12.2021 18:02	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.12.2021 18:02	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.12.2021 18:02	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.12.2021 18:02	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.12.2021 18:02	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.12.2021 18:02	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.12.2021 18:02	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	105	%	70-130	01.12.2021 18:02		
1,4-Difluorobenzene	540-36-3	95	%	70-130	01.12.2021 18:02		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 48 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-010

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 11:55

% Moisture:

Seq Number: 3147626

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	745	5.02	mg/kg	01.12.2021 16:51		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 11:00

% Moisture:

Seq Number: 3147671

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.12.2021 17:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.12.2021 17:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.12.2021 17:57	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.12.2021 17:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-130	01.12.2021 17:57	
o-Terphenyl	84-15-1	113	%	70-130	01.12.2021 17:57	



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 48 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-010

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.12.2021 12:00

% Moisture:

Seq Number: 3147515

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.12.2021 18:23	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.12.2021 18:23	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.12.2021 18:23	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.12.2021 18:23	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.12.2021 18:23	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.12.2021 18:23	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.12.2021 18:23	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	96	%	70-130	01.12.2021 18:23		
4-Bromofluorobenzene	460-00-4	104	%	70-130	01.12.2021 18:23		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 49 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-011

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 11:55

% Moisture:

Seq Number: 3147626

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	778	4.98	mg/kg	01.12.2021 16:57		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 11:00

% Moisture:

Seq Number: 3147671

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.12.2021 18:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.12.2021 18:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.12.2021 18:41	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.12.2021 18:41	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	109	%	70-130	01.12.2021 18:41		
o-Terphenyl	84-15-1	126	%	70-130	01.12.2021 18:41		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 49 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-011

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.12.2021 12:00

% Moisture:

Seq Number: 3147515

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.12.2021 18:43	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.12.2021 18:43	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.12.2021 18:43	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.12.2021 18:43	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.12.2021 18:43	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.12.2021 18:43	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.12.2021 18:43	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	96	%	70-130	01.12.2021 18:43		
4-Bromofluorobenzene	460-00-4	109	%	70-130	01.12.2021 18:43		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 50 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-012

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 11:55

% Moisture:

Seq Number: 3147626

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	760	5.00	mg/kg	01.12.2021 17:13		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 11:00

% Moisture:

Seq Number: 3147671

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.12.2021 19:02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.12.2021 19:02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.12.2021 19:02	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.12.2021 19:02	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	109	%	70-130	01.12.2021 19:02		
o-Terphenyl	84-15-1	120	%	70-130	01.12.2021 19:02		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 50 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-012

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.12.2021 12:00

% Moisture:

Seq Number: 3147515

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.12.2021 19:04	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.12.2021 19:04	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.12.2021 19:04	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	01.12.2021 19:04	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.12.2021 19:04	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.12.2021 19:04	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.12.2021 19:04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	112	%	70-130	01.12.2021 19:04		
1,4-Difluorobenzene	540-36-3	96	%	70-130	01.12.2021 19:04		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 51 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-013

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 11:55

% Moisture:

Seq Number: 3147626

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	499	5.05	mg/kg	01.12.2021 17:18		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 11:00

% Moisture:

Seq Number: 3147671

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.12.2021 19:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.12.2021 19:24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.12.2021 19:24	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.12.2021 19:24	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	106	%	70-130	01.12.2021 19:24		
o-Terphenyl	84-15-1	114	%	70-130	01.12.2021 19:24		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 51 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-013

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.12.2021 12:00

% Moisture:

Seq Number: 3147515

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.12.2021 19:24	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.12.2021 19:24	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.12.2021 19:24	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.12.2021 19:24	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.12.2021 19:24	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.12.2021 19:24	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.12.2021 19:24	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	108	%	70-130	01.12.2021 19:24		
1,4-Difluorobenzene	540-36-3	96	%	70-130	01.12.2021 19:24		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 52 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-014

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 11:55

% Moisture:

Seq Number: 3147626

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	528	5.05	mg/kg	01.12.2021 17:23		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 11:00

% Moisture:

Seq Number: 3147671

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.12.2021 19:46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.12.2021 19:46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.12.2021 19:46	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.12.2021 19:46	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	109	%	70-130	01.12.2021 19:46		
o-Terphenyl	84-15-1	116	%	70-130	01.12.2021 19:46		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 52 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-014

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.12.2021 12:00

% Moisture:

Seq Number: 3147515

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.12.2021 19:44	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.12.2021 19:44	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.12.2021 19:44	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.12.2021 19:44	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.12.2021 19:44	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.12.2021 19:44	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.12.2021 19:44	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	95	%	70-130	01.12.2021 19:44		
4-Bromofluorobenzene	460-00-4	110	%	70-130	01.12.2021 19:44		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 53 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-015

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 11:55

% Moisture:

Seq Number: 3147626

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	58.9	4.97	mg/kg	01.12.2021 17:29		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 11:00

% Moisture:

Seq Number: 3147671

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.12.2021 20:07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.12.2021 20:07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.12.2021 20:07	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.12.2021 20:07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-130	01.12.2021 20:07	
o-Terphenyl	84-15-1	113	%	70-130	01.12.2021 20:07	



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 53 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-015

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.12.2021 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3147515

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.12.2021 20:05	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.12.2021 20:05	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.12.2021 20:05	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.12.2021 20:05	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.12.2021 20:05	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.12.2021 20:05	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.12.2021 20:05	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	95	%	70-130	01.12.2021 20:05		
4-Bromofluorobenzene	460-00-4	105	%	70-130	01.12.2021 20:05		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 54 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-016

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 11:55

% Moisture:

Seq Number: 3147626

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	62.5	5.00	mg/kg	01.12.2021 17:34		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 11:00

% Moisture:

Seq Number: 3147671

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.12.2021 20:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.12.2021 20:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.12.2021 20:29	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.12.2021 20:29	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	114	%	70-130	01.12.2021 20:29		
o-Terphenyl	84-15-1	117	%	70-130	01.12.2021 20:29		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 54 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-016

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.12.2021 12:00

% Moisture:

Seq Number: 3147515

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.12.2021 20:25	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.12.2021 20:25	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.12.2021 20:25	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.12.2021 20:25	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.12.2021 20:25	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.12.2021 20:25	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.12.2021 20:25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	112	%	70-130	01.12.2021 20:25		
1,4-Difluorobenzene	540-36-3	89	%	70-130	01.12.2021 20:25		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 55 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-017

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 11:55

% Moisture:

Seq Number: 3147626

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	498	4.96	mg/kg	01.12.2021 17:39		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 11:00

% Moisture:

Seq Number: 3147671

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.12.2021 20:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.12.2021 20:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.12.2021 20:51	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.12.2021 20:51	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	112	%	70-130	01.12.2021 20:51		
o-Terphenyl	84-15-1	116	%	70-130	01.12.2021 20:51		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 55 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-017

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147611

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.12.2021 15:23	UX	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.12.2021 15:23	UX	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.12.2021 15:23	UX	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.12.2021 15:23	UX	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.12.2021 15:23	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.12.2021 15:23	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.12.2021 15:23	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	130	%	70-130	01.12.2021 15:23		
1,4-Difluorobenzene	540-36-3	104	%	70-130	01.12.2021 15:23		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 56 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-018

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 11:55

% Moisture:

Seq Number: 3147626

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	481	5.03	mg/kg	01.12.2021 17:44		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 11:00

% Moisture:

Seq Number: 3147671

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.12.2021 21:13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.12.2021 21:13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.12.2021 21:13	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.12.2021 21:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-130	01.12.2021 21:13	
o-Terphenyl	84-15-1	116	%	70-130	01.12.2021 21:13	



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 56 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-018

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147611

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.12.2021 15:49	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.12.2021 15:49	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.12.2021 15:49	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.12.2021 15:49	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.12.2021 15:49	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.12.2021 15:49	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.12.2021 15:49	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	128	%	70-130	01.12.2021 15:49		
1,4-Difluorobenzene	540-36-3	103	%	70-130	01.12.2021 15:49		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 57 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-019

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 12:10

% Moisture:

Seq Number: 3147627

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	528	5.00	mg/kg	01.12.2021 18:16		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 11:00

% Moisture:

Seq Number: 3147671

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.12.2021 21:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.12.2021 21:34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.12.2021 21:34	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.12.2021 21:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-130	01.12.2021 21:34	
o-Terphenyl	84-15-1	125	%	70-130	01.12.2021 21:34	



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 57 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-019

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147611

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.12.2021 16:14	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.12.2021 16:14	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.12.2021 16:14	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.12.2021 16:14	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.12.2021 16:14	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.12.2021 16:14	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.12.2021 16:14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	93	%	70-130	01.12.2021 16:14		
4-Bromofluorobenzene	460-00-4	140	%	70-130	01.12.2021 16:14	**	



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 58 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-020

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 12:10

% Moisture:

Seq Number: 3147627

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	525	4.95	mg/kg	01.12.2021 18:32		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 11:00

% Moisture:

Seq Number: 3147671

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.12.2021 21:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.12.2021 21:56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.12.2021 21:56	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.12.2021 21:56	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	115	%	70-130	01.12.2021 21:56		
o-Terphenyl	84-15-1	117	%	70-130	01.12.2021 21:56		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 58 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-020

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147611

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.12.2021 16:40	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.12.2021 16:40	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.12.2021 16:40	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.12.2021 16:40	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.12.2021 16:40	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.12.2021 16:40	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.12.2021 16:40	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	93	%	70-130	01.12.2021 16:40		
4-Bromofluorobenzene	460-00-4	135	%	70-130	01.12.2021 16:40	**	



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 59 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-021

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 12:10

% Moisture:

Seq Number: 3147627

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	591	5.03	mg/kg	01.12.2021 18:38		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 12:00

% Moisture:

Seq Number: 3147666

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.12.2021 12:58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.12.2021 12:58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.12.2021 12:58	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.12.2021 12:58	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	83	%	70-130	01.12.2021 12:58		
o-Terphenyl	84-15-1	90	%	70-130	01.12.2021 12:58		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 59 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-021

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.12.2021 13:00

% Moisture:

Seq Number: 3147617

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.13.2021 08:44	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.13.2021 08:44	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.13.2021 08:44	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.13.2021 08:44	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.13.2021 08:44	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.13.2021 08:44	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.13.2021 08:44	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	104	%	70-130	01.13.2021 08:44		
4-Bromofluorobenzene	460-00-4	140	%	70-130	01.13.2021 08:44	**	



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 60 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-022

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 12:10

% Moisture:

Seq Number: 3147627

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	603	4.99	mg/kg	01.12.2021 18:43		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 12:00

% Moisture:

Seq Number: 3147666

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.12.2021 13:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.12.2021 13:54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.12.2021 13:54	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.12.2021 13:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	71	%	70-130	01.12.2021 13:54	
o-Terphenyl	84-15-1	78	%	70-130	01.12.2021 13:54	



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 60 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-022

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147611

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.12.2021 17:32	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.12.2021 17:32	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.12.2021 17:32	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.12.2021 17:32	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.12.2021 17:32	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.12.2021 17:32	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.12.2021 17:32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	70-130	01.12.2021 17:32		
1,4-Difluorobenzene	540-36-3	84	%	70-130	01.12.2021 17:32		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 61 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-023

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 12:10

% Moisture:

Seq Number: 3147627

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	544	4.96	mg/kg	01.12.2021 18:48		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 12:00

% Moisture:

Seq Number: 3147666

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.12.2021 14:13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.12.2021 14:13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.12.2021 14:13	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.12.2021 14:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	72	%	70-130	01.12.2021 14:13	
o-Terphenyl	84-15-1	74	%	70-130	01.12.2021 14:13	



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 61 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-023

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147611

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.12.2021 17:58	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.12.2021 17:58	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.12.2021 17:58	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.12.2021 17:58	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.12.2021 17:58	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.12.2021 17:58	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.12.2021 17:58	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	135	%	70-130	01.12.2021 17:58	**	
1,4-Difluorobenzene	540-36-3	97	%	70-130	01.12.2021 17:58		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 62 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-024

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 12:10

% Moisture:

Seq Number: 3147627

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	559	5.02	mg/kg	01.12.2021 19:04		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 12:00

% Moisture:

Seq Number: 3147666

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.12.2021 14:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.12.2021 14:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.12.2021 14:31	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.12.2021 14:31	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	71	%	70-130	01.12.2021 14:31		
o-Terphenyl	84-15-1	79	%	70-130	01.12.2021 14:31		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 62 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-024

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147611

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.12.2021 18:24	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.12.2021 18:24	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.12.2021 18:24	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.12.2021 18:24	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.12.2021 18:24	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.12.2021 18:24	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.12.2021 18:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	97	%	70-130	01.12.2021 18:24	
4-Bromofluorobenzene	460-00-4	140	%	70-130	01.12.2021 18:24	**



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 63 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-025

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 12:10

% Moisture:

Seq Number: 3147627

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	529	4.95	mg/kg	01.12.2021 19:10		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 12:00

% Moisture:

Seq Number: 3147666

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.12.2021 14:50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.12.2021 14:50	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.12.2021 14:50	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.12.2021 14:50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	76	%	70-130	01.12.2021 14:50		
o-Terphenyl	84-15-1	80	%	70-130	01.12.2021 14:50		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 63 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-025

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.12.2021 10:00

% Moisture:

Seq Number: 3147611

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.12.2021 18:50	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.12.2021 18:50	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.12.2021 18:50	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	01.12.2021 18:50	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.12.2021 18:50	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.12.2021 18:50	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.12.2021 18:50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	145	%	70-130	01.12.2021 18:50	**	
1,4-Difluorobenzene	540-36-3	96	%	70-130	01.12.2021 18:50		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 64 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-026

Date Collected: 01.11.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 12:10

% Moisture:

Seq Number: 3147627

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	430	4.95	mg/kg	01.12.2021 19:15		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 12:00

% Moisture:

Seq Number: 3147666

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.12.2021 15:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.12.2021 15:09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.12.2021 15:09	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.12.2021 15:09	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	74	%	70-130	01.12.2021 15:09		
o-Terphenyl	84-15-1	77	%	70-130	01.12.2021 15:09		



Certificate of Analytical Results 684278

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 64 (4-4.5')**

Matrix: Soil

Date Received: 01.12.2021 08:41

Lab Sample Id: 684278-026

Date Collected: 01.11.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.12.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3147611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.12.2021 19:16	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.12.2021 19:16	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.12.2021 19:16	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	01.12.2021 19:16	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.12.2021 19:16	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.12.2021 19:16	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.12.2021 19:16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	102	%	70-130	01.12.2021 19:16		
4-Bromofluorobenzene	460-00-4	121	%	70-130	01.12.2021 19:16		

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. **ND** Not Detected.

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



Tetra Tech- Midland

Tyrell Fee #1

Analytical Method: Chloride by EPA 300

Seq Number: 3147626

MB Sample Id: 7718967-1-BLK

Matrix: Solid

LCS Sample Id: 7718967-1-BKS

Prep Method: E300P

Date Prep: 01.12.2021

LCSD Sample Id: 7718967-1-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	242	97	244	98	90-110	1	20	mg/kg	01.12.2021 13:44	

Analytical Method: Chloride by EPA 300

Seq Number: 3147627

MB Sample Id: 7718969-1-BLK

Matrix: Solid

LCS Sample Id: 7718969-1-BKS

Prep Method: E300P

Date Prep: 01.12.2021

LCSD Sample Id: 7718969-1-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	247	99	247	99	90-110	0	20	mg/kg	01.12.2021 18:06	

Analytical Method: Chloride by EPA 300

Seq Number: 3147626

Parent Sample Id: 684276-003

Matrix: Soil

MS Sample Id: 684276-003 S

Prep Method: E300P

Date Prep: 01.12.2021

MSD Sample Id: 684276-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	34.5	252	294	103	292	102	90-110	1	20	mg/kg	01.12.2021 14:00	

Analytical Method: Chloride by EPA 300

Seq Number: 3147626

Parent Sample Id: 684278-009

Matrix: Soil

MS Sample Id: 684278-009 S

Prep Method: E300P

Date Prep: 01.12.2021

MSD Sample Id: 684278-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	536	248	764	92	766	93	90-110	0	20	mg/kg	01.12.2021 16:41	

Analytical Method: Chloride by EPA 300

Seq Number: 3147627

Parent Sample Id: 684278-019

Matrix: Soil

MS Sample Id: 684278-019 S

Prep Method: E300P

Date Prep: 01.12.2021

MSD Sample Id: 684278-019 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	528	250	768	96	767	96	90-110	0	20	mg/kg	01.12.2021 18:22	

Analytical Method: Chloride by EPA 300

Seq Number: 3147627

Parent Sample Id: 684279-003

Matrix: Soil

MS Sample Id: 684279-003 S

Prep Method: E300P

Date Prep: 01.12.2021

MSD Sample Id: 684279-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	55.3	250	319	105	319	105	90-110	0	20	mg/kg	01.12.2021 19:36	

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

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

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

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

Tetra Tech- Midland

Tyrell Fee #1

Analytical Method: TPH by SW8015 Mod

Seq Number: 3147671

MB Sample Id: 7719051-1-BLK

Matrix: Solid

LCS Sample Id: 7719051-1-BKS

Prep Method: SW8015P

Date Prep: 01.12.2021

LCSD Sample Id: 7719051-1-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	940	94	1030	103	70-130	9	20	mg/kg	01.12.2021 12:02	
Diesel Range Organics (DRO)	<50.0	1000	1150	115	1170	117	70-130	2	20	mg/kg	01.12.2021 12:02	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
1-Chlorooctane	106		116		119		70-130			%	01.12.2021 12:02	
o-Terphenyl	137	**	130		133	**	70-130			%	01.12.2021 12:02	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3147666

MB Sample Id: 7719049-1-BLK

Matrix: Solid

LCS Sample Id: 7719049-1-BKS

Prep Method: SW8015P

Date Prep: 01.12.2021

LCSD Sample Id: 7719049-1-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	869	87	892	89	70-130	3	20	mg/kg	01.12.2021 12:21	
Diesel Range Organics (DRO)	<50.0	1000	829	83	894	89	70-130	8	20	mg/kg	01.12.2021 12:21	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag		LCSD %Rec	LCSD Flag		Limits	Units	Analysis Date	
1-Chlorooctane	95		91			82			70-130	%	01.12.2021 12:21	
o-Terphenyl	109		91			87			70-130	%	01.12.2021 12:21	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3147671

Matrix: Solid

MB Sample Id: 7719051-1-BLK

Prep Method: SW8015P

Date Prep: 01.12.2021

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.12.2021 11:40	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3147666

Matrix: Solid

MB Sample Id: 7719049-1-BLK

Prep Method: SW8015P

Date Prep: 01.12.2021

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.12.2021 12:03	

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

Tetra Tech- Midland

Tyrell Fee #1

Analytical Method: TPH by SW8015 Mod

Seq Number: 3147671

Parent Sample Id: 684278-001

Matrix: Soil

MS Sample Id: 684278-001 S

Prep Method: SW8015P

Date Prep: 01.12.2021

MSD Sample Id: 684278-001 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	997	1070	107	1040	104	70-130	3	20	mg/kg	01.12.2021 13:07	
Diesel Range Organics (DRO)	<49.9	997	1180	118	1190	119	70-130	1	20	mg/kg	01.12.2021 13:07	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	111		110		70-130	%	01.12.2021 13:07
o-Terphenyl	122		119		70-130	%	01.12.2021 13:07

Analytical Method: TPH by SW8015 Mod

Seq Number: 3147666

Parent Sample Id: 684278-021

Matrix: Soil

MS Sample Id: 684278-021 S

Prep Method: SW8015P

Date Prep: 01.12.2021

MSD Sample Id: 684278-021 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	997	915	92	867	87	70-130	5	20	mg/kg	01.12.2021 13:17	
Diesel Range Organics (DRO)	<49.9	997	996	100	864	86	70-130	14	20	mg/kg	01.12.2021 13:17	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		84		70-130	%	01.12.2021 13:17
o-Terphenyl	99		80		70-130	%	01.12.2021 13:17

Analytical Method: BTEX by EPA 8021B

Seq Number: 3147611

MB Sample Id: 7719034-1-BLK

Matrix: Solid

LCS Sample Id: 7719034-1-BKS

Prep Method: SW5035A

Date Prep: 01.12.2021

LCSD Sample Id: 7719034-1-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	0.0778	78	0.0741	74	70-130	5	35	mg/kg	01.12.2021 12:10	
Toluene	<0.00200	0.100	0.0897	90	0.0874	87	70-130	3	35	mg/kg	01.12.2021 12:10	
Ethylbenzene	<0.00200	0.100	0.0916	92	0.0890	89	70-130	3	35	mg/kg	01.12.2021 12:10	
m,p-Xylenes	<0.00400	0.200	0.182	91	0.179	90	70-130	2	35	mg/kg	01.12.2021 12:10	
o-Xylene	<0.00200	0.100	0.0960	96	0.0966	97	70-130	1	35	mg/kg	01.12.2021 12:10	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	75		89		88		70-130	%	01.12.2021 12:10
4-Bromofluorobenzene	139	**	125		126		70-130	%	01.12.2021 12:10

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

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



Tetra Tech- Midland

Tyrell Fee #1

Analytical Method: BTEX by EPA 8021B

Seq Number: 3147515

Matrix: Solid

Prep Method: SW5035A

Date Prep: 01.12.2021

MB Sample Id: 7718974-1-BLK

LCS Sample Id: 7718974-1-BKS

LCSD Sample Id: 7718974-1-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	0.0758	76	0.0788	79	70-130	4	35	mg/kg	01.12.2021 11:13	
Toluene	<0.00200	0.100	0.0787	79	0.0811	81	70-130	3	35	mg/kg	01.12.2021 11:13	
Ethylbenzene	<0.00200	0.100	0.0845	85	0.0870	87	70-130	3	35	mg/kg	01.12.2021 11:13	
m,p-Xylenes	<0.00400	0.200	0.170	85	0.175	88	70-130	3	35	mg/kg	01.12.2021 11:13	
o-Xylene	<0.00200	0.100	0.0868	87	0.0894	89	70-130	3	35	mg/kg	01.12.2021 11:13	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	93		95		96		70-130	%	01.12.2021 11:13
4-Bromofluorobenzene	104		98		96		70-130	%	01.12.2021 11:13

Analytical Method: BTEX by EPA 8021B

Seq Number: 3147617

Matrix: Solid

Prep Method: SW5035A

Date Prep: 01.12.2021

MB Sample Id: 7719041-1-BLK

LCS Sample Id: 7719041-1-BKS

LCSD Sample Id: 7719041-1-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	0.0775	78	0.0784	78	70-130	1	35	mg/kg	01.13.2021 02:12	
Toluene	<0.00200	0.100	0.0861	86	0.0874	87	70-130	1	35	mg/kg	01.13.2021 02:12	
Ethylbenzene	<0.00200	0.100	0.0875	88	0.0888	89	70-130	1	35	mg/kg	01.13.2021 02:12	
m,p-Xylenes	<0.00400	0.200	0.174	87	0.177	89	70-130	2	35	mg/kg	01.13.2021 02:12	
o-Xylene	<0.00200	0.100	0.0922	92	0.0954	95	70-130	3	35	mg/kg	01.13.2021 02:12	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	81		97		105		70-130	%	01.13.2021 02:12
4-Bromofluorobenzene	151	**	124		134	**	70-130	%	01.13.2021 02:12

Analytical Method: BTEX by EPA 8021B

Seq Number: 3147611

Matrix: Soil

Prep Method: SW5035A

Date Prep: 01.12.2021

Parent Sample Id: 684278-017

MS Sample Id: 684278-017 S

MSD Sample Id: 684278-017 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	0.0595	60	0.0510	51	70-130	15	35	mg/kg	01.12.2021 13:01	X
Toluene	<0.00200	0.0998	0.0685	69	0.0645	65	70-130	6	35	mg/kg	01.12.2021 13:01	X
Ethylbenzene	<0.00200	0.0998	0.0682	68	0.0657	66	70-130	4	35	mg/kg	01.12.2021 13:01	X
m,p-Xylenes	<0.00399	0.200	0.136	68	0.131	66	70-130	4	35	mg/kg	01.12.2021 13:01	X
o-Xylene	<0.00200	0.0998	0.0722	72	0.0708	71	70-130	2	35	mg/kg	01.12.2021 13:01	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	92		100		70-130	%	01.12.2021 13:01
4-Bromofluorobenzene	138	**	119		70-130	%	01.12.2021 13:01

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

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

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

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



Tetra Tech- Midland

Tyrell Fee #1

Analytical Method: BTEX by EPA 8021B

Seq Number: 3147515

Parent Sample Id: 684278-001

Matrix: Soil

MS Sample Id: 684278-001 S

Prep Method: SW5035A

Date Prep: 01.12.2021

MSD Sample Id: 684278-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0707	71	0.0696	70	70-130	2	35	mg/kg	01.12.2021 11:54	
Toluene	<0.00200	0.100	0.0730	73	0.0709	71	70-130	3	35	mg/kg	01.12.2021 11:54	
Ethylbenzene	<0.00200	0.100	0.0784	78	0.0754	76	70-130	4	35	mg/kg	01.12.2021 11:54	
m,p-Xylenes	<0.00400	0.200	0.158	79	0.151	76	70-130	5	35	mg/kg	01.12.2021 11:54	
o-Xylene	<0.00200	0.100	0.0808	81	0.0777	78	70-130	4	35	mg/kg	01.12.2021 11:54	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		96		70-130	%	01.12.2021 11:54
4-Bromofluorobenzene	102		100		70-130	%	01.12.2021 11:54

Analytical Method: BTEX by EPA 8021B

Seq Number: 3147617

Parent Sample Id: 684218-001

Matrix: Soil

MS Sample Id: 684218-001 S

Prep Method: SW5035A

Date Prep: 01.12.2021

MSD Sample Id: 684218-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.101	0.0340	34	0.0385	39	70-130	12	35	mg/kg	01.13.2021 03:05	X
Toluene	<0.00201	0.101	0.0423	42	0.0447	45	70-130	6	35	mg/kg	01.13.2021 03:05	X
Ethylbenzene	<0.00201	0.101	0.0429	42	0.0433	43	70-130	1	35	mg/kg	01.13.2021 03:05	X
m,p-Xylenes	<0.00402	0.201	0.0884	44	0.0879	44	70-130	1	35	mg/kg	01.13.2021 03:05	X
o-Xylene	<0.00201	0.101	0.0501	50	0.0498	50	70-130	1	35	mg/kg	01.13.2021 03:05	X

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	88		85		70-130	%	01.13.2021 03:05
4-Bromofluorobenzene	119		125		70-130	%	01.13.2021 03:05

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

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

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

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

Analysis Request of Chain of Custody Record

Page 1 of 3



Tetra Tech, Inc.

 901W Wall Street, Ste 100
 Midland, Texas 79705
 Tel (432) 682-4559
 Fax (432) 682-3946

Client Name:

Site Manager:

Conner Moehring

Project Name:

Tyree Fee #1

Project Location:
(county, state)

Lea Co, NM

Project #:

212C-MD-02379

Invoice to:

COG - Ike Tavares

Receiving Laboratory:

Xenco

Sampler Signature:

Conner Moehring

Comments:

SAMPLE IDENTIFICATION

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD					# CONTAINERS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
		DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	None	FILTERED (Y/N)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
	Bottom Hole 39 (4-4.5')	1/1/2021		X				X		1 N	X		BTEX 8021B	BTEX 8021B																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								

ANALYSIS REQUEST
(Circle or Specify Method No.)
 BTEX 8021B BTEX 8260B
 TPH TX1005 (Ext to C35)
 TPH 8015M (GRO - DRO - ORO - MRO)
 PAH 8270C
 Total Metals Ag As Ba Cd Cr Pb Se Hg
 TCLP Metals Ag As Ba Cd Cr Pb Se Hg
 TCLP Volatiles
 TCLP Semi Volatiles
 RCI
 GC/MS Vol. 8260B / 624
 GC/MS Semi. Vol. 8270C/625
 PCB's 8082 / 608
 NORM
 PLM (Asbestos)
 Chloride
 Chloride Sulfate TDS
 General Water Chemistry (see attached list)
 Anion/Cation Balance

Hold

LAB USE ONLY

REMARKS:

STANDARD

Sample Temperature

☒ RUSH: Same Day 24 hr - 40 hr - 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

41

Date: Time:

Received by:

Date: Time:

Date: Time:

Received by:

Date: Time:

Relinquished by:

Date: Time:

Received by:

Date: Time:

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #:



18198

ORIGINAL COPY

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

901 W Wall Street, Ste 1000
Midland, Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

Page 3 of 3

[illegible]

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #

☐ Special Report Limits or TRRP Report

☐ Rush Charges Authorized

X Rush: Sally Day 24 hr 48 hr 72 hr

☐ STANDARD

REMARKS:

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 01.12.2021 08.41.00 AM

Work Order #: 684278

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	4.1
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	N/A
#18 Water VOC samples have zero headspace?	N/A

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Brianna Teel

Date: 01.12.2021

Checklist reviewed by:



Jessica Kramer

Date: 01.12.2021

Certificate of Analysis Summary 684955

Tetra Tech- Midland, Midland, TX

Project Name: Tyrell Fee #1

Project Id: 212C-MD-02379

Contact: Clair Gonzales

Project Location: Lea Co, NM

Date Received in Lab: Fri 01.15.2021 16:40

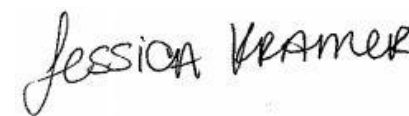
Report Date: 01.20.2021 16:25

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	684955-001	684955-002	684955-003	684955-004	684955-005	684955-006
	<i>Field Id:</i>	Bottom Hole 1 (0.5')	Bottom Hole 2 (0.5')	Bottom Hole 3 (0.5')	Bottom Hole 4 (0.5')	Bottom Hole 5 (0.5')	Bottom Hole 6 (0.5')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	01.16.2021 10:00	01.16.2021 10:00	01.16.2021 10:00	01.16.2021 10:00	01.16.2021 10:00	01.16.2021 10:00
	<i>Analyzed:</i>	01.16.2021 21:34	01.16.2021 22:00	01.16.2021 22:26	01.16.2021 22:52	01.16.2021 23:18	01.16.2021 23:44
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
m,p-Xylenes		<0.00399 0.00399	<0.00398 0.00398	<0.00397 0.00397	<0.00399 0.00399	<0.00398 0.00398	<0.00401 0.00401
o-Xylene		<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Total BTEX		<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	01.18.2021 12:30	01.18.2021 12:30	01.18.2021 13:30	01.18.2021 13:30	01.18.2021 13:30	01.18.2021 13:30
	<i>Analyzed:</i>	01.18.2021 16:22	01.18.2021 16:27	01.18.2021 22:28	01.18.2021 22:44	01.18.2021 22:49	01.18.2021 22:54
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		12.2 5.03	13.4 4.99	7.58 4.96	6.17 4.98	7.38 4.99	5.66 5.04
TPH by SW8015 Mod	<i>Extracted:</i>	01.18.2021 08:00	01.18.2021 08:00	01.18.2021 08:00	01.18.2021 08:00	01.18.2021 08:00	01.18.2021 08:00
	<i>Analyzed:</i>	01.18.2021 09:19	01.18.2021 10:17	01.18.2021 10:36	01.18.2021 10:55	01.18.2021 11:14	01.18.2021 11:34
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0
Total TPH		<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0

BRL - Below Reporting Limit

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



Certificate of Analysis Summary 684955



Tetra Tech- Midland, Midland, TX

Project Name: Tyrell Fee #1

Project Id: 212C-MD-02379

Contact: Clair Gonzales

Project Location: Lea Co, NM

Date Received in Lab: Fri 01.15.2021 16:40

Report Date: 01.20.2021 16:25

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i> <i>Field Id:</i> <i>Depth:</i> <i>Matrix:</i> <i>Sampled:</i>	684955-007 Bottom Hole 7 (0.5') SOIL 01.14.2021 00:00	684955-008 Bottom Hole 8 (0.5') SOIL 01.14.2021 00:00	684955-009 Bottom Hole 9 (0.5') SOIL 01.14.2021 00:00	684955-010 Bottom Hole 10 (0.5') SOIL 01.14.2021 00:00	684955-011 Bottom Hole 11 (0.5') SOIL 01.14.2021 00:00	684955-012 Bottom Hole 12 (0.5') SOIL 01.14.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.16.2021 10:00 01.17.2021 00:10 mg/kg RL	01.16.2021 10:00 01.17.2021 00:35 mg/kg RL	01.17.2021 10:00 *** ** mg/kg RL	01.17.2021 10:00 *** ** mg/kg RL	01.17.2021 10:00 *** ** mg/kg RL	01.17.2021 10:00 *** ** mg/kg RL
Benzene		<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200
m,p-Xylenes		<0.00401 0.00401	<0.00403 0.00403	<0.00399 0.00399	<0.00398 0.00398	<0.00398 0.00398	<0.00401 0.00401
o-Xylene		<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200
Total BTEX		<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.18.2021 13:30 01.18.2021 22:59 mg/kg RL	01.18.2021 13:30 01.18.2021 23:15 mg/kg RL	01.18.2021 13:30 01.18.2021 23:20 mg/kg RL	01.18.2021 13:30 01.18.2021 23:25 mg/kg RL	01.18.2021 13:30 01.18.2021 23:31 mg/kg RL	01.18.2021 13:30 01.18.2021 23:36 mg/kg RL
Chloride		6.08 4.96	48.6 5.00	19.0 4.97	18.2 4.96	77.6 4.95	123 5.03
TPH by SW8015 Mod	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.18.2021 08:00 01.18.2021 11:53 mg/kg RL	01.18.2021 08:00 01.18.2021 12:12 mg/kg RL	01.18.2021 08:00 01.18.2021 12:32 mg/kg RL	01.18.2021 08:00 01.18.2021 12:51 mg/kg RL	01.18.2021 08:00 01.18.2021 13:30 mg/kg RL	01.18.2021 08:00 01.18.2021 13:50 mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Diesel Range Organics (DRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Total TPH		<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 684955

Tetra Tech- Midland, Midland, TX

Project Name: Tyrell Fee #1

Project Id: 212C-MD-02379

Contact: Clair Gonzales

Project Location: Lea Co, NM

Date Received in Lab: Fri 01.15.2021 16:40

Report Date: 01.20.2021 16:25

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i> <i>Field Id:</i> <i>Depth:</i> <i>Matrix:</i> <i>Sampled:</i>	684955-013 Bottom Hole 13 (0.5')	684955-014 Bottom Hole 14 (0.5')	684955-015 Bottom Hole 15 (0.5')	684955-016 Bottom Hole 16 (0.5')	684955-017 Bottom Hole 17(0.5')	684955-018 Bottom Hole 18 (0.5')
BTEX by EPA 8021B	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.17.2021 10:00 * * * * * mg/kg RL	01.17.2021 10:00 * * * * * mg/kg RL	01.17.2021 10:00 * * * * * mg/kg RL	01.17.2021 10:00 * * * * * mg/kg RL	01.17.2021 10:00 * * * * * mg/kg RL	01.17.2021 10:00 * * * * * mg/kg RL
Benzene		<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200
Toluene		<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200
Ethylbenzene		<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	0.00502 0.00200
m,p-Xylenes		<0.00402 0.00402	<0.00402 0.00402	<0.00401 0.00401	<0.00402 0.00402	<0.00402 0.00402	<0.00401 0.00401
o-Xylene		0.00614 0.00201	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	0.00670 0.00200
Total Xylenes		0.00614 0.00201	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	0.00670 0.00200
Total BTEX		0.00614 0.00201	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	0.0117 0.00200
Chloride by EPA 300	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.18.2021 13:30 01.18.2021 23:41 mg/kg RL	01.18.2021 13:30 01.18.2021 23:57 mg/kg RL	01.18.2021 13:30 01.19.2021 08:07 mg/kg RL	01.18.2021 13:30 01.19.2021 08:22 mg/kg RL	01.18.2021 13:30 01.19.2021 08:27 mg/kg RL	01.18.2021 13:30 01.19.2021 08:33 mg/kg RL
Chloride		15.3 5.00	8.56 4.98	35.4 4.95	18.1 5.04	17.9 4.99	30.5 4.96
TPH by SW8015 Mod	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.18.2021 08:00 01.18.2021 14:09 mg/kg RL	01.18.2021 08:00 01.18.2021 14:29 mg/kg RL	01.18.2021 08:00 01.18.2021 14:48 mg/kg RL	01.18.2021 08:00 01.18.2021 15:08 mg/kg RL	01.18.2021 08:00 01.18.2021 15:28 mg/kg RL	01.18.2021 08:00 01.18.2021 15:47 mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.9 49.9	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8
Diesel Range Organics (DRO)		<50.0 50.0	<49.9 49.9	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8
Total TPH		<50.0 50.0	<49.9 49.9	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8

BRL - Below Reporting Limit

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



Certificate of Analysis Summary 684955

Tetra Tech- Midland, Midland, TX

Project Name: Tyrell Fee #1

Project Id: 212C-MD-02379

Contact: Clair Gonzales

Project Location: Lea Co, NM

Date Received in Lab: Fri 01.15.2021 16:40

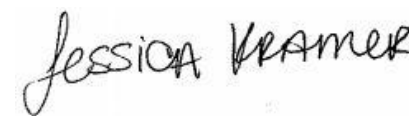
Report Date: 01.20.2021 16:25

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i> <i>Field Id:</i> <i>Depth:</i> <i>Matrix:</i> <i>Sampled:</i>	684955-019 Bottom Hole 19 (0.5') SOIL 01.14.2021 00:00	684955-020 Bottom Hole 20 (0.5') SOIL 01.14.2021 00:00	684955-021 Bottom Hole 21 (0.5') SOIL 01.14.2021 00:00	684955-022 Bottom Hole 22 (2-2.5') SOIL 01.14.2021 00:00	684955-023 Bottom Hole 23 (2-2.5') SOIL 01.14.2021 00:00	684955-024 Bottom Hole 24 (2-2.5') SOIL 01.14.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.17.2021 10:00 01.17.2021 10:26 mg/kg RL	01.18.2021 09:15 01.18.2021 19:59 mg/kg RL	01.17.2021 10:00 01.17.2021 11:35 mg/kg RL	01.17.2021 10:00 01.17.2021 12:00 mg/kg RL	01.17.2021 10:00 01.17.2021 12:26 mg/kg RL	01.17.2021 10:00 01.17.2021 12:52 mg/kg RL
Benzene		<0.00202 0.00202	<0.00200 0.00200	0.00449 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00403 0.00403	<0.00401 0.00401	<0.00402 0.00402	<0.00398 0.00398	<0.00399 0.00399	<0.00401 0.00401
o-Xylene		<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00202 0.00202	<0.00200 0.00200	0.00449 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.18.2021 13:30 01.19.2021 08:38 mg/kg RL	01.18.2021 13:30 01.19.2021 08:43 mg/kg RL	01.18.2021 13:30 01.19.2021 08:48 mg/kg RL	01.18.2021 13:30 01.19.2021 08:53 mg/kg RL	01.18.2021 13:45 01.18.2021 16:59 mg/kg RL	01.18.2021 13:45 01.18.2021 17:15 mg/kg RL
Chloride		11.7 4.95	102 5.05	12.9 5.05	45.5 5.05	15.7 5.00	13.2 4.98
TPH by SW8015 Mod	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.18.2021 08:00 01.18.2021 17:10 mg/kg RL	01.18.2021 08:00 01.18.2021 17:29 mg/kg RL	01.18.2021 10:00 01.18.2021 11:16 mg/kg RL	01.18.2021 10:00 01.18.2021 12:22 mg/kg RL	01.18.2021 10:00 01.18.2021 12:44 mg/kg RL	01.18.2021 10:00 01.18.2021 13:06 mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0
Total TPH		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0

BRL - Below Reporting Limit

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



Certificate of Analysis Summary 684955

Tetra Tech- Midland, Midland, TX

Project Name: Tyrell Fee #1

Project Id: 212C-MD-02379

Contact: Clair Gonzales

Project Location: Lea Co, NM

Date Received in Lab: Fri 01.15.2021 16:40

Report Date: 01.20.2021 16:25

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i> <i>Field Id:</i> <i>Depth:</i> <i>Matrix:</i> <i>Sampled:</i>	684955-025 Bottom Hole 25 (2-2.5') SOIL 01.14.2021 00:00	684955-026 Bottom Hole 26 (2-2.5') SOIL 01.14.2021 00:00	684955-027 Bottom Hole 27 (2-2.5') SOIL 01.14.2021 00:00	684955-028 Bottom Hole 28 (2-2.5') SOIL 01.14.2021 00:00	684955-029 Bottom Hole 29 (2-2.5') SOIL 01.14.2021 00:00	684955-030 Bottom Hole 30 (2-2.5') SOIL 01.14.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.17.2021 10:00 01.17.2021 13:18 mg/kg RL	01.17.2021 10:00 01.17.2021 13:44 mg/kg RL	01.17.2021 10:00 01.17.2021 14:10 mg/kg RL	01.17.2021 10:00 01.17.2021 14:36 mg/kg RL	01.17.2021 12:00 01.17.2021 19:03 mg/kg RL	01.17.2021 12:00 01.17.2021 19:29 mg/kg RL
Benzene		<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00402 0.00402	<0.00399 0.00399	<0.00398 0.00398	<0.00398 0.00398	<0.00401 0.00401	<0.00399 0.00399
o-Xylene		<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.18.2021 13:45 01.18.2021 17:20 mg/kg RL	01.18.2021 13:45 01.18.2021 17:26 mg/kg RL	01.18.2021 13:45 01.18.2021 17:31 mg/kg RL	01.18.2021 13:45 01.18.2021 17:47 mg/kg RL	01.18.2021 13:45 01.18.2021 17:52 mg/kg RL	01.18.2021 13:45 01.18.2021 17:58 mg/kg RL
Chloride		12.2 4.95	19.3 4.99	14.0 5.04	11.2 4.98	19.5 5.00	11.1 4.95
TPH by SW8015 Mod	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.18.2021 10:00 01.18.2021 13:28 mg/kg RL	01.18.2021 10:00 01.18.2021 13:50 mg/kg RL	01.18.2021 10:00 01.18.2021 14:12 mg/kg RL	01.18.2021 10:00 01.18.2021 14:34 mg/kg RL	01.18.2021 10:00 01.18.2021 14:56 mg/kg RL	01.18.2021 10:00 01.18.2021 15:24 mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9
Total TPH		<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9

BRL - Below Reporting Limit

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



Certificate of Analysis Summary 684955

Tetra Tech- Midland, Midland, TX

Project Name: Tyrell Fee #1

Project Id: 212C-MD-02379

Contact: Clair Gonzales

Project Location: Lea Co, NM

Date Received in Lab: Fri 01.15.2021 16:40

Report Date: 01.20.2021 16:25

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i> <i>Field Id:</i> <i>Depth:</i> <i>Matrix:</i> <i>Sampled:</i>	684955-031 Bottom Hole 31 (4-4.5') SOIL 01.14.2021 00:00	684955-032 Bottom Hole 32 (4-4.5') SOIL 01.14.2021 00:00	684955-033 Bottom Hole 33 (4-4.5') SOIL 01.14.2021 00:00	684955-034 Bottom Hole 34 (4-4.5') SOIL 01.14.2021 00:00	684955-035 Bottom Hole 35 (4-4.5') SOIL 01.14.2021 00:00	684955-036 Bottom Hole 36 (4-4.5') SOIL 01.14.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.17.2021 12:00 01.17.2021 19:55 mg/kg RL	01.17.2021 12:00 01.17.2021 20:22 mg/kg RL	01.17.2021 12:00 01.17.2021 20:48 mg/kg RL	01.17.2021 12:00 01.17.2021 21:14 mg/kg RL	01.18.2021 09:15 01.18.2021 20:19 mg/kg RL	01.17.2021 12:00 01.17.2021 22:07 mg/kg RL
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00400 0.00400	<0.00401 0.00401	<0.00402 0.00402	<0.00402 0.00402	<0.00400 0.00400	<0.00399 0.00399
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.18.2021 13:45 01.18.2021 18:03 mg/kg RL	01.18.2021 13:45 01.18.2021 18:08 mg/kg RL	01.18.2021 13:45 01.18.2021 18:14 mg/kg RL	01.18.2021 13:45 01.18.2021 18:30 mg/kg RL	01.18.2021 13:45 01.18.2021 18:35 mg/kg RL	01.18.2021 13:45 01.18.2021 18:51 mg/kg RL
Chloride		1430 25.2	1630 24.9	656 4.99	1160 5.04	947 4.98	1030 5.00
TPH by SW8015 Mod	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.18.2021 10:00 01.18.2021 16:09 mg/kg RL	01.18.2021 10:00 01.18.2021 16:31 mg/kg RL	01.18.2021 10:00 01.18.2021 16:53 mg/kg RL	01.18.2021 10:00 01.18.2021 17:15 mg/kg RL	01.18.2021 10:00 01.18.2021 17:37 mg/kg RL	01.18.2021 10:00 01.18.2021 17:59 mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0
Total TPH		<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0

BRL - Below Reporting Limit

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



Certificate of Analysis Summary 684955

Tetra Tech- Midland, Midland, TX

Project Name: Tyrell Fee #1

Project Id: 212C-MD-02379

Contact: Clair Gonzales

Project Location: Lea Co, NM

Date Received in Lab: Fri 01.15.2021 16:40

Report Date: 01.20.2021 16:25

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i> <i>Field Id:</i> <i>Depth:</i> <i>Matrix:</i> <i>Sampled:</i>	684955-037 Bottom Hole 37 (4-4.5') SOIL 01.14.2021 00:00	684955-038 Bottom Hole 38 (4-4.5') SOIL 01.14.2021 00:00	684955-039 Bottom Hole 65 (3-3.5') SOIL 01.14.2021 00:00	684955-040 Bottom Hole 66 (3-3.5') SOIL 01.14.2021 00:00	684955-041 Bottom Hole 67 (3-3.5') SOIL 01.14.2021 00:00	684955-042 Bottom Hole 68 (3-3.5') SOIL 01.14.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.17.2021 12:00 01.17.2021 22:34 mg/kg RL	01.17.2021 12:00 01.17.2021 23:00 mg/kg RL	01.17.2021 12:00 01.18.2021 00:41 mg/kg RL	01.17.2021 12:00 01.18.2021 01:07 mg/kg RL	01.17.2021 12:00 01.18.2021 01:32 mg/kg RL	01.17.2021 12:00 01.18.2021 01:58 mg/kg RL
Benzene		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199
Toluene		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199
Ethylbenzene		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199
m,p-Xylenes		<0.00402 0.00402	<0.00401 0.00401	<0.00402 0.00402	<0.00399 0.00399	<0.00398 0.00398	<0.00398 0.00398
o-Xylene		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199
Total Xylenes		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199
Total BTEX		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199
Chloride by EPA 300	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.18.2021 13:45 01.18.2021 18:56 mg/kg RL	01.18.2021 13:45 01.18.2021 19:02 mg/kg RL	01.18.2021 13:45 01.18.2021 19:07 mg/kg RL	01.18.2021 13:45 01.18.2021 19:12 mg/kg RL	01.18.2021 13:45 01.18.2021 19:18 mg/kg RL	01.18.2021 13:45 01.18.2021 19:23 mg/kg RL
Chloride		862 5.02	1480 24.8	11.2 4.95	11.5 4.98	17.7 4.99	10.5 5.05
TPH by SW8015 Mod	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.18.2021 10:00 01.18.2021 18:21 mg/kg RL	01.18.2021 10:00 01.18.2021 18:43 mg/kg RL	01.18.2021 10:00 01.18.2021 19:05 mg/kg RL	01.18.2021 10:00 01.18.2021 19:27 mg/kg RL	01.18.2021 15:00 01.18.2021 21:14 mg/kg RL	01.18.2021 15:00 01.18.2021 22:18 mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0	<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0
Total TPH		<50.0 50.0	<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0

BRL - Below Reporting Limit

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



Certificate of Analysis Summary 684955



Tetra Tech- Midland, Midland, TX

Project Name: Tyrell Fee #1

Project Id: 212C-MD-02379

Contact: Clair Gonzales

Project Location: Lea Co, NM

Date Received in Lab: Fri 01.15.2021 16:40

Report Date: 01.20.2021 16:25

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	684955-043	684955-044	684955-045	684955-046	684955-047	684955-048
	<i>Field Id:</i>	Bottom Hole 69 (3-3.5')	Bottom Hole 70 (3-3.5')	Bottom Hole 71 (3-3.5')	Bottom Hole 72 (3-3.5')	Bottom Hole 73 (3-3.5')	Bottom Hole 74 (3-3.5')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	01.17.2021 12:00	01.17.2021 12:00	01.17.2021 12:00	01.17.2021 12:00	01.17.2021 12:00	01.17.2021 12:00
	<i>Analyzed:</i>	01.18.2021 02:23	01.18.2021 02:48	01.18.2021 03:14	01.18.2021 03:40	01.18.2021 04:05	01.18.2021 04:31
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199
m,p-Xylenes		<0.00400 0.00400	<0.00399 0.00399	<0.00401 0.00401	<0.00402 0.00402	<0.00401 0.00401	<0.00398 0.00398
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199
Chloride by EPA 300	<i>Extracted:</i>	01.18.2021 15:35	01.18.2021 15:35	01.18.2021 15:35	01.18.2021 15:35	01.18.2021 15:35	01.18.2021 15:35
	<i>Analyzed:</i>	01.18.2021 16:45	01.18.2021 17:01	01.18.2021 17:06	01.18.2021 17:11	01.18.2021 17:17	01.18.2021 17:32
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		<5.02 5.02	<4.96 4.96	6.32 4.99	6.36 4.97	<5.04 5.04	6.08 5.00
TPH by SW8015 Mod	<i>Extracted:</i>	01.18.2021 15:00	01.18.2021 15:00	01.18.2021 15:00	01.18.2021 15:00	01.18.2021 15:00	01.18.2021 15:00
	<i>Analyzed:</i>	01.18.2021 22:39	01.18.2021 23:00	01.18.2021 23:21	01.18.2021 23:42	01.19.2021 00:03	01.19.2021 00:24
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9	<49.8 49.8
Diesel Range Organics (DRO)		<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9	<49.8 49.8
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9	<49.8 49.8
Total TPH		<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9	<49.8 49.8

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 684955

Tetra Tech- Midland, Midland, TX

Project Name: Tyrell Fee #1

Project Id: 212C-MD-02379

Contact: Clair Gonzales

Project Location: Lea Co, NM

Date Received in Lab: Fri 01.15.2021 16:40

Report Date: 01.20.2021 16:25

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	684955-049	684955-050	684955-051	684955-052	684955-053	684955-054
	<i>Field Id:</i>	Bottom Hole 75 (4-4.5')	Bottom Hole 76 (4-4.5')	Bottom Hole 77 (4-4.5')	Bottom Hole 78 (4-4.5')	Bottom Hole 79 (4-4.5')	Bottom Hole 80 (4-4.5')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	01.18.2021 08:00	01.18.2021 08:00	01.18.2021 08:00	01.18.2021 09:15	01.18.2021 09:15	01.18.2021 09:15
	<i>Analyzed:</i>	01.18.2021 08:47	01.18.2021 09:12	01.18.2021 09:37	01.18.2021 10:03	01.18.2021 10:28	01.18.2021 10:53
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00402 0.00402	<0.00401 0.00401	<0.00397 0.00397	<0.00402 0.00402	<0.00399 0.00399	<0.00400 0.00400
o-Xylene		<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	01.18.2021 15:35	01.18.2021 15:35	01.18.2021 15:35	01.18.2021 15:35	01.18.2021 15:35	01.18.2021 15:35
	<i>Analyzed:</i>	01.18.2021 17:37	01.18.2021 17:43	01.18.2021 17:48	01.18.2021 17:53	01.18.2021 17:58	01.18.2021 18:14
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		7.36 4.98	2080 25.3	1200 5.05	1640 25.0	1410 25.0	2150 24.8
TPH by SW8015 Mod	<i>Extracted:</i>	01.18.2021 15:00	01.18.2021 15:00	01.18.2021 15:00	01.18.2021 15:00	01.18.2021 15:00	01.18.2021 15:00
	<i>Analyzed:</i>	01.19.2021 00:45	01.19.2021 01:06	01.19.2021 01:49	01.19.2021 02:10	01.19.2021 02:32	01.19.2021 02:54
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9	<50.0 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9	<50.0 50.0	<49.9 49.9
Total TPH		<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9	<50.0 50.0	<49.9 49.9

BRL - Below Reporting Limit

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



Certificate of Analysis Summary 684955



Tetra Tech- Midland, Midland, TX

Project Name: Tyrell Fee #1

Project Id: 212C-MD-02379

Contact: Clair Gonzales

Project Location: Lea Co, NM

Date Received in Lab: Fri 01.15.2021 16:40

Report Date: 01.20.2021 16:25

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	684955-055	684955-056	684955-057	684955-058	684955-059	684955-060
	<i>Field Id:</i>	Bottom Hole 81 (4-4.5')	Bottom Hole 82 (4-4.5')	Bottom Hole 83 (4-4.5')	Bottom Hole 84 (4-4.5')	Bottom Hole 85 (4-4.5')	Bottom Hole 86 (4-4.5')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	01.18.2021 09:15	01.18.2021 09:15	01.18.2021 09:15	01.18.2021 09:15	01.18.2021 09:15	01.19.2021 11:00
	<i>Analyzed:</i>	01.18.2021 11:18	01.18.2021 11:43	01.18.2021 17:34	01.18.2021 17:59	01.18.2021 14:15	01.20.2021 07:09
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	0.00238 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200
Toluene		<0.00199 0.00199	<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200
Ethylbenzene		<0.00199 0.00199	<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200
m,p-Xylenes		<0.00398 0.00398	<0.00398 0.00398	<0.00404 0.00404	<0.00399 0.00399	<0.00402 0.00402	<0.00401 0.00401
o-Xylene		<0.00199 0.00199	<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200
Total Xylenes		<0.00199 0.00199	<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200
Total BTEX		<0.00199 0.00199	0.00238 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	01.18.2021 15:35	01.18.2021 15:35	01.18.2021 15:35	01.18.2021 15:35	01.18.2021 15:35	01.18.2021 15:35
	<i>Analyzed:</i>	01.18.2021 18:19	01.18.2021 18:35	01.18.2021 18:40	01.18.2021 18:45	01.18.2021 18:50	01.18.2021 18:55
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		2640 25.0	2560 24.9	1620 25.2	2440 25.0	2070 24.8	2780 24.8
TPH by SW8015 Mod	<i>Extracted:</i>	01.18.2021 15:00	01.18.2021 15:00	01.18.2021 15:00	01.18.2021 15:00	01.18.2021 15:00	01.18.2021 15:00
	<i>Analyzed:</i>	01.19.2021 03:16	01.19.2021 03:37	01.19.2021 03:59	01.19.2021 04:21	01.19.2021 04:43	01.19.2021 05:05
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0
Total TPH		<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 684955

Tetra Tech- Midland, Midland, TX

Project Name: Tyrell Fee #1

Project Id: 212C-MD-02379

Contact: Clair Gonzales

Project Location: Lea Co, NM

Date Received in Lab: Fri 01.15.2021 16:40

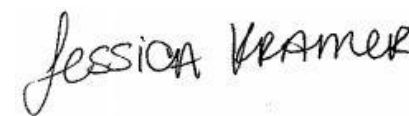
Report Date: 01.20.2021 16:25

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i> <i>Field Id:</i> <i>Depth:</i> <i>Matrix:</i> <i>Sampled:</i>	684955-061 Bottom Hole 87 (4-4.5') SOIL 01.14.2021 00:00	684955-062 Bottom Hole 88 (4-4.5') SOIL 01.14.2021 00:00	684955-063 Bottom Hole 89 (4-4.5') SOIL 01.14.2021 00:00	684955-064 Bottom Hole 90 (4-4.5') SOIL 01.14.2021 00:00	684955-065 Bottom Hole 91 (4-4.5') SOIL 01.14.2021 00:00	684955-066 Bottom Hole 92 (4-4.5') SOIL 01.14.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.18.2021 09:15 01.18.2021 15:04 mg/kg RL	01.18.2021 09:15 01.18.2021 15:29 mg/kg RL	01.18.2021 09:15 01.18.2021 15:54 mg/kg RL	01.18.2021 09:15 01.18.2021 16:19 mg/kg RL	01.18.2021 09:15 01.18.2021 16:44 mg/kg RL	01.18.2021 09:15 01.18.2021 17:09 mg/kg RL
Benzene		<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199
Toluene		<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199
Ethylbenzene		<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199
m,p-Xylenes		<0.00404 0.00404	<0.00404 0.00404	<0.00400 0.00400	<0.00398 0.00398	<0.00402 0.00402	<0.00398 0.00398
o-Xylene		<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199
Total Xylenes		<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199
Total BTEX		<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199
Chloride by EPA 300	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.18.2021 15:35 01.18.2021 19:01 mg/kg RL	01.18.2021 15:35 01.18.2021 19:06 mg/kg RL	01.18.2021 15:50 01.18.2021 19:37 mg/kg RL	01.18.2021 15:50 01.18.2021 19:52 mg/kg RL	01.18.2021 15:50 01.18.2021 19:58 mg/kg RL	01.18.2021 15:50 01.18.2021 20:03 mg/kg RL
Chloride		2360 25.1	4310 25.3	2600 X 25.0	1970 24.9	2370 25.0	3310 24.8
TPH by SW8015 Mod	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.18.2021 15:00 01.18.2021 19:06 mg/kg RL	01.18.2021 15:00 01.18.2021 20:06 mg/kg RL	01.18.2021 15:00 01.18.2021 20:25 mg/kg RL	01.18.2021 15:00 01.18.2021 20:44 mg/kg RL	01.18.2021 15:00 01.18.2021 21:03 mg/kg RL	01.18.2021 15:00 01.18.2021 21:22 mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Diesel Range Organics (DRO)		<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Total TPH		<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0

BRL - Below Reporting Limit

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



Certificate of Analysis Summary 684955

Tetra Tech- Midland, Midland, TX

Project Name: Tyrell Fee #1

Project Id: 212C-MD-02379

Contact: Clair Gonzales

Project Location: Lea Co, NM

Date Received in Lab: Fri 01.15.2021 16:40

Report Date: 01.20.2021 16:25

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i> <i>Field Id:</i> <i>Depth:</i> <i>Matrix:</i> <i>Sampled:</i>	684955-067 Bottom Hole 93 (4-4.5') SOIL 01.14.2021 00:00	684955-068 Bottom Hole 94 (4-4.5') SOIL 01.14.2021 00:00	684955-069 Bottom Hole 95 (4-4.5') SOIL 01.14.2021 00:00	684955-070 Bottom Hole 96 (4-4.5') SOIL 01.14.2021 00:00	684955-071 Bottom Hole 97 (4-4.5') SOIL 01.14.2021 00:00	684955-072 Bottom Hole 98 (4-4.5') SOIL 01.14.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.18.2021 09:15 01.18.2021 19:38 mg/kg RL	01.18.2021 09:15 01.19.2021 02:27 mg/kg RL	01.18.2021 09:15 01.18.2021 18:57 mg/kg RL	01.18.2021 16:30 01.19.2021 06:11 mg/kg RL	01.18.2021 16:30 01.19.2021 06:32 mg/kg RL	01.18.2021 16:30 01.19.2021 06:52 mg/kg RL
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
m,p-Xylenes		<0.00401 0.00401	<0.00400 0.00400	<0.00402 0.00402	<0.00399 0.00399	<0.00398 0.00398	<0.00401 0.00401
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.18.2021 15:50 01.18.2021 20:08 mg/kg RL	01.18.2021 15:50 01.18.2021 20:24 mg/kg RL	01.18.2021 15:50 01.18.2021 20:29 mg/kg RL	01.18.2021 15:50 01.18.2021 20:34 mg/kg RL	01.18.2021 15:50 01.18.2021 20:39 mg/kg RL	01.18.2021 15:50 01.18.2021 20:44 mg/kg RL
Chloride		1680 25.1	1250 4.95	2090 24.8	1520 25.2	2480 24.8	2980 25.0
TPH by SW8015 Mod	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.18.2021 15:00 01.18.2021 21:41 mg/kg RL	01.18.2021 15:00 01.18.2021 22:00 mg/kg RL	01.18.2021 15:00 01.18.2021 22:19 mg/kg RL	01.18.2021 15:00 01.18.2021 22:37 mg/kg RL	01.18.2021 15:00 01.18.2021 23:14 mg/kg RL	01.18.2021 15:00 01.18.2021 23:33 mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0
Total TPH		<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0

BRL - Below Reporting Limit

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





Tetra Tech- Midland, Midland, TX

Project Name: Tyrell Fee #1

Project Id: 212C-MD-02379

Contact: Clair Gonzales

Project Location: Lea Co, NM

Date Received in Lab: Fri 01.15.2021 16:40

Report Date: 01.20.2021 16:25

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i> <i>Field Id:</i> <i>Depth:</i> <i>Matrix:</i> <i>Sampled:</i>	684955-073 Bottom Hole 99 (4-4.5') SOIL 01.14.2021 00:00	684955-074 Bottom Hole 100 (4-4.5') SOIL 01.14.2021 00:00	684955-075 Bottom Hole 101 (4-4.5') SOIL 01.14.2021 00:00	684955-076 Bottom Hole 102 (4-4.5') SOIL 01.14.2021 00:00	684955-077 Bottom Hole 103 ((4-4.5') SOIL 01.14.2021 00:00	684955-078 Bottom Hole 104 (4-4.5') SOIL 01.14.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.18.2021 16:30 01.19.2021 07:13 mg/kg RL	01.18.2021 16:30 01.19.2021 07:33 mg/kg RL	01.18.2021 16:30 01.19.2021 07:54 mg/kg RL	01.18.2021 16:30 01.19.2021 08:55 mg/kg RL	01.18.2021 16:30 01.19.2021 09:15 mg/kg RL	01.18.2021 16:30 01.19.2021 09:36 mg/kg RL
Benzene		<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00202 0.00202	<0.00200 0.00200
Toluene		<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00202 0.00202	<0.00200 0.00200
Ethylbenzene		<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00202 0.00202	<0.00200 0.00200
m,p-Xylenes		<0.00398 0.00398	<0.00399 0.00399	<0.00400 0.00400	<0.00397 0.00397	<0.00403 0.00403	<0.00400 0.00400
o-Xylene		<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00202 0.00202	<0.00200 0.00200
Total Xylenes		<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00202 0.00202	<0.00200 0.00200
Total BTEX		<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00202 0.00202	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.18.2021 15:50 01.18.2021 20:50 mg/kg RL	01.18.2021 15:50 01.18.2021 21:05 mg/kg RL	01.18.2021 15:50 01.18.2021 21:10 mg/kg RL	01.18.2021 15:50 01.18.2021 21:26 mg/kg RL	01.18.2021 15:50 01.18.2021 21:31 mg/kg RL	01.18.2021 15:50 01.18.2021 21:36 mg/kg RL
Chloride		2920 25.0	1780 25.1	2710 24.8	2020 24.8	1930 24.8	2360 25.1
TPH by SW8015 Mod	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.18.2021 15:00 01.18.2021 23:51 mg/kg RL	01.18.2021 15:00 01.19.2021 00:10 mg/kg RL	01.18.2021 15:00 01.19.2021 00:29 mg/kg RL	01.18.2021 15:00 01.19.2021 00:47 mg/kg RL	01.18.2021 15:00 01.19.2021 01:06 mg/kg RL	01.18.2021 15:00 01.19.2021 01:25 mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0
Diesel Range Organics (DRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0
Total TPH		<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 684955



Tetra Tech- Midland, Midland, TX

Project Name: Tyrell Fee #1

Project Id: 212C-MD-02379

Contact: Clair Gonzales

Project Location: Lea Co, NM

Date Received in Lab: Fri 01.15.2021 16:40

Report Date: 01.20.2021 16:25

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i> <i>Field Id:</i> <i>Depth:</i> <i>Matrix:</i> <i>Sampled:</i>	684955-079 Bottom Hole 105 (4-4.5') SOIL 01.14.2021 00:00	684955-080 Bottom Hole 106 (4-4.5') SOIL 01.14.2021 00:00	684955-081 Bottom Hole 107 (4-4.5') SOIL 01.14.2021 00:00	684955-082 Bottom Hole 108 (4-4.5') SOIL 01.14.2021 00:00	684955-083 Bottom Hole 109 (4-4.5') SOIL 01.14.2021 00:00	684955-084 Bottom Hole 110 (4-4.5') SOIL 01.14.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.19.2021 11:00 01.20.2021 07:29 mg/kg RL	01.19.2021 11:00 01.20.2021 07:49 mg/kg RL	01.19.2021 11:00 01.20.2021 08:10 mg/kg RL	01.19.2021 11:00 01.20.2021 08:30 mg/kg RL	01.19.2021 11:00 01.20.2021 08:51 mg/kg RL	01.19.2021 11:00 01.20.2021 09:11 mg/kg RL
Benzene		<0.00201 0.00201	<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201
Toluene		<0.00201 0.00201	<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201
Ethylbenzene		<0.00201 0.00201	<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201
m,p-Xylenes		<0.00402 0.00402	<0.00402 0.00402	<0.00397 0.00397	<0.00400 0.00400	<0.00404 0.00404	<0.00402 0.00402
o-Xylene		<0.00201 0.00201	<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201
Total Xylenes		<0.00201 0.00201	<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201
Total BTEX		<0.00201 0.00201	<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201
Chloride by EPA 300	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.18.2021 15:50 01.18.2021 21:42 mg/kg RL	01.18.2021 15:50 01.18.2021 21:47 mg/kg RL	01.18.2021 15:50 01.18.2021 21:52 mg/kg RL	01.18.2021 15:50 01.18.2021 21:57 mg/kg RL	01.18.2021 16:15 01.18.2021 19:55 mg/kg RL	01.18.2021 16:15 01.18.2021 20:11 mg/kg RL
Chloride		4430 25.0	2910 25.0	2410 25.0	1990 25.2	1490 24.8	1900 24.9
TPH by SW8015 Mod	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.18.2021 15:00 01.19.2021 01:44 mg/kg RL	01.18.2021 15:00 01.19.2021 02:03 mg/kg RL	01.19.2021 16:00 01.19.2021 22:08 mg/kg RL	01.19.2021 16:00 01.19.2021 23:12 mg/kg RL	01.19.2021 16:00 01.19.2021 23:33 mg/kg RL	01.19.2021 16:00 01.19.2021 23:54 mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0	<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	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9
Total TPH		<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 684955



Tetra Tech- Midland, Midland, TX

Project Name: Tyrell Fee #1

Project Id: 212C-MD-02379

Contact: Clair Gonzales

Project Location: Lea Co, NM

Date Received in Lab: Fri 01.15.2021 16:40

Report Date: 01.20.2021 16:25

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i> <i>Field Id:</i> <i>Depth:</i> <i>Matrix:</i> <i>Sampled:</i>	684955-085 Bottom Hole 111 (4-4.5') SOIL 01.14.2021 00:00	684955-086 Bottom Hole 112 (1.5') SOIL 01.14.2021 00:00	684955-087 Bottom Hole 113 (1.5') SOIL 01.14.2021 00:00	684955-088 Bottom Hole 114 (1.5') SOIL 01.14.2021 00:00	684955-089 Bottom Hole 115 (1.5') SOIL 01.14.2021 00:00	684955-090 Bottom Hole 116 (1.5') SOIL 01.14.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.19.2021 11:00 01.20.2021 09:32 mg/kg RL	01.19.2021 11:00 01.20.2021 09:52 mg/kg RL	01.19.2021 14:00 01.19.2021 19:21 mg/kg RL	01.19.2021 14:00 01.19.2021 19:47 mg/kg RL	01.19.2021 14:00 01.19.2021 20:13 mg/kg RL	01.19.2021 14:00 01.19.2021 20:39 mg/kg RL
Benzene		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200
Toluene		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200
Ethylbenzene		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200
m,p-Xylenes		<0.00396 0.00396	<0.00399 0.00399	<0.00399 0.00399	<0.00401 0.00401	<0.00402 0.00402	<0.00401 0.00401
o-Xylene		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200
Total Xylenes		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200
Total BTEX		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.18.2021 16:15 01.18.2021 20:16 mg/kg RL	01.18.2021 16:15 01.18.2021 20:22 mg/kg RL	01.18.2021 16:15 01.18.2021 20:27 mg/kg RL	01.18.2021 16:15 01.18.2021 20:43 mg/kg RL	01.18.2021 16:15 01.18.2021 20:48 mg/kg RL	01.18.2021 16:15 01.18.2021 20:53 mg/kg RL
Chloride		1130 4.99	17.9 5.00	16.6 5.04	15.0 4.98	12.0 4.96	12.9 5.03
TPH by SW8015 Mod	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.19.2021 16:00 01.20.2021 00:16 mg/kg RL	01.19.2021 16:00 01.20.2021 00:37 mg/kg RL	01.19.2021 16:00 01.20.2021 00:58 mg/kg RL	01.19.2021 16:00 01.20.2021 01:20 mg/kg RL	01.19.2021 16:00 01.20.2021 01:41 mg/kg RL	01.19.2021 16:00 01.20.2021 02:03 mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9
Total TPH		<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 684955

Tetra Tech- Midland, Midland, TX

Project Name: Tyrell Fee #1

Project Id: 212C-MD-02379

Contact: Clair Gonzales

Project Location: Lea Co, NM

Date Received in Lab: Fri 01.15.2021 16:40

Report Date: 01.20.2021 16:25

Project Manager: Jessica Kramer

Analysis Requested	Lab Id: 684955-091 Field Id: Bottom Hole 117 (1.5') Depth: Matrix: SOIL Sampled: 01.14.2021 00:00					
BTEX by EPA 8021B	Extracted: 01.19.2021 14:00 Analyzed: 01.19.2021 21:05 Units/RL: mg/kg RL					
Benzene	<0.00200 0.00200					
Toluene	<0.00200 0.00200					
Ethylbenzene	<0.00200 0.00200					
m,p-Xylenes	<0.00399 0.00399					
o-Xylene	<0.00200 0.00200					
Total Xylenes	<0.00200 0.00200					
Total BTEX	<0.00200 0.00200					
Chloride by EPA 300	Extracted: 01.18.2021 16:15 Analyzed: 01.18.2021 20:59 Units/RL: mg/kg RL					
Chloride	12.8 5.00					
TPH by SW8015 Mod	Extracted: 01.19.2021 16:00 Analyzed: 01.20.2021 02:45 Units/RL: mg/kg RL					
Gasoline Range Hydrocarbons (GRO)	<50.0 50.0					
Diesel Range Organics (DRO)	<50.0 50.0					
Motor Oil Range Hydrocarbons (MRO)	<50.0 50.0					
Total TPH	<50.0 50.0					

BRL - Below Reporting Limit

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



Analytical Report 684955

for

Tetra Tech- Midland

Project Manager: Clair Gonzales

Tyrell Fee #1

212C-MD-02379

01.20.2021

Collected By: Client



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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



01.20.2021

Project Manager: **Clair Gonzales**

Tetra Tech- Midland

901 West Wall ST

Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **684955**

Tyrell Fee #1

Project Address: Lea Co, NM

Clair Gonzales:

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 Eurofins Xenco, LLC Report Number(s) 684955. 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 Eurofins Xenco, LLC. 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. 684955 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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



Sample Cross Reference 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Bottom Hole 1 (0.5')	S	01.14.2021 00:00		684955-001
Bottom Hole 2 (0.5')	S	01.14.2021 00:00		684955-002
Bottom Hole 3 (0.5')	S	01.14.2021 00:00		684955-003
Bottom Hole 4 (0.5')	S	01.14.2021 00:00		684955-004
Bottom Hole 5 (0.5')	S	01.14.2021 00:00		684955-005
Bottom Hole 6 (0.5')	S	01.14.2021 00:00		684955-006
Bottom Hole 7 (0.5')	S	01.14.2021 00:00		684955-007
Bottom Hole 8 (0.5')	S	01.14.2021 00:00		684955-008
Bottom Hole 9 (0.5')	S	01.14.2021 00:00		684955-009
Bottom Hole 10 (0.5')	S	01.14.2021 00:00		684955-010
Bottom Hole 11 (0.5')	S	01.14.2021 00:00		684955-011
Bottom Hole 12 (0.5')	S	01.14.2021 00:00		684955-012
Bottom Hole 13 (0.5')	S	01.14.2021 00:00		684955-013
Bottom Hole 14 (0.5')	S	01.14.2021 00:00		684955-014
Bottom Hole 15 (0.5')	S	01.14.2021 00:00		684955-015
Bottom Hole 16 (0.5')	S	01.14.2021 00:00		684955-016
Bottom Hole 17(0.5')	S	01.14.2021 00:00		684955-017
Bottom Hole 18 (0.5')	S	01.14.2021 00:00		684955-018
Bottom Hole 19 (0.5')	S	01.14.2021 00:00		684955-019
Bottom Hole 20 (0.5')	S	01.14.2021 00:00		684955-020
Bottom Hole 21 (0.5')	S	01.14.2021 00:00		684955-021
Bottom Hole 22 (2-2.5')	S	01.14.2021 00:00		684955-022
Bottom Hole 23 (2-2.5')	S	01.14.2021 00:00		684955-023
Bottom Hole 24 (2-2.5')	S	01.14.2021 00:00		684955-024
Bottom Hole 25 (2-2.5')	S	01.14.2021 00:00		684955-025
Bottom Hole 26 (2-2.5')	S	01.14.2021 00:00		684955-026
Bottom Hole 27 (2-2.5')	S	01.14.2021 00:00		684955-027
Bottom Hole 28 (2-2.5')	S	01.14.2021 00:00		684955-028
Bottom Hole 29 (2-2.5')	S	01.14.2021 00:00		684955-029
Bottom Hole 30 (2-2.5')	S	01.14.2021 00:00		684955-030
Bottom Hole 31 (4-4.5')	S	01.14.2021 00:00		684955-031
Bottom Hole 32 (4-4.5')	S	01.14.2021 00:00		684955-032
Bottom Hole 33 (4-4.5')	S	01.14.2021 00:00		684955-033
Bottom Hole 34 (4-4.5')	S	01.14.2021 00:00		684955-034
Bottom Hole 35 (4-4.5')	S	01.14.2021 00:00		684955-035
Bottom Hole 36 (4-4.5')	S	01.14.2021 00:00		684955-036
Bottom Hole 37 (4-4.5')	S	01.14.2021 00:00		684955-037
Bottom Hole 38 (4-4.5')	S	01.14.2021 00:00		684955-038
Bottom Hole 65 (3-3.5')	S	01.14.2021 00:00		684955-039
Bottom Hole 66 (3-3.5')	S	01.14.2021 00:00		684955-040
Bottom Hole 67 (3-3.5')	S	01.14.2021 00:00		684955-041
Bottom Hole 68 (3-3.5')	S	01.14.2021 00:00		684955-042
Bottom Hole 69 (3-3.5')	S	01.14.2021 00:00		684955-043



Sample Cross Reference 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Bottom Hole 70 (3-3.5')	S	01.14.2021 00:00	684955-044
Bottom Hole 71 (3-3.5')	S	01.14.2021 00:00	684955-045
Bottom Hole 72 (3-3.5')	S	01.14.2021 00:00	684955-046
Bottom Hole 73 (3-3.5')	S	01.14.2021 00:00	684955-047
Bottom Hole 74 (3-3.5')	S	01.14.2021 00:00	684955-048
Bottom Hole 75 (4-4.5')	S	01.14.2021 00:00	684955-049
Bottom Hole 76 (4-4.5')	S	01.14.2021 00:00	684955-050
Bottom Hole 77 (4-4.5')	S	01.14.2021 00:00	684955-051
Bottom Hole 78 (4-4.5')	S	01.14.2021 00:00	684955-052
Bottom Hole 79 (4-4.5')	S	01.14.2021 00:00	684955-053
Bottom Hole 80 (4-4.5')	S	01.14.2021 00:00	684955-054
Bottom Hole 81 (4-4.5')	S	01.14.2021 00:00	684955-055
Bottom Hole 82 (4-4.5')	S	01.14.2021 00:00	684955-056
Bottom Hole 83 (4-4.5')	S	01.14.2021 00:00	684955-057
Bottom Hole 84 (4-4.5')	S	01.14.2021 00:00	684955-058
Bottom Hole 85 (4-4.5')	S	01.14.2021 00:00	684955-059
Bottom Hole 86 (4-4.5')	S	01.14.2021 00:00	684955-060
Bottom Hole 87 (4-4.5')	S	01.14.2021 00:00	684955-061
Bottom Hole 88 (4-4.5')	S	01.14.2021 00:00	684955-062
Bottom Hole 89 (4-4.5')	S	01.14.2021 00:00	684955-063
Bottom Hole 90 (4-4.5')	S	01.14.2021 00:00	684955-064
Bottom Hole 91 (4-4.5')	S	01.14.2021 00:00	684955-065
Bottom Hole 92 (4-4.5')	S	01.14.2021 00:00	684955-066
Bottom Hole 93 (4-4.5')	S	01.14.2021 00:00	684955-067
Bottom Hole 94 (4-4.5')	S	01.14.2021 00:00	684955-068
Bottom Hole 95 (4-4.5')	S	01.14.2021 00:00	684955-069
Bottom Hole 96 (4-4.5')	S	01.14.2021 00:00	684955-070
Bottom Hole 97 (4-4.5')	S	01.14.2021 00:00	684955-071
Bottom Hole 98 (4-4.5')	S	01.14.2021 00:00	684955-072
Bottom Hole 99 (4-4.5')	S	01.14.2021 00:00	684955-073
Bottom Hole 100 (4-4.5')	S	01.14.2021 00:00	684955-074
Bottom Hole 101 (4-4.5')	S	01.14.2021 00:00	684955-075
Bottom Hole 102 (4-4.5')	S	01.14.2021 00:00	684955-076
Bottom Hole 103 ((4-4.5')	S	01.14.2021 00:00	684955-077
Bottom Hole 104 (4-4.5')	S	01.14.2021 00:00	684955-078
Bottom Hole 105 (4-4.5')	S	01.14.2021 00:00	684955-079
Bottom Hole 106 (4-4.5')	S	01.14.2021 00:00	684955-080
Bottom Hole 107 (4-4.5')	S	01.14.2021 00:00	684955-081
Bottom Hole 108 (4-4.5')	S	01.14.2021 00:00	684955-082
Bottom Hole 109 (4-4.5')	S	01.14.2021 00:00	684955-083
Bottom Hole 110 (4-4.5')	S	01.14.2021 00:00	684955-084
Bottom Hole 111 (4-4.5')	S	01.14.2021 00:00	684955-085
Bottom Hole 112 (1.5')	S	01.14.2021 00:00	684955-086
Bottom Hole 113 (1.5')	S	01.14.2021 00:00	684955-087



Sample Cross Reference 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Bottom Hole 114 (1.5')	S	01.14.2021 00:00	684955-088
Bottom Hole 115 (1.5')	S	01.14.2021 00:00	684955-089
Bottom Hole 116 (1.5')	S	01.14.2021 00:00	684955-090
Bottom Hole 117 (1.5')	S	01.14.2021 00:00	684955-091

**CASE NARRATIVE****Client Name: Tetra Tech- Midland****Project Name: Tyrell Fee #1**

Project ID: 212C-MD-02379
Work Order Number(s): 684955

Report Date: 01.20.2021
Date Received: 01.15.2021

Sample receipt non conformances and comments:**Sample receipt non conformances and comments per sample:**

None

Analytical non conformances and comments:

Batch: LBA-3148031 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered above QC limits . Samples affected are: 7719356-1-BKS,7719356-1-BSD,684925-001 S,684925-001 SD,684955-006,684955-004,684955-003,684955-002,684955-008,684955-001.

Batch: LBA-3148097 BTEX by EPA 8021B

Surrogate 1,4-Difluorobenzene recovered below QC limits. Matrix interferences is suspected;
Samples affected are: 684955-015,684955-019.

Surrogate 4-Bromofluorobenzene recovered above QC limits . Samples affected are: 7719370-1-BKS,684955-009 S,684955-009 SD,684955-010,684955-011,684955-012,684955-014,684955-016,684955-018,684955-022,684955-023,684955-024,684955-025,684955-026,684955-027,684955-009,684955-028.

Batch: LBA-3148099 BTEX by EPA 8021B

Surrogate 1,4-Difluorobenzene recovered below QC limits. Matrix interferences is suspected;
Samples affected are: 684955-029.

Surrogate 4-Bromofluorobenzene recovered above QC limits Samples affected are: 7719371-1-BKS,7719371-1-BLK,7719371-1-BSD,684955-029 S,684955-029 SD,684955-048,684955-038,684955-039,684955-040,684955-041,684955-042,684955-043,684955-044,684955-045,684955-046,684955-047,684955-034,684955-031,684955-030,684955-029,684955-037.

Batch: LBA-3148181 Chloride by EPA 300

Lab Sample ID 684955-073 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 684955-063, -064, -065, -066, -067, -068, -069, -070, -071, -072, -073, -074, -075, -076, -077, -078, -079, -080, -081, -082.

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

**CASE NARRATIVE****Client Name: Tetra Tech- Midland****Project Name: Tyrell Fee #1**

Project ID: 212C-MD-02379
Work Order Number(s): 684955

Report Date: 01.20.2021
Date Received: 01.15.2021

Batch: LBA-3148188 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered below QC limits. Matrix interferences is suspected.

Samples affected are: 684955-020.

Surrogate 1,4-Difluorobenzene recovered above QC limits. Matrix interferences is suspected.

Samples affected are: 684955-020.

Batch: LBA-3148196 BTEX by EPA 8021B

Benzene Relative Percent Difference (RPD) between matrix spike and duplicate was above quality control limits.

Samples in the analytical batch are: 684955-049, -050, -051, -052, -053, -054, -055, -056, -057, -058, -059, -061, -062, -063, -064, -065, -066

Surrogate 1,4-Difluorobenzene recovered above QC limits. Matrix interferences is suspected.

Samples affected are: 684955-057.

Surrogate 4-Bromofluorobenzene recovered above QC limits Data confirmed by re-analysis. Samples affected are: 7719476-1-BKS, 7719476-1-BLK, 7719476-1-BSD, 684955-049 S, 684955-049 SD, 684955-053, 684955-058, 684955-055, 684955-056, 684955-059, 684955-061, 684955-062, 684955-063, 684955-064, 684955-065, 684955-066, 684955-057, 684955-052, 684955-051, 684955-050, 684955-049, 684955-054.

Lab Sample ID 684955-049 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD).

Benzene recovered below QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference.

Samples in the analytical batch are: 684955-049, -050, -051, -052, -053, -054, -055, -056, -057, -058, -059, -061, -062, -063, -064, -065, -066.

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

Batch: LBA-3148219 TPH by SW8015 Mod

Surrogate 1-Chlorooctane recovered below QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 684955-002, 684955-003, 684955-004, 684955-005, 684955-019, 684955-008, 684955-009, 684955-015, 684955-016, 684955-006.

Batch: LBA-3148220 TPH by SW8015 Mod

Surrogate 1-Chlorooctane recovered below QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 684955-061, 684955-080, 684955-078, 684955-062.

**CASE NARRATIVE****Client Name: Tetra Tech- Midland****Project Name: Tyrell Fee #1**

Project ID: 212C-MD-02379
Work Order Number(s): 684955

Report Date: 01.20.2021
Date Received: 01.15.2021

Batch: LBA-3148225 TPH by SW8015 Mod

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

Samples affected are: 684955-031.

Batch: LBA-3148296 BTEX by EPA 8021B

Ethylbenzene, Toluene Relative Percent Difference (RPD) between matrix spike and duplicate were above quality control limits.

Samples in the analytical batch are: 684955-087, -088, -089, -090, -091

Surrogate 4-Bromofluorobenzene recovered below QC limits. Samples affected are: 7719546-1-BKS, 7719546-1-BLK.

Lab Sample ID 684955-087 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Toluene recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 684955-087, -088, -089, -090, -091.

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



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 1 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-001

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 12:30

% Moisture:

Seq Number: 3148167

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.2	5.03	mg/kg	01.18.2021 16:22		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 08:00

% Moisture:

Seq Number: 3148219

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 09:19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 09:19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 09:19	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 09:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	71	%	70-130	01.18.2021 09:19	
o-Terphenyl	84-15-1	79	%	70-130	01.18.2021 09:19	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 1 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-001

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.16.2021 10:00

% Moisture:

Seq Number: 3148031

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.16.2021 21:34	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.16.2021 21:34	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.16.2021 21:34	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.16.2021 21:34	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.16.2021 21:34	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.16.2021 21:34	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.16.2021 21:34	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	107	%	70-130	01.16.2021 21:34		
4-Bromofluorobenzene	460-00-4	179	%	70-130	01.16.2021 21:34	**	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 2 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-002

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 12:30

% Moisture:

Seq Number: 3148167

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	13.4	4.99	mg/kg	01.18.2021 16:27		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 08:00

% Moisture:

Seq Number: 3148219

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.18.2021 10:17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.18.2021 10:17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.18.2021 10:17	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.18.2021 10:17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	66	%	70-130	01.18.2021 10:17	**	
o-Terphenyl	84-15-1	73	%	70-130	01.18.2021 10:17		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 2 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-002

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.16.2021 10:00

% Moisture:

Seq Number: 3148031

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.16.2021 22:00	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.16.2021 22:00	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.16.2021 22:00	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.16.2021 22:00	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.16.2021 22:00	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.16.2021 22:00	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.16.2021 22:00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	153	%	70-130	01.16.2021 22:00	**	
1,4-Difluorobenzene	540-36-3	116	%	70-130	01.16.2021 22:00		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 3 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-003

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:30

% Moisture:

Seq Number: 3148190

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7.58	4.96	mg/kg	01.18.2021 22:28		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 08:00

% Moisture:

Seq Number: 3148219

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 10:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 10:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 10:36	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 10:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	65	%	70-130	01.18.2021 10:36	**
o-Terphenyl	84-15-1	72	%	70-130	01.18.2021 10:36	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 3 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-003

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.16.2021 10:00

% Moisture:

Seq Number: 3148031

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.16.2021 22:26	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.16.2021 22:26	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.16.2021 22:26	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.16.2021 22:26	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.16.2021 22:26	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.16.2021 22:26	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.16.2021 22:26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	106	%	70-130	01.16.2021 22:26		
4-Bromofluorobenzene	460-00-4	179	%	70-130	01.16.2021 22:26	**	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 4 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-004

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:30

% Moisture:

Seq Number: 3148190

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6.17	4.98	mg/kg	01.18.2021 22:44		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 08:00

% Moisture:

Seq Number: 3148219

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.18.2021 10:55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.18.2021 10:55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.18.2021 10:55	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.18.2021 10:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	65	%	70-130	01.18.2021 10:55	**
o-Terphenyl	84-15-1	72	%	70-130	01.18.2021 10:55	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 4 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-004

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.16.2021 10:00

% Moisture:

Seq Number: 3148031

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.16.2021 22:52	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.16.2021 22:52	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.16.2021 22:52	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.16.2021 22:52	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.16.2021 22:52	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.16.2021 22:52	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.16.2021 22:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	01.16.2021 22:52	
4-Bromofluorobenzene	460-00-4	187	%	70-130	01.16.2021 22:52	**



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 5 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-005

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:30

% Moisture:

Seq Number: 3148190

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7.38	4.99	mg/kg	01.18.2021 22:49		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 08:00

% Moisture:

Seq Number: 3148219

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 11:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 11:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 11:14	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 11:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	66	%	70-130	01.18.2021 11:14	**
o-Terphenyl	84-15-1	71	%	70-130	01.18.2021 11:14	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 5 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-005

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.16.2021 10:00

% Moisture:

Seq Number: 3148031

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.16.2021 23:18	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.16.2021 23:18	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.16.2021 23:18	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.16.2021 23:18	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.16.2021 23:18	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.16.2021 23:18	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.16.2021 23:18	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	106	%	70-130	01.16.2021 23:18		
1,4-Difluorobenzene	540-36-3	92	%	70-130	01.16.2021 23:18		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 6 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-006

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:30

% Moisture:

Seq Number: 3148190

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5.66	5.04	mg/kg	01.18.2021 22:54		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 08:00

% Moisture:

Seq Number: 3148219

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 11:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 11:34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 11:34	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 11:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	65	%	70-130	01.18.2021 11:34	**
o-Terphenyl	84-15-1	71	%	70-130	01.18.2021 11:34	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 6 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-006

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.16.2021 10:00

% Moisture:

Seq Number: 3148031

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.16.2021 23:44	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.16.2021 23:44	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.16.2021 23:44	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.16.2021 23:44	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.16.2021 23:44	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.16.2021 23:44	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.16.2021 23:44	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	109	%	70-130	01.16.2021 23:44		
4-Bromofluorobenzene	460-00-4	172	%	70-130	01.16.2021 23:44	**	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 7 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-007

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:30

% Moisture:

Seq Number: 3148190

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6.08	4.96	mg/kg	01.18.2021 22:59		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 08:00

% Moisture:

Seq Number: 3148219

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.18.2021 11:53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.18.2021 11:53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.18.2021 11:53	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.18.2021 11:53	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	72	%	70-130	01.18.2021 11:53		
o-Terphenyl	84-15-1	75	%	70-130	01.18.2021 11:53		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 7 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-007

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.16.2021 10:00

% Moisture:

Seq Number: 3148031

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.17.2021 00:10	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.17.2021 00:10	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.17.2021 00:10	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.17.2021 00:10	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.17.2021 00:10	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.17.2021 00:10	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.17.2021 00:10	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	101	%	70-130	01.17.2021 00:10		
1,4-Difluorobenzene	540-36-3	74	%	70-130	01.17.2021 00:10		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 8 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-008

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:30

% Moisture:

Seq Number: 3148190

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	48.6	5.00	mg/kg	01.18.2021 23:15		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 08:00

% Moisture:

Seq Number: 3148219

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.18.2021 12:12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.18.2021 12:12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.18.2021 12:12	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.18.2021 12:12	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	66	%	70-130	01.18.2021 12:12	**	
o-Terphenyl	84-15-1	73	%	70-130	01.18.2021 12:12		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 8 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-008

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.16.2021 10:00

% Moisture:

Seq Number: 3148031

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.17.2021 00:35	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.17.2021 00:35	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.17.2021 00:35	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.17.2021 00:35	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.17.2021 00:35	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.17.2021 00:35	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.17.2021 00:35	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	112	%	70-130	01.17.2021 00:35		
4-Bromofluorobenzene	460-00-4	171	%	70-130	01.17.2021 00:35	**	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 9 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-009

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:30

% Moisture:

Seq Number: 3148190

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	19.0	4.97	mg/kg	01.18.2021 23:20		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 08:00

% Moisture:

Seq Number: 3148219

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 12:32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 12:32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 12:32	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 12:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	62	%	70-130	01.18.2021 12:32	**
o-Terphenyl	84-15-1	71	%	70-130	01.18.2021 12:32	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 9 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-009

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 10:00

% Moisture:

Seq Number: 3148097

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.17.2021 04:51	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.17.2021 04:51	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.17.2021 04:51	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.17.2021 04:51	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.17.2021 04:51	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.17.2021 04:51	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.17.2021 04:51	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	150	%	70-130	01.17.2021 04:51	**	
1,4-Difluorobenzene	540-36-3	74	%	70-130	01.17.2021 04:51		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 10 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-010

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:30

% Moisture:

Seq Number: 3148190

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	18.2	4.96	mg/kg	01.18.2021 23:25		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 08:00

% Moisture:

Seq Number: 3148219

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.18.2021 12:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.18.2021 12:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.18.2021 12:51	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.18.2021 12:51	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	118	%	70-130	01.18.2021 12:51		
o-Terphenyl	84-15-1	127	%	70-130	01.18.2021 12:51		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 10 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-010

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 10:00

% Moisture:

Seq Number: 3148097

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.17.2021 05:16	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.17.2021 05:16	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.17.2021 05:16	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.17.2021 05:16	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.17.2021 05:16	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.17.2021 05:16	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.17.2021 05:16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	132	%	70-130	01.17.2021 05:16	**	
1,4-Difluorobenzene	540-36-3	86	%	70-130	01.17.2021 05:16		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 11 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-011

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:30

% Moisture:

Seq Number: 3148190

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	77.6	4.95	mg/kg	01.18.2021 23:31		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 08:00

% Moisture:

Seq Number: 3148219

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.18.2021 13:30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.18.2021 13:30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.18.2021 13:30	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.18.2021 13:30	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	110	%	70-130	01.18.2021 13:30		
o-Terphenyl	84-15-1	120	%	70-130	01.18.2021 13:30		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 11 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-011

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 10:00

% Moisture:

Seq Number: 3148097

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.17.2021 05:42	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.17.2021 05:42	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.17.2021 05:42	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.17.2021 05:42	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.17.2021 05:42	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.17.2021 05:42	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.17.2021 05:42	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	135	%	70-130	01.17.2021 05:42	**	
1,4-Difluorobenzene	540-36-3	94	%	70-130	01.17.2021 05:42		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 12 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-012

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:30

% Moisture:

Seq Number: 3148190

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	123	5.03	mg/kg	01.18.2021 23:36		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 08:00

% Moisture:

Seq Number: 3148219

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 13:50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 13:50	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 13:50	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 13:50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	71	%	70-130	01.18.2021 13:50		
o-Terphenyl	84-15-1	77	%	70-130	01.18.2021 13:50		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 12 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-012

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 10:00

% Moisture:

Seq Number: 3148097

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.17.2021 06:08	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.17.2021 06:08	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.17.2021 06:08	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.17.2021 06:08	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.17.2021 06:08	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.17.2021 06:08	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.17.2021 06:08	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	172	%	70-130	01.17.2021 06:08	**	
1,4-Difluorobenzene	540-36-3	109	%	70-130	01.17.2021 06:08		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 13 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-013

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:30

% Moisture:

Seq Number: 3148190

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	15.3	5.00	mg/kg	01.18.2021 23:41		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 08:00

% Moisture:

Seq Number: 3148219

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 14:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 14:09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 14:09	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 14:09	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	107	%	70-130	01.18.2021 14:09		
o-Terphenyl	84-15-1	117	%	70-130	01.18.2021 14:09		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 13 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-013

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 10:00

% Moisture:

Seq Number: 3148097

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.17.2021 06:33	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.17.2021 06:33	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.17.2021 06:33	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.17.2021 06:33	U	1
o-Xylene	95-47-6	0.00614	0.00201	mg/kg	01.17.2021 06:33		1
Total Xylenes	1330-20-7	0.00614	0.00201	mg/kg	01.17.2021 06:33		1
Total BTEX		0.00614	0.00201	mg/kg	01.17.2021 06:33		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	73	%	70-130	01.17.2021 06:33	
4-Bromofluorobenzene	460-00-4	111	%	70-130	01.17.2021 06:33	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 14 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-014

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:30

% Moisture:

Seq Number: 3148190

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8.56	4.98	mg/kg	01.18.2021 23:57		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 08:00

% Moisture:

Seq Number: 3148219

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.18.2021 14:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.18.2021 14:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.18.2021 14:29	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.18.2021 14:29	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	116	%	70-130	01.18.2021 14:29		
o-Terphenyl	84-15-1	129	%	70-130	01.18.2021 14:29		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 14 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-014

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 10:00

% Moisture:

Seq Number: 3148097

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.17.2021 06:59	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.17.2021 06:59	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.17.2021 06:59	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.17.2021 06:59	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.17.2021 06:59	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.17.2021 06:59	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.17.2021 06:59	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	150	%	70-130	01.17.2021 06:59	**	
1,4-Difluorobenzene	540-36-3	109	%	70-130	01.17.2021 06:59		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 15 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-015

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:30

% Moisture:

Seq Number: 3148190

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	35.4	4.95	mg/kg	01.19.2021 08:07		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 08:00

% Moisture:

Seq Number: 3148219

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.18.2021 14:48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.18.2021 14:48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.18.2021 14:48	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.18.2021 14:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	62	%	70-130	01.18.2021 14:48	**
o-Terphenyl	84-15-1	70	%	70-130	01.18.2021 14:48	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 15 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-015

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 10:00

% Moisture:

Seq Number: 3148097

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.17.2021 07:25	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.17.2021 07:25	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.17.2021 07:25	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.17.2021 07:25	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.17.2021 07:25	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.17.2021 07:25	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.17.2021 07:25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	51	%	70-130	01.17.2021 07:25	**	
4-Bromofluorobenzene	460-00-4	85	%	70-130	01.17.2021 07:25		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 16 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-016

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:30

% Moisture:

Seq Number: 3148190

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	18.1	5.04	mg/kg	01.19.2021 08:22		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 08:00

% Moisture:

Seq Number: 3148219

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 15:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 15:08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 15:08	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 15:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	66	%	70-130	01.18.2021 15:08	**
o-Terphenyl	84-15-1	71	%	70-130	01.18.2021 15:08	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 16 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-016

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 10:00

% Moisture:

Seq Number: 3148097

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.17.2021 07:51	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.17.2021 07:51	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.17.2021 07:51	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.17.2021 07:51	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.17.2021 07:51	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.17.2021 07:51	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.17.2021 07:51	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	142	%	70-130	01.17.2021 07:51	**	
1,4-Difluorobenzene	540-36-3	99	%	70-130	01.17.2021 07:51		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 17(0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-017

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:30

% Moisture:

Seq Number: 3148190

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	17.9	4.99	mg/kg	01.19.2021 08:27		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 08:00

% Moisture:

Seq Number: 3148219

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.18.2021 15:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.18.2021 15:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.18.2021 15:28	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.18.2021 15:28	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	115	%	70-130	01.18.2021 15:28		
o-Terphenyl	84-15-1	129	%	70-130	01.18.2021 15:28		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 17(0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-017

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 10:00

% Moisture:

Seq Number: 3148097

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.17.2021 08:16	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.17.2021 08:16	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.17.2021 08:16	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.17.2021 08:16	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.17.2021 08:16	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.17.2021 08:16	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.17.2021 08:16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	110	%	70-130	01.17.2021 08:16		
1,4-Difluorobenzene	540-36-3	95	%	70-130	01.17.2021 08:16		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 18 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-018

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:30

% Moisture:

Seq Number: 3148190

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	30.5	4.96	mg/kg	01.19.2021 08:33		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 08:00

% Moisture:

Seq Number: 3148219

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.18.2021 15:47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.18.2021 15:47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.18.2021 15:47	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.18.2021 15:47	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	120	%	70-130	01.18.2021 15:47		
o-Terphenyl	84-15-1	130	%	70-130	01.18.2021 15:47		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 18 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-018

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 10:00

% Moisture:

Seq Number: 3148097

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.17.2021 08:42	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.17.2021 08:42	U	1
Ethylbenzene	100-41-4	0.00502	0.00200	mg/kg	01.17.2021 08:42		1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.17.2021 08:42	U	1
o-Xylene	95-47-6	0.00670	0.00200	mg/kg	01.17.2021 08:42		1
Total Xylenes	1330-20-7	0.00670	0.00200	mg/kg	01.17.2021 08:42		1
Total BTEX		0.0117	0.00200	mg/kg	01.17.2021 08:42		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	137	%	70-130	01.17.2021 08:42	**	
1,4-Difluorobenzene	540-36-3	108	%	70-130	01.17.2021 08:42		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 19 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-019

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:30

% Moisture:

Seq Number: 3148190

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.7	4.95	mg/kg	01.19.2021 08:38		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 08:00

% Moisture:

Seq Number: 3148219

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 17:10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 17:10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 17:10	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 17:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	62	%	70-130	01.18.2021 17:10	**
o-Terphenyl	84-15-1	70	%	70-130	01.18.2021 17:10	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 19 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-019

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 10:00

% Moisture:

Seq Number: 3148097

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.17.2021 10:26	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.17.2021 10:26	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.17.2021 10:26	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.17.2021 10:26	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.17.2021 10:26	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.17.2021 10:26	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.17.2021 10:26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	126	%	70-130	01.17.2021 10:26		
1,4-Difluorobenzene	540-36-3	65	%	70-130	01.17.2021 10:26	**	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 20 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-020

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:30

% Moisture:

Seq Number: 3148190

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	102	5.05	mg/kg	01.19.2021 08:43		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 08:00

% Moisture:

Seq Number: 3148219

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 17:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 17:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 17:29	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 17:29	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	119	%	70-130	01.18.2021 17:29		
o-Terphenyl	84-15-1	130	%	70-130	01.18.2021 17:29		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 20 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-020

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 09:15

% Moisture:

Seq Number: 3148188

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.18.2021 19:59	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.18.2021 19:59	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.18.2021 19:59	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.18.2021 19:59	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.18.2021 19:59	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.18.2021 19:59	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.18.2021 19:59	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	68	%	70-130	01.18.2021 19:59	**	
1,4-Difluorobenzene	540-36-3	133	%	70-130	01.18.2021 19:59	**	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 21 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-021

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:30

% Moisture:

Seq Number: 3148190

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.9	5.05	mg/kg	01.19.2021 08:48		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 10:00

% Moisture:

Seq Number: 3148225

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 11:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 11:16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 11:16	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 11:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-130	01.18.2021 11:16	
o-Terphenyl	84-15-1	97	%	70-130	01.18.2021 11:16	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 21 (0.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-021

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 10:00

% Moisture:

Seq Number: 3148097

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00449	0.00201	mg/kg	01.17.2021 11:35		1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.17.2021 11:35	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.17.2021 11:35	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.17.2021 11:35	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.17.2021 11:35	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.17.2021 11:35	U	1
Total BTEX		0.00449	0.00201	mg/kg	01.17.2021 11:35		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	01.17.2021 11:35		
4-Bromofluorobenzene	460-00-4	110	%	70-130	01.17.2021 11:35		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 22 (2-2.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-022

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:30

% Moisture:

Seq Number: 3148190

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	45.5	5.05	mg/kg	01.19.2021 08:53		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 10:00

% Moisture:

Seq Number: 3148225

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.18.2021 12:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.18.2021 12:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.18.2021 12:22	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.18.2021 12:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-130	01.18.2021 12:22	
o-Terphenyl	84-15-1	95	%	70-130	01.18.2021 12:22	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 22 (2-2.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-022

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 10:00

% Moisture:

Seq Number: 3148097

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.17.2021 12:00	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.17.2021 12:00	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.17.2021 12:00	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.17.2021 12:00	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.17.2021 12:00	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.17.2021 12:00	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.17.2021 12:00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	112	%	70-130	01.17.2021 12:00		
4-Bromofluorobenzene	460-00-4	181	%	70-130	01.17.2021 12:00	**	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 23 (2-2.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-023

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:45

% Moisture:

Seq Number: 3148169

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	15.7	5.00	mg/kg	01.18.2021 16:59		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 10:00

% Moisture:

Seq Number: 3148225

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 12:44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 12:44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 12:44	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 12:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-130	01.18.2021 12:44	
o-Terphenyl	84-15-1	101	%	70-130	01.18.2021 12:44	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 23 (2-2.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-023

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 10:00

% Moisture:

Seq Number: 3148097

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.17.2021 12:26	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.17.2021 12:26	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.17.2021 12:26	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.17.2021 12:26	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.17.2021 12:26	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.17.2021 12:26	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.17.2021 12:26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	185	%	70-130	01.17.2021 12:26	**	
1,4-Difluorobenzene	540-36-3	107	%	70-130	01.17.2021 12:26		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 24 (2-2.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-024

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:45

% Moisture:

Seq Number: 3148169

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	13.2	4.98	mg/kg	01.18.2021 17:15		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 10:00

% Moisture:

Seq Number: 3148225

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 13:06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 13:06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 13:06	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 13:06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-130	01.18.2021 13:06	
o-Terphenyl	84-15-1	104	%	70-130	01.18.2021 13:06	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 24 (2-2.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-024

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 10:00

% Moisture:

Seq Number: 3148097

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.17.2021 12:52	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.17.2021 12:52	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.17.2021 12:52	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.17.2021 12:52	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.17.2021 12:52	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.17.2021 12:52	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.17.2021 12:52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	170	%	70-130	01.17.2021 12:52	**	
1,4-Difluorobenzene	540-36-3	99	%	70-130	01.17.2021 12:52		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 25 (2-2.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-025

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:45

% Moisture:

Seq Number: 3148169

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.2	4.95	mg/kg	01.18.2021 17:20		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 10:00

% Moisture:

Seq Number: 3148225

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.18.2021 13:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.18.2021 13:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.18.2021 13:28	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.18.2021 13:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-130	01.18.2021 13:28	
o-Terphenyl	84-15-1	112	%	70-130	01.18.2021 13:28	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 25 (2-2.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-025

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 10:00

% Moisture:

Seq Number: 3148097

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.17.2021 13:18	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.17.2021 13:18	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.17.2021 13:18	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.17.2021 13:18	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.17.2021 13:18	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.17.2021 13:18	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.17.2021 13:18	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	174	%	70-130	01.17.2021 13:18	**	
1,4-Difluorobenzene	540-36-3	102	%	70-130	01.17.2021 13:18		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 26 (2-2.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-026

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:45

% Moisture:

Seq Number: 3148169

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	19.3	4.99	mg/kg	01.18.2021 17:26		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 10:00

% Moisture:

Seq Number: 3148225

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 13:50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 13:50	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 13:50	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 13:50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	121	%	70-130	01.18.2021 13:50	
o-Terphenyl	84-15-1	120	%	70-130	01.18.2021 13:50	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 26 (2-2.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-026

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 10:00

% Moisture:

Seq Number: 3148097

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.17.2021 13:44	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.17.2021 13:44	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.17.2021 13:44	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.17.2021 13:44	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.17.2021 13:44	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.17.2021 13:44	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.17.2021 13:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	01.17.2021 13:44	
4-Bromofluorobenzene	460-00-4	184	%	70-130	01.17.2021 13:44	**



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 27 (2-2.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-027

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:45

% Moisture:

Seq Number: 3148169

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	14.0	5.04	mg/kg	01.18.2021 17:31		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 10:00

% Moisture:

Seq Number: 3148225

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.18.2021 14:12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.18.2021 14:12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.18.2021 14:12	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.18.2021 14:12	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	112	%	70-130	01.18.2021 14:12		
o-Terphenyl	84-15-1	115	%	70-130	01.18.2021 14:12		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 27 (2-2.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-027

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 10:00

% Moisture:

Seq Number: 3148097

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.17.2021 14:10	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.17.2021 14:10	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.17.2021 14:10	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.17.2021 14:10	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.17.2021 14:10	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.17.2021 14:10	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.17.2021 14:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.17.2021 14:10	
4-Bromofluorobenzene	460-00-4	173	%	70-130	01.17.2021 14:10	**



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 28 (2-2.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-028

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:45

% Moisture:

Seq Number: 3148169

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.2	4.98	mg/kg	01.18.2021 17:47		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 10:00

% Moisture:

Seq Number: 3148225

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 14:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 14:34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 14:34	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 14:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	121	%	70-130	01.18.2021 14:34	
o-Terphenyl	84-15-1	128	%	70-130	01.18.2021 14:34	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 28 (2-2.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-028

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 10:00

% Moisture:

Seq Number: 3148097

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.17.2021 14:36	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.17.2021 14:36	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.17.2021 14:36	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.17.2021 14:36	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.17.2021 14:36	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.17.2021 14:36	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.17.2021 14:36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	188	%	70-130	01.17.2021 14:36	**	
1,4-Difluorobenzene	540-36-3	109	%	70-130	01.17.2021 14:36		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 29 (2-2.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-029

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:45

% Moisture:

Seq Number: 3148169

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	19.5	5.00	mg/kg	01.18.2021 17:52		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 10:00

% Moisture:

Seq Number: 3148225

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 14:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 14:56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 14:56	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 14:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-130	01.18.2021 14:56	
o-Terphenyl	84-15-1	122	%	70-130	01.18.2021 14:56	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 29 (2-2.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-029

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 12:00

% Moisture:

Seq Number: 3148099

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.17.2021 19:03	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.17.2021 19:03	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.17.2021 19:03	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.17.2021 19:03	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.17.2021 19:03	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.17.2021 19:03	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.17.2021 19:03	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	67	%	70-130	01.17.2021 19:03	**	
4-Bromofluorobenzene	460-00-4	131	%	70-130	01.17.2021 19:03	**	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 30 (2-2.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-030

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:45

% Moisture:

Seq Number: 3148169

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.1	4.95	mg/kg	01.18.2021 17:58		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 10:00

% Moisture:

Seq Number: 3148225

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.18.2021 15:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.18.2021 15:24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.18.2021 15:24	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.18.2021 15:24	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	120	%	70-130	01.18.2021 15:24		
o-Terphenyl	84-15-1	125	%	70-130	01.18.2021 15:24		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 30 (2-2.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-030

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 12:00

% Moisture:

Seq Number: 3148099

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.17.2021 19:29	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.17.2021 19:29	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.17.2021 19:29	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.17.2021 19:29	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.17.2021 19:29	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.17.2021 19:29	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.17.2021 19:29	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	84	%	70-130	01.17.2021 19:29		
4-Bromofluorobenzene	460-00-4	167	%	70-130	01.17.2021 19:29	**	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 31 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-031

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:45

% Moisture:

Seq Number: 3148169

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1430	25.2	mg/kg	01.18.2021 18:03		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 10:00

% Moisture:

Seq Number: 3148225

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 16:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 16:09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 16:09	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 16:09	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	128	%	70-130	01.18.2021 16:09		
o-Terphenyl	84-15-1	134	%	70-130	01.18.2021 16:09	**	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 31 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-031

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 12:00

% Moisture:

Seq Number: 3148099

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.17.2021 19:55	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.17.2021 19:55	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.17.2021 19:55	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.17.2021 19:55	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.17.2021 19:55	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.17.2021 19:55	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.17.2021 19:55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	83	%	70-130	01.17.2021 19:55		
4-Bromofluorobenzene	460-00-4	167	%	70-130	01.17.2021 19:55	**	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 32 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-032

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:45

% Moisture:

Seq Number: 3148169

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1630	24.9	mg/kg	01.18.2021 18:08		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 10:00

% Moisture:

Seq Number: 3148225

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 16:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 16:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 16:31	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 16:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-130	01.18.2021 16:31	
o-Terphenyl	84-15-1	115	%	70-130	01.18.2021 16:31	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 32 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-032

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 12:00

% Moisture:

Seq Number: 3148099

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.17.2021 20:22	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.17.2021 20:22	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.17.2021 20:22	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.17.2021 20:22	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.17.2021 20:22	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.17.2021 20:22	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.17.2021 20:22	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	117	%	70-130	01.17.2021 20:22		
1,4-Difluorobenzene	540-36-3	93	%	70-130	01.17.2021 20:22		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 33 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-033

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:45

% Moisture:

Seq Number: 3148169

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	656	4.99	mg/kg	01.18.2021 18:14		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 10:00

% Moisture:

Seq Number: 3148225

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.18.2021 16:53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.18.2021 16:53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.18.2021 16:53	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.18.2021 16:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-130	01.18.2021 16:53	
o-Terphenyl	84-15-1	113	%	70-130	01.18.2021 16:53	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 33 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-033

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 12:00

% Moisture:

Seq Number: 3148099

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.17.2021 20:48	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.17.2021 20:48	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.17.2021 20:48	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.17.2021 20:48	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.17.2021 20:48	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.17.2021 20:48	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.17.2021 20:48	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	109	%	70-130	01.17.2021 20:48		
1,4-Difluorobenzene	540-36-3	89	%	70-130	01.17.2021 20:48		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 34 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-034

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:45

% Moisture:

Seq Number: 3148169

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1160	5.04	mg/kg	01.18.2021 18:30		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 10:00

% Moisture:

Seq Number: 3148225

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 17:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 17:15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 17:15	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 17:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-130	01.18.2021 17:15	
o-Terphenyl	84-15-1	112	%	70-130	01.18.2021 17:15	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 34 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-034

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 12:00

% Moisture:

Seq Number: 3148099

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.17.2021 21:14	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.17.2021 21:14	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.17.2021 21:14	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.17.2021 21:14	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.17.2021 21:14	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.17.2021 21:14	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.17.2021 21:14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	92	%	70-130	01.17.2021 21:14		
4-Bromofluorobenzene	460-00-4	168	%	70-130	01.17.2021 21:14	**	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 35 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-035

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:45

% Moisture:

Seq Number: 3148169

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	947	4.98	mg/kg	01.18.2021 18:35		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 10:00

% Moisture:

Seq Number: 3148225

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.18.2021 17:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.18.2021 17:37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.18.2021 17:37	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.18.2021 17:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-130	01.18.2021 17:37	
o-Terphenyl	84-15-1	112	%	70-130	01.18.2021 17:37	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 35 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-035

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 09:15

% Moisture:

Seq Number: 3148188

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.18.2021 20:19	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.18.2021 20:19	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.18.2021 20:19	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.18.2021 20:19	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.18.2021 20:19	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.18.2021 20:19	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.18.2021 20:19	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	109	%	70-130	01.18.2021 20:19		
1,4-Difluorobenzene	540-36-3	98	%	70-130	01.18.2021 20:19		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 36 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-036

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:45

% Moisture:

Seq Number: 3148169

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1030	5.00	mg/kg	01.18.2021 18:51		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 10:00

% Moisture:

Seq Number: 3148225

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 17:59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 17:59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 17:59	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 17:59	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	113	%	70-130	01.18.2021 17:59		
o-Terphenyl	84-15-1	109	%	70-130	01.18.2021 17:59		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 36 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-036

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 12:00

% Moisture:

Seq Number: 3148099

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.17.2021 22:07	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.17.2021 22:07	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.17.2021 22:07	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.17.2021 22:07	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.17.2021 22:07	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.17.2021 22:07	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.17.2021 22:07	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	121	%	70-130	01.17.2021 22:07		
1,4-Difluorobenzene	540-36-3	94	%	70-130	01.17.2021 22:07		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 37 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-037

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:45

% Moisture:

Seq Number: 3148169

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	862	5.02	mg/kg	01.18.2021 18:56		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 10:00

% Moisture:

Seq Number: 3148225

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 18:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 18:21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 18:21	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 18:21	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	110	%	70-130	01.18.2021 18:21		
o-Terphenyl	84-15-1	109	%	70-130	01.18.2021 18:21		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 37 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-037

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 12:00

% Moisture:

Seq Number: 3148099

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.17.2021 22:34	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.17.2021 22:34	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.17.2021 22:34	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.17.2021 22:34	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.17.2021 22:34	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.17.2021 22:34	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.17.2021 22:34	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	154	%	70-130	01.17.2021 22:34	**	
1,4-Difluorobenzene	540-36-3	89	%	70-130	01.17.2021 22:34		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 38 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-038

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:45

% Moisture:

Seq Number: 3148169

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1480	24.8	mg/kg	01.18.2021 19:02		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 10:00

% Moisture:

Seq Number: 3148225

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.18.2021 18:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.18.2021 18:43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.18.2021 18:43	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.18.2021 18:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-130	01.18.2021 18:43	
o-Terphenyl	84-15-1	102	%	70-130	01.18.2021 18:43	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 38 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-038

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 12:00

% Moisture:

Seq Number: 3148099

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.17.2021 23:00	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.17.2021 23:00	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.17.2021 23:00	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.17.2021 23:00	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.17.2021 23:00	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.17.2021 23:00	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.17.2021 23:00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	185	%	70-130	01.17.2021 23:00	**	
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.17.2021 23:00		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 65 (3-3.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-039

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:45

% Moisture:

Seq Number: 3148169

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.2	4.95	mg/kg	01.18.2021 19:07		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 10:00

% Moisture:

Seq Number: 3148225

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.18.2021 19:05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.18.2021 19:05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.18.2021 19:05	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.18.2021 19:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-130	01.18.2021 19:05	
o-Terphenyl	84-15-1	100	%	70-130	01.18.2021 19:05	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 65 (3-3.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-039

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 12:00

% Moisture:

Seq Number: 3148099

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.18.2021 00:41	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.18.2021 00:41	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.18.2021 00:41	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.18.2021 00:41	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.18.2021 00:41	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.18.2021 00:41	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.18.2021 00:41	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	182	%	70-130	01.18.2021 00:41	**	
1,4-Difluorobenzene	540-36-3	98	%	70-130	01.18.2021 00:41		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 66 (3-3.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-040

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:45

% Moisture:

Seq Number: 3148169

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.5	4.98	mg/kg	01.18.2021 19:12		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 10:00

% Moisture:

Seq Number: 3148225

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 19:27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 19:27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 19:27	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 19:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-130	01.18.2021 19:27	
o-Terphenyl	84-15-1	103	%	70-130	01.18.2021 19:27	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 66 (3-3.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-040

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 12:00

% Moisture:

Seq Number: 3148099

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.18.2021 01:07	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.18.2021 01:07	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.18.2021 01:07	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.18.2021 01:07	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.18.2021 01:07	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.18.2021 01:07	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.18.2021 01:07	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	171	%	70-130	01.18.2021 01:07	**	
1,4-Difluorobenzene	540-36-3	110	%	70-130	01.18.2021 01:07		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 67 (3-3.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-041

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:45

% Moisture:

Seq Number: 3148169

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	17.7	4.99	mg/kg	01.18.2021 19:18		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148228

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 21:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 21:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 21:14	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 21:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-130	01.18.2021 21:14	
o-Terphenyl	84-15-1	103	%	70-130	01.18.2021 21:14	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 67 (3-3.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-041

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 12:00

% Moisture:

Seq Number: 3148099

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.18.2021 01:32	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.18.2021 01:32	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.18.2021 01:32	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.18.2021 01:32	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.18.2021 01:32	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.18.2021 01:32	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.18.2021 01:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	187	%	70-130	01.18.2021 01:32	**
1,4-Difluorobenzene	540-36-3	124	%	70-130	01.18.2021 01:32	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 68 (3-3.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-042

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 13:45

% Moisture:

Seq Number: 3148169

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.5	5.05	mg/kg	01.18.2021 19:23		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148228

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 22:18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 22:18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 22:18	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 22:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-130	01.18.2021 22:18	
o-Terphenyl	84-15-1	106	%	70-130	01.18.2021 22:18	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 68 (3-3.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-042

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 12:00

% Moisture:

Seq Number: 3148099

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.18.2021 01:58	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.18.2021 01:58	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.18.2021 01:58	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.18.2021 01:58	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.18.2021 01:58	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.18.2021 01:58	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.18.2021 01:58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	119	%	70-130	01.18.2021 01:58	
4-Bromofluorobenzene	460-00-4	183	%	70-130	01.18.2021 01:58	**



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 69 (3-3.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-043

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:35

% Moisture:

Seq Number: 3148170

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.02	5.02	mg/kg	01.18.2021 16:45	U	1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148228

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 22:39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 22:39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 22:39	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 22:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-130	01.18.2021 22:39	
o-Terphenyl	84-15-1	108	%	70-130	01.18.2021 22:39	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 69 (3-3.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-043

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 12:00

% Moisture:

Seq Number: 3148099

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.18.2021 02:23	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.18.2021 02:23	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.18.2021 02:23	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.18.2021 02:23	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.18.2021 02:23	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.18.2021 02:23	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.18.2021 02:23	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	191	%	70-130	01.18.2021 02:23	**	
1,4-Difluorobenzene	540-36-3	121	%	70-130	01.18.2021 02:23		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 70 (3-3.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-044

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:35

% Moisture:

Seq Number: 3148170

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.96	4.96	mg/kg	01.18.2021 17:01	U	1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148228

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.18.2021 23:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.18.2021 23:00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.18.2021 23:00	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.18.2021 23:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-130	01.18.2021 23:00	
o-Terphenyl	84-15-1	108	%	70-130	01.18.2021 23:00	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 70 (3-3.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-044

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 12:00

% Moisture:

Seq Number: 3148099

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.18.2021 02:48	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.18.2021 02:48	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.18.2021 02:48	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.18.2021 02:48	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.18.2021 02:48	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.18.2021 02:48	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.18.2021 02:48	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	190	%	70-130	01.18.2021 02:48	**	
1,4-Difluorobenzene	540-36-3	123	%	70-130	01.18.2021 02:48		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 71 (3-3.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-045

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:35

% Moisture:

Seq Number: 3148170

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6.32	4.99	mg/kg	01.18.2021 17:06		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148228

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.18.2021 23:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.18.2021 23:21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.18.2021 23:21	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.18.2021 23:21	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	101	%	70-130	01.18.2021 23:21		
o-Terphenyl	84-15-1	108	%	70-130	01.18.2021 23:21		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 71 (3-3.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-045

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 12:00

% Moisture:

Seq Number: 3148099

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.18.2021 03:14	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.18.2021 03:14	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.18.2021 03:14	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.18.2021 03:14	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.18.2021 03:14	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.18.2021 03:14	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.18.2021 03:14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	118	%	70-130	01.18.2021 03:14		
4-Bromofluorobenzene	460-00-4	187	%	70-130	01.18.2021 03:14	**	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 72 (3-3.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-046

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:35

% Moisture:

Seq Number: 3148170

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6.36	4.97	mg/kg	01.18.2021 17:11		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148228

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 23:42	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 23:42	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 23:42	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 23:42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-130	01.18.2021 23:42	
o-Terphenyl	84-15-1	104	%	70-130	01.18.2021 23:42	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 72 (3-3.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-046

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 12:00

% Moisture:

Seq Number: 3148099

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.18.2021 03:40	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.18.2021 03:40	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.18.2021 03:40	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.18.2021 03:40	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.18.2021 03:40	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.18.2021 03:40	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.18.2021 03:40	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	122	%	70-130	01.18.2021 03:40		
4-Bromofluorobenzene	460-00-4	192	%	70-130	01.18.2021 03:40	**	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 73 (3-3.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-047

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:35

% Moisture:

Seq Number: 3148170

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.04	5.04	mg/kg	01.18.2021 17:17	U	1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148228

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.19.2021 00:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.19.2021 00:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.19.2021 00:03	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.19.2021 00:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-130	01.19.2021 00:03	
o-Terphenyl	84-15-1	104	%	70-130	01.19.2021 00:03	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 73 (3-3.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-047

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 12:00

% Moisture:

Seq Number: 3148099

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.18.2021 04:05	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.18.2021 04:05	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.18.2021 04:05	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.18.2021 04:05	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.18.2021 04:05	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.18.2021 04:05	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.18.2021 04:05	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	178	%	70-130	01.18.2021 04:05	**	
1,4-Difluorobenzene	540-36-3	111	%	70-130	01.18.2021 04:05		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 74 (3-3.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-048

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:35

% Moisture:

Seq Number: 3148170

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6.08	5.00	mg/kg	01.18.2021 17:32		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148228

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.19.2021 00:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.19.2021 00:24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.19.2021 00:24	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.19.2021 00:24	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	103	%	70-130	01.19.2021 00:24		
o-Terphenyl	84-15-1	107	%	70-130	01.19.2021 00:24		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 74 (3-3.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-048

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.17.2021 12:00

% Moisture:

Seq Number: 3148099

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.18.2021 04:31	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.18.2021 04:31	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.18.2021 04:31	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.18.2021 04:31	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.18.2021 04:31	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.18.2021 04:31	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.18.2021 04:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	187	%	70-130	01.18.2021 04:31	**
1,4-Difluorobenzene	540-36-3	120	%	70-130	01.18.2021 04:31	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 75 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-049

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:35

% Moisture:

Seq Number: 3148170

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7.36	4.98	mg/kg	01.18.2021 17:37		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148228

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.19.2021 00:45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.19.2021 00:45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.19.2021 00:45	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.19.2021 00:45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-130	01.19.2021 00:45	
o-Terphenyl	84-15-1	104	%	70-130	01.19.2021 00:45	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 75 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-049

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 08:00

% Moisture:

Seq Number: 3148196

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.18.2021 08:47	UXF	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.18.2021 08:47	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.18.2021 08:47	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.18.2021 08:47	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.18.2021 08:47	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.18.2021 08:47	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.18.2021 08:47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	162	%	70-130	01.18.2021 08:47	**
1,4-Difluorobenzene	540-36-3	82	%	70-130	01.18.2021 08:47	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 76 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-050

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:35

% Moisture:

Seq Number: 3148170

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2080	25.3	mg/kg	01.18.2021 17:43		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148228

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.19.2021 01:06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.19.2021 01:06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.19.2021 01:06	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.19.2021 01:06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-130	01.19.2021 01:06	
o-Terphenyl	84-15-1	107	%	70-130	01.19.2021 01:06	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 76 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-050

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 08:00

% Moisture:

Seq Number: 3148196

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.18.2021 09:12	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.18.2021 09:12	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.18.2021 09:12	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.18.2021 09:12	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.18.2021 09:12	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.18.2021 09:12	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.18.2021 09:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	121	%	70-130	01.18.2021 09:12	
4-Bromofluorobenzene	460-00-4	177	%	70-130	01.18.2021 09:12	**



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 77 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-051

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:35

% Moisture:

Seq Number: 3148170

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1200	5.05	mg/kg	01.18.2021 17:48		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148228

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.19.2021 01:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.19.2021 01:49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.19.2021 01:49	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.19.2021 01:49	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	124	%	70-130	01.19.2021 01:49		
o-Terphenyl	84-15-1	121	%	70-130	01.19.2021 01:49		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 77 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-051

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 08:00

% Moisture:

Seq Number: 3148196

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.18.2021 09:37	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.18.2021 09:37	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.18.2021 09:37	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.18.2021 09:37	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.18.2021 09:37	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.18.2021 09:37	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.18.2021 09:37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	197	%	70-130	01.18.2021 09:37	**	
1,4-Difluorobenzene	540-36-3	121	%	70-130	01.18.2021 09:37		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 78 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-052

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:35

% Moisture:

Seq Number: 3148170

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1640	25.0	mg/kg	01.18.2021 17:53		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148228

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.19.2021 02:10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.19.2021 02:10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.19.2021 02:10	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.19.2021 02:10	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	115	%	70-130	01.19.2021 02:10		
o-Terphenyl	84-15-1	115	%	70-130	01.19.2021 02:10		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 78 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-052

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 09:15

% Moisture:

Seq Number: 3148196

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.18.2021 10:03	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.18.2021 10:03	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.18.2021 10:03	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.18.2021 10:03	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.18.2021 10:03	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.18.2021 10:03	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.18.2021 10:03	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	195	%	70-130	01.18.2021 10:03	**	
1,4-Difluorobenzene	540-36-3	118	%	70-130	01.18.2021 10:03		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 79 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-053

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:35

% Moisture:

Seq Number: 3148170

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1410	25.0	mg/kg	01.18.2021 17:58		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148228

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.19.2021 02:32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.19.2021 02:32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.19.2021 02:32	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.19.2021 02:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-130	01.19.2021 02:32	
o-Terphenyl	84-15-1	122	%	70-130	01.19.2021 02:32	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 79 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-053

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 09:15

% Moisture:

Seq Number: 3148196

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.18.2021 10:28	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.18.2021 10:28	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.18.2021 10:28	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.18.2021 10:28	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.18.2021 10:28	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.18.2021 10:28	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.18.2021 10:28	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	189	%	70-130	01.18.2021 10:28	**	
1,4-Difluorobenzene	540-36-3	119	%	70-130	01.18.2021 10:28		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 80 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-054

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:35

% Moisture:

Seq Number: 3148170

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2150	24.8	mg/kg	01.18.2021 18:14		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148228

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.19.2021 02:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.19.2021 02:54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.19.2021 02:54	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.19.2021 02:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	124	%	70-130	01.19.2021 02:54	
o-Terphenyl	84-15-1	129	%	70-130	01.19.2021 02:54	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 80 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-054

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 09:15

% Moisture:

Seq Number: 3148196

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.18.2021 10:53	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.18.2021 10:53	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.18.2021 10:53	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.18.2021 10:53	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.18.2021 10:53	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.18.2021 10:53	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.18.2021 10:53	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	184	%	70-130	01.18.2021 10:53	**	
1,4-Difluorobenzene	540-36-3	117	%	70-130	01.18.2021 10:53		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 81 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-055

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:35

% Moisture:

Seq Number: 3148170

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2640	25.0	mg/kg	01.18.2021 18:19		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148228

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.19.2021 03:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.19.2021 03:16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.19.2021 03:16	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.19.2021 03:16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	126	%	70-130	01.19.2021 03:16		
o-Terphenyl	84-15-1	129	%	70-130	01.19.2021 03:16		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 81 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-055

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 09:15

% Moisture:

Seq Number: 3148196

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.18.2021 11:18	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.18.2021 11:18	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.18.2021 11:18	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.18.2021 11:18	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.18.2021 11:18	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.18.2021 11:18	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.18.2021 11:18	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	194	%	70-130	01.18.2021 11:18	**	
1,4-Difluorobenzene	540-36-3	111	%	70-130	01.18.2021 11:18		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 82 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-056

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:35

% Moisture:

Seq Number: 3148170

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2560	24.9	mg/kg	01.18.2021 18:35		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148228

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.19.2021 03:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.19.2021 03:37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.19.2021 03:37	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.19.2021 03:37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	124	%	70-130	01.19.2021 03:37		
o-Terphenyl	84-15-1	127	%	70-130	01.19.2021 03:37		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 82 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-056

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 09:15

% Moisture:

Seq Number: 3148196

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00238	0.00199	mg/kg	01.18.2021 11:43		1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.18.2021 11:43	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.18.2021 11:43	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.18.2021 11:43	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.18.2021 11:43	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.18.2021 11:43	U	1
Total BTEX		0.00238	0.00199	mg/kg	01.18.2021 11:43		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	144	%	70-130	01.18.2021 11:43	**	
1,4-Difluorobenzene	540-36-3	94	%	70-130	01.18.2021 11:43		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 83 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-057

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:35

% Moisture:

Seq Number: 3148170

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1620	25.2	mg/kg	01.18.2021 18:40		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148228

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.19.2021 03:59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.19.2021 03:59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.19.2021 03:59	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.19.2021 03:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	121	%	70-130	01.19.2021 03:59	
o-Terphenyl	84-15-1	125	%	70-130	01.19.2021 03:59	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 83 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-057

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 09:15

% Moisture:

Seq Number: 3148196

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.18.2021 17:34	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.18.2021 17:34	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.18.2021 17:34	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	01.18.2021 17:34	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.18.2021 17:34	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.18.2021 17:34	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.18.2021 17:34	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	212	%	70-130	01.18.2021 17:34	**	
1,4-Difluorobenzene	540-36-3	132	%	70-130	01.18.2021 17:34	**	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 84 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-058

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:35

% Moisture:

Seq Number: 3148170

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2440	25.0	mg/kg	01.18.2021 18:45		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148228

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.19.2021 04:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.19.2021 04:21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.19.2021 04:21	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.19.2021 04:21	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	124	%	70-130	01.19.2021 04:21		
o-Terphenyl	84-15-1	128	%	70-130	01.19.2021 04:21		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 84 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-058

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 09:15

% Moisture:

Seq Number: 3148196

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.18.2021 17:59	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.18.2021 17:59	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.18.2021 17:59	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.18.2021 17:59	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.18.2021 17:59	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.18.2021 17:59	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.18.2021 17:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	01.18.2021 17:59	
4-Bromofluorobenzene	460-00-4	136	%	70-130	01.18.2021 17:59	**



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 85 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-059

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:35

% Moisture:

Seq Number: 3148170

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2070	24.8	mg/kg	01.18.2021 18:50		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148228

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.19.2021 04:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.19.2021 04:43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.19.2021 04:43	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.19.2021 04:43	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	123	%	70-130	01.19.2021 04:43		
o-Terphenyl	84-15-1	121	%	70-130	01.19.2021 04:43		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 85 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-059

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 09:15

% Moisture:

Seq Number: 3148196

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.18.2021 14:15	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.18.2021 14:15	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.18.2021 14:15	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.18.2021 14:15	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.18.2021 14:15	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.18.2021 14:15	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.18.2021 14:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	94	%	70-130	01.18.2021 14:15	
4-Bromofluorobenzene	460-00-4	187	%	70-130	01.18.2021 14:15	**



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 86 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-060

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:35

% Moisture:

Seq Number: 3148170

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2780	24.8	mg/kg	01.18.2021 18:55		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148228

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.19.2021 05:05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.19.2021 05:05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.19.2021 05:05	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.19.2021 05:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-130	01.19.2021 05:05	
o-Terphenyl	84-15-1	119	%	70-130	01.19.2021 05:05	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 86 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-060

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148292

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.20.2021 07:09	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.20.2021 07:09	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.20.2021 07:09	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.20.2021 07:09	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.20.2021 07:09	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.20.2021 07:09	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.20.2021 07:09	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	109	%	70-130	01.20.2021 07:09		
1,4-Difluorobenzene	540-36-3	97	%	70-130	01.20.2021 07:09		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 87 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-061

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:35

% Moisture:

Seq Number: 3148170

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2360	25.1	mg/kg	01.18.2021 19:01		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148220

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.18.2021 19:06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.18.2021 19:06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.18.2021 19:06	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.18.2021 19:06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	68	%	70-130	01.18.2021 19:06	**
o-Terphenyl	84-15-1	75	%	70-130	01.18.2021 19:06	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 87 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-061

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 09:15

% Moisture:

Seq Number: 3148196

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.18.2021 15:04	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.18.2021 15:04	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.18.2021 15:04	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	01.18.2021 15:04	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.18.2021 15:04	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.18.2021 15:04	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.18.2021 15:04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	191	%	70-130	01.18.2021 15:04	**	
1,4-Difluorobenzene	540-36-3	127	%	70-130	01.18.2021 15:04		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 88 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-062

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:35

% Moisture:

Seq Number: 3148170

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4310	25.3	mg/kg	01.18.2021 19:06		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148220

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 20:06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 20:06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 20:06	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 20:06	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	69	%	70-130	01.18.2021 20:06	**	
o-Terphenyl	84-15-1	78	%	70-130	01.18.2021 20:06		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 88 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-062

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 09:15

% Moisture:

Seq Number: 3148196

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.18.2021 15:29	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.18.2021 15:29	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.18.2021 15:29	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	01.18.2021 15:29	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.18.2021 15:29	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.18.2021 15:29	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.18.2021 15:29	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	200	%	70-130	01.18.2021 15:29	**	
1,4-Difluorobenzene	540-36-3	120	%	70-130	01.18.2021 15:29		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 89 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-063

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:50

% Moisture:

Seq Number: 3148181

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2600	25.0	mg/kg	01.18.2021 19:37	X	5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148220

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 20:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 20:25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 20:25	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 20:25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	73	%	70-130	01.18.2021 20:25		
o-Terphenyl	84-15-1	82	%	70-130	01.18.2021 20:25		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 89 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-063

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 09:15

% Moisture:

Seq Number: 3148196

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.18.2021 15:54	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.18.2021 15:54	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.18.2021 15:54	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.18.2021 15:54	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.18.2021 15:54	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.18.2021 15:54	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.18.2021 15:54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	200	%	70-130	01.18.2021 15:54	**	
1,4-Difluorobenzene	540-36-3	117	%	70-130	01.18.2021 15:54		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 90 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-064

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:50

% Moisture:

Seq Number: 3148181

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1970	24.9	mg/kg	01.18.2021 19:52		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148220

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.18.2021 20:44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.18.2021 20:44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.18.2021 20:44	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.18.2021 20:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	71	%	70-130	01.18.2021 20:44	
o-Terphenyl	84-15-1	79	%	70-130	01.18.2021 20:44	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 90 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-064

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 09:15

% Moisture:

Seq Number: 3148196

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.18.2021 16:19	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.18.2021 16:19	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.18.2021 16:19	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.18.2021 16:19	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.18.2021 16:19	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.18.2021 16:19	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.18.2021 16:19	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	116	%	70-130	01.18.2021 16:19		
4-Bromofluorobenzene	460-00-4	167	%	70-130	01.18.2021 16:19	**	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 91 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-065

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:50

% Moisture:

Seq Number: 3148181

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2370	25.0	mg/kg	01.18.2021 19:58		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148220

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.18.2021 21:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.18.2021 21:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.18.2021 21:03	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.18.2021 21:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-130	01.18.2021 21:03	
o-Terphenyl	84-15-1	88	%	70-130	01.18.2021 21:03	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 91 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-065

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 09:15

% Moisture:

Seq Number: 3148196

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.18.2021 16:44	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.18.2021 16:44	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.18.2021 16:44	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.18.2021 16:44	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.18.2021 16:44	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.18.2021 16:44	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.18.2021 16:44	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	139	%	70-130	01.18.2021 16:44	**	
1,4-Difluorobenzene	540-36-3	104	%	70-130	01.18.2021 16:44		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 92 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-066

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:50

% Moisture:

Seq Number: 3148181

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3310	24.8	mg/kg	01.18.2021 20:03		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148220

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 21:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 21:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 21:22	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 21:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	71	%	70-130	01.18.2021 21:22	
o-Terphenyl	84-15-1	78	%	70-130	01.18.2021 21:22	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 92 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-066

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 09:15

% Moisture:

Seq Number: 3148196

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.18.2021 17:09	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.18.2021 17:09	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.18.2021 17:09	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.18.2021 17:09	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.18.2021 17:09	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.18.2021 17:09	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.18.2021 17:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	124	%	70-130	01.18.2021 17:09	
4-Bromofluorobenzene	460-00-4	193	%	70-130	01.18.2021 17:09	**



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 93 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-067

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:50

% Moisture:

Seq Number: 3148181

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1680	25.1	mg/kg	01.18.2021 20:08		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148220

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.18.2021 21:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.18.2021 21:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.18.2021 21:41	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.18.2021 21:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	73	%	70-130	01.18.2021 21:41	
o-Terphenyl	84-15-1	84	%	70-130	01.18.2021 21:41	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 93 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-067

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 09:15

% Moisture:

Seq Number: 3148188

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.18.2021 19:38	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.18.2021 19:38	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.18.2021 19:38	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.18.2021 19:38	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.18.2021 19:38	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.18.2021 19:38	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.18.2021 19:38	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	107	%	70-130	01.18.2021 19:38		
1,4-Difluorobenzene	540-36-3	98	%	70-130	01.18.2021 19:38		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 94 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-068

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:50

% Moisture:

Seq Number: 3148181

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1250	4.95	mg/kg	01.18.2021 20:24		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148220

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 22:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 22:00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 22:00	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 22:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	70	%	70-130	01.18.2021 22:00	
o-Terphenyl	84-15-1	80	%	70-130	01.18.2021 22:00	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 94 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-068

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 09:15

% Moisture:

Seq Number: 3148188

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.19.2021 02:27	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.19.2021 02:27	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.19.2021 02:27	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.19.2021 02:27	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.19.2021 02:27	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.19.2021 02:27	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.19.2021 02:27	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.19.2021 02:27		
4-Bromofluorobenzene	460-00-4	120	%	70-130	01.19.2021 02:27		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 95 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-069

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:50

% Moisture:

Seq Number: 3148181

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2090	24.8	mg/kg	01.18.2021 20:29		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148220

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 22:19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 22:19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 22:19	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 22:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	72	%	70-130	01.18.2021 22:19	
o-Terphenyl	84-15-1	82	%	70-130	01.18.2021 22:19	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 95 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-069

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 09:15

% Moisture:

Seq Number: 3148188

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.18.2021 18:57	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.18.2021 18:57	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.18.2021 18:57	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.18.2021 18:57	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.18.2021 18:57	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.18.2021 18:57	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.18.2021 18:57	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	70-130	01.18.2021 18:57		
1,4-Difluorobenzene	540-36-3	97	%	70-130	01.18.2021 18:57		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 96 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-070

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:50

% Moisture:

Seq Number: 3148181

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1520	25.2	mg/kg	01.18.2021 20:34		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148220

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.18.2021 22:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.18.2021 22:37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.18.2021 22:37	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.18.2021 22:37	U	1

Surrogate

1-Chlorooctane

o-Terphenyl

Cas Number

% Recovery

Units

Limits

Analysis Date

Flag

111-85-3

73

%

70-130

01.18.2021 22:37

84-15-1

84

%

70-130

01.18.2021 22:37



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 96 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-070

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 16:30

% Moisture:

Seq Number: 3148192

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.19.2021 06:11	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.19.2021 06:11	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.19.2021 06:11	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.19.2021 06:11	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.19.2021 06:11	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.19.2021 06:11	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.19.2021 06:11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.19.2021 06:11		
4-Bromofluorobenzene	460-00-4	102	%	70-130	01.19.2021 06:11		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 97 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-071

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:50

% Moisture:

Seq Number: 3148181

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2480	24.8	mg/kg	01.18.2021 20:39		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148220

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 23:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 23:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 23:14	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 23:14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	71	%	70-130	01.18.2021 23:14		
o-Terphenyl	84-15-1	80	%	70-130	01.18.2021 23:14		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 97 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-071

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 16:30

% Moisture:

Seq Number: 3148192

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.19.2021 06:32	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.19.2021 06:32	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.19.2021 06:32	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.19.2021 06:32	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.19.2021 06:32	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.19.2021 06:32	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.19.2021 06:32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	103	%	70-130	01.19.2021 06:32		
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.19.2021 06:32		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 98 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-072

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:50

% Moisture:

Seq Number: 3148181

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2980	25.0	mg/kg	01.18.2021 20:44		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148220

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.18.2021 23:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.18.2021 23:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.18.2021 23:33	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.18.2021 23:33	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	71	%	70-130	01.18.2021 23:33		
o-Terphenyl	84-15-1	81	%	70-130	01.18.2021 23:33		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 98 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-072

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 16:30

% Moisture:

Seq Number: 3148192

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.19.2021 06:52	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.19.2021 06:52	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.19.2021 06:52	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.19.2021 06:52	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.19.2021 06:52	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.19.2021 06:52	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.19.2021 06:52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.19.2021 06:52		
4-Bromofluorobenzene	460-00-4	103	%	70-130	01.19.2021 06:52		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 99 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-073

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:50

% Moisture:

Seq Number: 3148181

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2920	25.0	mg/kg	01.18.2021 20:50		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148220

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.18.2021 23:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.18.2021 23:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.18.2021 23:51	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.18.2021 23:51	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	73	%	70-130	01.18.2021 23:51		
o-Terphenyl	84-15-1	86	%	70-130	01.18.2021 23:51		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 99 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-073

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 16:30

% Moisture:

Seq Number: 3148192

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.19.2021 07:13	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.19.2021 07:13	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.19.2021 07:13	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.19.2021 07:13	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.19.2021 07:13	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.19.2021 07:13	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.19.2021 07:13	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	94	%	70-130	01.19.2021 07:13		
4-Bromofluorobenzene	460-00-4	108	%	70-130	01.19.2021 07:13		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 100 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-074

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:50

% Moisture:

Seq Number: 3148181

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1780	25.1	mg/kg	01.18.2021 21:05		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148220

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.19.2021 00:10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.19.2021 00:10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.19.2021 00:10	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.19.2021 00:10	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	74	%	70-130	01.19.2021 00:10		
o-Terphenyl	84-15-1	85	%	70-130	01.19.2021 00:10		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 100 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-074

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 16:30

% Moisture:

Seq Number: 3148192

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.19.2021 07:33	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.19.2021 07:33	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.19.2021 07:33	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.19.2021 07:33	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.19.2021 07:33	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.19.2021 07:33	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.19.2021 07:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	01.19.2021 07:33	
4-Bromofluorobenzene	460-00-4	103	%	70-130	01.19.2021 07:33	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 101 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-075

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:50

% Moisture:

Seq Number: 3148181

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2710	24.8	mg/kg	01.18.2021 21:10		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148220

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.19.2021 00:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.19.2021 00:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.19.2021 00:29	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.19.2021 00:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	71	%	70-130	01.19.2021 00:29	
o-Terphenyl	84-15-1	80	%	70-130	01.19.2021 00:29	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 101 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-075

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 16:30

% Moisture:

Seq Number: 3148192

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.19.2021 07:54	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.19.2021 07:54	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.19.2021 07:54	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.19.2021 07:54	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.19.2021 07:54	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.19.2021 07:54	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.19.2021 07:54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	105	%	70-130	01.19.2021 07:54		
1,4-Difluorobenzene	540-36-3	98	%	70-130	01.19.2021 07:54		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 102 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-076

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:50

% Moisture:

Seq Number: 3148181

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2020	24.8	mg/kg	01.18.2021 21:26		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148220

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.19.2021 00:47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.19.2021 00:47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.19.2021 00:47	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.19.2021 00:47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	73	%	70-130	01.19.2021 00:47	
o-Terphenyl	84-15-1	79	%	70-130	01.19.2021 00:47	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 102 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-076

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 16:30

% Moisture:

Seq Number: 3148192

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.19.2021 08:55	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.19.2021 08:55	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.19.2021 08:55	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.19.2021 08:55	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.19.2021 08:55	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.19.2021 08:55	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.19.2021 08:55	U	1

Surrogate

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	96	%	70-130	01.19.2021 08:55	
4-Bromofluorobenzene	460-00-4	104	%	70-130	01.19.2021 08:55	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 103 ((4-4.5'))**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-077

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:50

% Moisture:

Seq Number: 3148181

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1930	24.8	mg/kg	01.18.2021 21:31		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148220

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.19.2021 01:06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.19.2021 01:06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.19.2021 01:06	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.19.2021 01:06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	71	%	70-130	01.19.2021 01:06	
o-Terphenyl	84-15-1	80	%	70-130	01.19.2021 01:06	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 103 ((4-4.5'))**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-077

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 16:30

% Moisture:

Seq Number: 3148192

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.19.2021 09:15	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.19.2021 09:15	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.19.2021 09:15	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.19.2021 09:15	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.19.2021 09:15	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.19.2021 09:15	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.19.2021 09:15	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	105	%	70-130	01.19.2021 09:15		
1,4-Difluorobenzene	540-36-3	97	%	70-130	01.19.2021 09:15		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 104 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-078

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:50

% Moisture:

Seq Number: 3148181

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2360	25.1	mg/kg	01.18.2021 21:36		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148220

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.19.2021 01:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.19.2021 01:25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.19.2021 01:25	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.19.2021 01:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	68	%	70-130	01.19.2021 01:25	**
o-Terphenyl	84-15-1	78	%	70-130	01.19.2021 01:25	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 104 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-078

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 16:30

% Moisture:

Seq Number: 3148192

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.19.2021 09:36	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.19.2021 09:36	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.19.2021 09:36	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.19.2021 09:36	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.19.2021 09:36	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.19.2021 09:36	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.19.2021 09:36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	92	%	70-130	01.19.2021 09:36		
4-Bromofluorobenzene	460-00-4	107	%	70-130	01.19.2021 09:36		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 105 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-079

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:50

% Moisture:

Seq Number: 3148181

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4430	25.0	mg/kg	01.18.2021 21:42		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148220

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.19.2021 01:44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.19.2021 01:44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.19.2021 01:44	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.19.2021 01:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	70	%	70-130	01.19.2021 01:44	
o-Terphenyl	84-15-1	76	%	70-130	01.19.2021 01:44	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 105 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-079

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148292

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.20.2021 07:29	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.20.2021 07:29	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.20.2021 07:29	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.20.2021 07:29	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.20.2021 07:29	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.20.2021 07:29	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.20.2021 07:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	01.20.2021 07:29	
4-Bromofluorobenzene	460-00-4	103	%	70-130	01.20.2021 07:29	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 106 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-080

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:50

% Moisture:

Seq Number: 3148181

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2910	25.0	mg/kg	01.18.2021 21:47		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.18.2021 15:00

% Moisture:

Seq Number: 3148220

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.19.2021 02:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.19.2021 02:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.19.2021 02:03	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.19.2021 02:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	68	%	70-130	01.19.2021 02:03	**
o-Terphenyl	84-15-1	79	%	70-130	01.19.2021 02:03	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 106 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-080

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148292

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.20.2021 07:49	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.20.2021 07:49	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.20.2021 07:49	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.20.2021 07:49	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.20.2021 07:49	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.20.2021 07:49	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.20.2021 07:49	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	01.20.2021 07:49		
1,4-Difluorobenzene	540-36-3	97	%	70-130	01.20.2021 07:49		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 107 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-081

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:50

% Moisture:

Seq Number: 3148181

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2410	25.0	mg/kg	01.18.2021 21:52		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 16:00

% Moisture:

Seq Number: 3148365

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.19.2021 22:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.19.2021 22:08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.19.2021 22:08	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.19.2021 22:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-130	01.19.2021 22:08	
o-Terphenyl	84-15-1	101	%	70-130	01.19.2021 22:08	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 107 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-081

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148292

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.20.2021 08:10	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.20.2021 08:10	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.20.2021 08:10	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.20.2021 08:10	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.20.2021 08:10	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.20.2021 08:10	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.20.2021 08:10	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	106	%	70-130	01.20.2021 08:10		
1,4-Difluorobenzene	540-36-3	98	%	70-130	01.20.2021 08:10		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 108 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-082

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 15:50

% Moisture:

Seq Number: 3148181

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1990	25.2	mg/kg	01.18.2021 21:57		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 16:00

% Moisture:

Seq Number: 3148365

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.19.2021 23:12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.19.2021 23:12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.19.2021 23:12	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.19.2021 23:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-130	01.19.2021 23:12	
o-Terphenyl	84-15-1	100	%	70-130	01.19.2021 23:12	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 108 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-082

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148292

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.20.2021 08:30	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.20.2021 08:30	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.20.2021 08:30	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.20.2021 08:30	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.20.2021 08:30	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.20.2021 08:30	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.20.2021 08:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	01.20.2021 08:30	
4-Bromofluorobenzene	460-00-4	100	%	70-130	01.20.2021 08:30	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 109 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-083

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 16:15

% Moisture:

Seq Number: 3148184

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1490	24.8	mg/kg	01.18.2021 19:55		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 16:00

% Moisture:

Seq Number: 3148365

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.19.2021 23:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.19.2021 23:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.19.2021 23:33	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.19.2021 23:33	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	110	%	70-130	01.19.2021 23:33		
o-Terphenyl	84-15-1	97	%	70-130	01.19.2021 23:33		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 109 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-083

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148292

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.20.2021 08:51	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.20.2021 08:51	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.20.2021 08:51	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	01.20.2021 08:51	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.20.2021 08:51	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.20.2021 08:51	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.20.2021 08:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	01.20.2021 08:51	
4-Bromofluorobenzene	460-00-4	107	%	70-130	01.20.2021 08:51	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 110 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-084

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 16:15

% Moisture:

Seq Number: 3148184

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1900	24.9	mg/kg	01.18.2021 20:11		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 16:00

% Moisture:

Seq Number: 3148365

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.19.2021 23:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.19.2021 23:54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.19.2021 23:54	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.19.2021 23:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-130	01.19.2021 23:54	
o-Terphenyl	84-15-1	99	%	70-130	01.19.2021 23:54	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 110 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-084

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148292

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.20.2021 09:11	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.20.2021 09:11	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.20.2021 09:11	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.20.2021 09:11	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.20.2021 09:11	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.20.2021 09:11	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.20.2021 09:11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	01.20.2021 09:11		
1,4-Difluorobenzene	540-36-3	98	%	70-130	01.20.2021 09:11		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 111 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-085

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 16:15

% Moisture:

Seq Number: 3148184

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1130	4.99	mg/kg	01.18.2021 20:16		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 16:00

% Moisture:

Seq Number: 3148365

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.20.2021 00:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.20.2021 00:16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.20.2021 00:16	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.20.2021 00:16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	109	%	70-130	01.20.2021 00:16		
o-Terphenyl	84-15-1	101	%	70-130	01.20.2021 00:16		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 111 (4-4.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-085

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148292

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.20.2021 09:32	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.20.2021 09:32	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.20.2021 09:32	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	01.20.2021 09:32	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.20.2021 09:32	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.20.2021 09:32	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.20.2021 09:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	01.20.2021 09:32	
1,4-Difluorobenzene	540-36-3	97	%	70-130	01.20.2021 09:32	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 112 (1.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-086

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 16:15

% Moisture:

Seq Number: 3148184

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	17.9	5.00	mg/kg	01.18.2021 20:22		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 16:00

% Moisture:

Seq Number: 3148365

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.20.2021 00:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.20.2021 00:37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.20.2021 00:37	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.20.2021 00:37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	105	%	70-130	01.20.2021 00:37		
o-Terphenyl	84-15-1	98	%	70-130	01.20.2021 00:37		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 112 (1.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-086

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148292

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.20.2021 09:52	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.20.2021 09:52	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.20.2021 09:52	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.20.2021 09:52	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.20.2021 09:52	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.20.2021 09:52	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.20.2021 09:52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	01.20.2021 09:52		
1,4-Difluorobenzene	540-36-3	97	%	70-130	01.20.2021 09:52		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 113 (1.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-087

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 16:15

% Moisture:

Seq Number: 3148184

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16.6	5.04	mg/kg	01.18.2021 20:27		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 16:00

% Moisture:

Seq Number: 3148365

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.20.2021 00:58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.20.2021 00:58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.20.2021 00:58	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.20.2021 00:58	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	103	%	70-130	01.20.2021 00:58		
o-Terphenyl	84-15-1	100	%	70-130	01.20.2021 00:58		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 113 (1.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-087

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.19.2021 14:00

% Moisture:

Seq Number: 3148296

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.19.2021 19:21	UX	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.19.2021 19:21	UXF	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.19.2021 19:21	UXF	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.19.2021 19:21	UX	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.19.2021 19:21	UX	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.19.2021 19:21	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.19.2021 19:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	88	%	70-130	01.19.2021 19:21	
1,4-Difluorobenzene	540-36-3	89	%	70-130	01.19.2021 19:21	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 114 (1.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-088

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 16:15

% Moisture:

Seq Number: 3148184

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	15.0	4.98	mg/kg	01.18.2021 20:43		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 16:00

% Moisture:

Seq Number: 3148365

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.20.2021 01:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.20.2021 01:20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.20.2021 01:20	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.20.2021 01:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-130	01.20.2021 01:20	
o-Terphenyl	84-15-1	102	%	70-130	01.20.2021 01:20	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 114 (1.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-088

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.19.2021 14:00

% Moisture:

Seq Number: 3148296

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.19.2021 19:47	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.19.2021 19:47	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.19.2021 19:47	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.19.2021 19:47	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.19.2021 19:47	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.19.2021 19:47	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.19.2021 19:47	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	01.19.2021 19:47		
4-Bromofluorobenzene	460-00-4	79	%	70-130	01.19.2021 19:47		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 115 (1.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-089

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 16:15

% Moisture:

Seq Number: 3148184

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.0	4.96	mg/kg	01.18.2021 20:48		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 16:00

% Moisture:

Seq Number: 3148365

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.20.2021 01:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.20.2021 01:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.20.2021 01:41	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.20.2021 01:41	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	107	%	70-130	01.20.2021 01:41		
o-Terphenyl	84-15-1	103	%	70-130	01.20.2021 01:41		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 115 (1.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-089

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.19.2021 14:00

% Moisture:

Seq Number: 3148296

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.19.2021 20:13	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.19.2021 20:13	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.19.2021 20:13	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.19.2021 20:13	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.19.2021 20:13	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.19.2021 20:13	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.19.2021 20:13	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	106	%	70-130	01.19.2021 20:13		
4-Bromofluorobenzene	460-00-4	87	%	70-130	01.19.2021 20:13		



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 116 (1.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-090

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 16:15

% Moisture:

Seq Number: 3148184

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.9	5.03	mg/kg	01.18.2021 20:53		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 16:00

% Moisture:

Seq Number: 3148365

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.20.2021 02:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.20.2021 02:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.20.2021 02:03	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.20.2021 02:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-130	01.20.2021 02:03	
o-Terphenyl	84-15-1	104	%	70-130	01.20.2021 02:03	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 116 (1.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-090

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.19.2021 14:00

% Moisture:

Seq Number: 3148296

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.19.2021 20:39	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.19.2021 20:39	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.19.2021 20:39	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.19.2021 20:39	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.19.2021 20:39	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.19.2021 20:39	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.19.2021 20:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	85	%	70-130	01.19.2021 20:39	
1,4-Difluorobenzene	540-36-3	105	%	70-130	01.19.2021 20:39	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 117 (1.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-091

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 16:15

% Moisture:

Seq Number: 3148184

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.8	5.00	mg/kg	01.18.2021 20:59		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 16:00

% Moisture:

Seq Number: 3148365

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.20.2021 02:45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.20.2021 02:45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.20.2021 02:45	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.20.2021 02:45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-130	01.20.2021 02:45	
o-Terphenyl	84-15-1	99	%	70-130	01.20.2021 02:45	



Certificate of Analytical Results 684955

Tetra Tech- Midland, Midland, TX

Tyrell Fee #1

Sample Id: **Bottom Hole 117 (1.5')**

Matrix: Soil

Date Received: 01.15.2021 16:40

Lab Sample Id: 684955-091

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.19.2021 14:00

% Moisture:

Seq Number: 3148296

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.19.2021 21:05	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.19.2021 21:05	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.19.2021 21:05	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.19.2021 21:05	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.19.2021 21:05	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.19.2021 21:05	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.19.2021 21:05	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	87	%	70-130	01.19.2021 21:05		
1,4-Difluorobenzene	540-36-3	105	%	70-130	01.19.2021 21:05		

Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

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



Tetra Tech- Midland

Tyrell Fee #1

Analytical Method: Chloride by EPA 300

Seq Number: 3148167

MB Sample Id: 7719418-1-BLK

Matrix: Solid

LCS Sample Id: 7719418-1-BKS

Prep Method: E300P

Date Prep: 01.18.2021

LCSD Sample Id: 7719418-1-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	254	102	255	102	90-110	0	20	mg/kg	01.18.2021 13:53	

Analytical Method: Chloride by EPA 300

Seq Number: 3148190

MB Sample Id: 7719419-1-BLK

Matrix: Solid

LCS Sample Id: 7719419-1-BKS

Prep Method: E300P

Date Prep: 01.18.2021

LCSD Sample Id: 7719419-1-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	254	102	252	101	90-110	1	20	mg/kg	01.18.2021 22:18	

Analytical Method: Chloride by EPA 300

Seq Number: 3148169

MB Sample Id: 7719420-1-BLK

Matrix: Solid

LCS Sample Id: 7719420-1-BKS

Prep Method: E300P

Date Prep: 01.18.2021

LCSD Sample Id: 7719420-1-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	254	102	90-110	0	20	mg/kg	01.18.2021 16:48	

Analytical Method: Chloride by EPA 300

Seq Number: 3148170

MB Sample Id: 7719446-1-BLK

Matrix: Solid

LCS Sample Id: 7719446-1-BKS

Prep Method: E300P

Date Prep: 01.18.2021

LCSD Sample Id: 7719446-1-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	263	105	262	105	90-110	0	20	mg/kg	01.18.2021 16:35	

Analytical Method: Chloride by EPA 300

Seq Number: 3148181

MB Sample Id: 7719447-1-BLK

Matrix: Solid

LCS Sample Id: 7719447-1-BKS

Prep Method: E300P

Date Prep: 01.18.2021

LCSD Sample Id: 7719447-1-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	252	101	90-110	1	20	mg/kg	01.18.2021 19:26	

Analytical Method: Chloride by EPA 300

Seq Number: 3148184

MB Sample Id: 7719448-1-BLK

Matrix: Solid

LCS Sample Id: 7719448-1-BKS

Prep Method: E300P

Date Prep: 01.18.2021

LCSD Sample Id: 7719448-1-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	252	101	252	101	90-110	0	20	mg/kg	01.18.2021 19:44	

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



Tetra Tech- Midland

Tyrell Fee #1

Analytical Method: Chloride by EPA 300

Seq Number: 3148167

Parent Sample Id: 684953-036

Matrix: Soil

MS Sample Id: 684953-036 S

Prep Method: E300P

Date Prep: 01.18.2021

MSD Sample Id: 684953-036 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	9.95	252	262	100	263	100	90-110	0	20	mg/kg	01.18.2021 14:09	

Analytical Method: Chloride by EPA 300

Seq Number: 3148167

Parent Sample Id: 684953-046

Matrix: Soil

MS Sample Id: 684953-046 S

Prep Method: E300P

Date Prep: 01.18.2021

MSD Sample Id: 684953-046 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	10.5	253	269	102	270	103	90-110	0	20	mg/kg	01.18.2021 15:23	

Analytical Method: Chloride by EPA 300

Seq Number: 3148190

Parent Sample Id: 684955-003

Matrix: Soil

MS Sample Id: 684955-003 S

Prep Method: E300P

Date Prep: 01.18.2021

MSD Sample Id: 684955-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	7.58	248	258	101	259	101	90-110	0	20	mg/kg	01.18.2021 22:33	

Analytical Method: Chloride by EPA 300

Seq Number: 3148190

Parent Sample Id: 684955-013

Matrix: Soil

MS Sample Id: 684955-013 S

Prep Method: E300P

Date Prep: 01.18.2021

MSD Sample Id: 684955-013 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	15.3	250	258	97	258	97	90-110	0	20	mg/kg	01.18.2021 23:46	

Analytical Method: Chloride by EPA 300

Seq Number: 3148169

Parent Sample Id: 684955-023

Matrix: Soil

MS Sample Id: 684955-023 S

Prep Method: E300P

Date Prep: 01.18.2021

MSD Sample Id: 684955-023 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	15.7	250	264	99	263	99	90-110	0	20	mg/kg	01.18.2021 17:04	

Analytical Method: Chloride by EPA 300

Seq Number: 3148169

Parent Sample Id: 684955-033

Matrix: Soil

MS Sample Id: 684955-033 S

Prep Method: E300P

Date Prep: 01.18.2021

MSD Sample Id: 684955-033 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	656	250	888	93	889	93	90-110	0	20	mg/kg	01.18.2021 18:19	

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

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

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

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



Tetra Tech- Midland

Tyrell Fee #1

Analytical Method: Chloride by EPA 300

Seq Number: 3148170

Parent Sample Id: 684955-043

Matrix: Soil

MS Sample Id: 684955-043 S

Prep Method: E300P

Date Prep: 01.18.2021

MSD Sample Id: 684955-043 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.02	251	265	106	262	104	90-110	1	20	mg/kg	01.18.2021 16:51	

Analytical Method: Chloride by EPA 300

Seq Number: 3148170

Parent Sample Id: 684955-053

Matrix: Soil

MS Sample Id: 684955-053 S

Prep Method: E300P

Date Prep: 01.18.2021

MSD Sample Id: 684955-053 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1410	1250	2690	102	2690	102	90-110	0	20	mg/kg	01.18.2021 18:03	

Analytical Method: Chloride by EPA 300

Seq Number: 3148181

Parent Sample Id: 684955-063

Matrix: Soil

MS Sample Id: 684955-063 S

Prep Method: E300P

Date Prep: 01.18.2021

MSD Sample Id: 684955-063 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2600	1250	4010	113	3840	99	90-110	4	20	mg/kg	01.18.2021 19:42	X

Analytical Method: Chloride by EPA 300

Seq Number: 3148181

Parent Sample Id: 684955-073

Matrix: Soil

MS Sample Id: 684955-073 S

Prep Method: E300P

Date Prep: 01.18.2021

MSD Sample Id: 684955-073 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2920	1250	4210	103	4170	100	90-110	1	20	mg/kg	01.18.2021 20:55	

Analytical Method: Chloride by EPA 300

Seq Number: 3148184

Parent Sample Id: 684955-083

Matrix: Soil

MS Sample Id: 684955-083 S

Prep Method: E300P

Date Prep: 01.18.2021

MSD Sample Id: 684955-083 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1490	1240	2810	106	2790	105	90-110	1	20	mg/kg	01.18.2021 20:00	

Analytical Method: Chloride by EPA 300

Seq Number: 3148184

Parent Sample Id: 684987-002

Matrix: Soil

MS Sample Id: 684987-002 S

Prep Method: E300P

Date Prep: 01.18.2021

MSD Sample Id: 684987-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	4180	2490	7350	127	7370	128	90-110	0	20	mg/kg	01.18.2021 21:15	X

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

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

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

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

Tetra Tech- Midland

Tyrell Fee #1

Analytical Method: TPH by SW8015 Mod

Seq Number: 3148219

MB Sample Id: 7719451-1-BLK

Matrix: Solid

LCS Sample Id: 7719451-1-BKS

Prep Method: SW8015P

Date Prep: 01.18.2021

LCSD Sample Id: 7719451-1-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	866	87	888	89	70-130	3	20	mg/kg	01.18.2021 08:42	
Diesel Range Organics (DRO)	<50.0	1000	931	93	934	93	70-130	0	20	mg/kg	01.18.2021 08:42	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	86		106		106		70-130	%	01.18.2021 08:42
o-Terphenyl	100		101		102		70-130	%	01.18.2021 08:42

Analytical Method: TPH by SW8015 Mod

Seq Number: 3148225

MB Sample Id: 7719454-1-BLK

Matrix: Solid

LCS Sample Id: 7719454-1-BKS

Prep Method: SW8015P

Date Prep: 01.18.2021

LCSD Sample Id: 7719454-1-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	933	93	913	91	70-130	2	20	mg/kg	01.18.2021 10:32	
Diesel Range Organics (DRO)	<50.0	1000	860	86	905	91	70-130	5	20	mg/kg	01.18.2021 10:32	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	91		98		100		70-130	%	01.18.2021 10:32
o-Terphenyl	96		95		101		70-130	%	01.18.2021 10:32

Analytical Method: TPH by SW8015 Mod

Seq Number: 3148220

MB Sample Id: 7719453-1-BLK

Matrix: Solid

LCS Sample Id: 7719453-1-BKS

Prep Method: SW8015P

Date Prep: 01.18.2021

LCSD Sample Id: 7719453-1-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	831	83	840	84	70-130	1	20	mg/kg	01.18.2021 18:27	
Diesel Range Organics (DRO)	<50.0	1000	898	90	880	88	70-130	2	20	mg/kg	01.18.2021 18:27	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	77		101		101		70-130	%	01.18.2021 18:27
o-Terphenyl	90		95		96		70-130	%	01.18.2021 18:27

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

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

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

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

Tetra Tech- Midland

Tyrell Fee #1

Analytical Method: TPH by SW8015 Mod

Seq Number: 3148228

MB Sample Id: 7719456-1-BLK

Matrix: Solid

LCS Sample Id: 7719456-1-BKS

Prep Method: SW8015P

Date Prep: 01.18.2021

LCSD Sample Id: 7719456-1-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	1020	102	976	98	70-130	4	20	mg/kg	01.18.2021 20:32	
Diesel Range Organics (DRO)	<50.0	1000	949	95	949	95	70-130	0	20	mg/kg	01.18.2021 20:32	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag		LCSD %Rec	LCSD Flag		Limits	Units	Analysis Date	
1-Chlorooctane	100		104			105			70-130	%	01.18.2021 20:32	
o-Terphenyl	106		110			107			70-130	%	01.18.2021 20:32	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3148365

MB Sample Id: 7719552-1-BLK

Matrix: Solid

LCS Sample Id: 7719552-1-BKS

Prep Method: SW8015P

Date Prep: 01.19.2021

LCSD Sample Id: 7719552-1-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	1070	107	1030	103	70-130	4	20	mg/kg	01.19.2021 21:25	
Diesel Range Organics (DRO)	<50.0	1000	1160	116	1150	115	70-130	1	20	mg/kg	01.19.2021 21:25	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
1-Chlorooctane	117		121		113		70-130			%	01.19.2021 21:25	
o-Terphenyl	110		125		127		70-130			%	01.19.2021 21:25	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3148219

Matrix: Solid

MB Sample Id: 7719451-1-BLK

Prep Method: SW8015P

Date Prep: 01.18.2021

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.18.2021 08:24	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3148225

Matrix: Solid

MB Sample Id: 7719454-1-BLK

Prep Method: SW8015P

Date Prep: 01.18.2021

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.18.2021 10:11	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3148220

Matrix: Solid

MB Sample Id: 7719453-1-BLK

Prep Method: SW8015P

Date Prep: 01.18.2021

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.18.2021 18:08	

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

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

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

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

Tetra Tech- Midland

Tyrell Fee #1

Analytical Method: TPH by SW8015 Mod

Seq Number: 3148228

Matrix: Solid

Prep Method: SW8015P

Date Prep: 01.18.2021

MB Sample Id: 7719456-1-BLK

Parameter

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.18.2021 20:10	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3148365

Matrix: Solid

Prep Method: SW8015P

Date Prep: 01.19.2021

MB Sample Id: 7719552-1-BLK

Parameter

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.19.2021 21:04	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3148219

Matrix: Soil

Prep Method: SW8015P

Date Prep: 01.18.2021

Parent Sample Id: 684955-001

MS Sample Id: 684955-001 S

MSD Sample Id: 684955-001 SD

Parameter

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	822	82	761	76	70-130	8	20	mg/kg	01.18.2021 09:39	
Diesel Range Organics (DRO)	<49.9	998	834	84	793	80	70-130	5	20	mg/kg	01.18.2021 09:39	

Surrogate

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	81		76		70-130	%	01.18.2021 09:39
o-Terphenyl	73		73		70-130	%	01.18.2021 09:39

Analytical Method: TPH by SW8015 Mod

Seq Number: 3148225

Matrix: Soil

Prep Method: SW8015P

Date Prep: 01.18.2021

Parent Sample Id: 684955-021

MS Sample Id: 684955-021 S

MSD Sample Id: 684955-021 SD

Parameter

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	997	1030	103	1050	105	70-130	2	20	mg/kg	01.18.2021 11:38	
Diesel Range Organics (DRO)	<49.9	997	1000	100	1020	102	70-130	2	20	mg/kg	01.18.2021 11:38	

Surrogate

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	102		104		70-130	%	01.18.2021 11:38
o-Terphenyl	95		96		70-130	%	01.18.2021 11:38

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



Tetra Tech- Midland

Tyrell Fee #1

Analytical Method: TPH by SW8015 Mod

Seq Number: 3148220

Parent Sample Id: 684955-061

Matrix: Soil

MS Sample Id: 684955-061 S

Prep Method: SW8015P

Date Prep: 01.18.2021

MSD Sample Id: 684955-061 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	999	840	84	816	82	70-130	3	20	mg/kg	01.18.2021 19:26	
Diesel Range Organics (DRO)	<50.0	999	811	81	829	83	70-130	2	20	mg/kg	01.18.2021 19:26	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	79		84		70-130	%	01.18.2021 19:26
o-Terphenyl	76		73		70-130	%	01.18.2021 19:26

Analytical Method: TPH by SW8015 Mod

Seq Number: 3148228

Parent Sample Id: 684955-041

Matrix: Soil

MS Sample Id: 684955-041 S

Prep Method: SW8015P

Date Prep: 01.18.2021

MSD Sample Id: 684955-041 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	997	967	97	984	99	70-130	2	20	mg/kg	01.18.2021 21:36	
Diesel Range Organics (DRO)	<49.9	997	974	98	963	97	70-130	1	20	mg/kg	01.18.2021 21:36	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	100		100		70-130	%	01.18.2021 21:36
o-Terphenyl	103		100		70-130	%	01.18.2021 21:36

Analytical Method: TPH by SW8015 Mod

Seq Number: 3148365

Parent Sample Id: 684955-081

Matrix: Soil

MS Sample Id: 684955-081 S

Prep Method: SW8015P

Date Prep: 01.19.2021

MSD Sample Id: 684955-081 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	1060	106	1000	100	70-130	6	20	mg/kg	01.19.2021 22:29	
Diesel Range Organics (DRO)	<49.9	998	1000	100	1070	107	70-130	7	20	mg/kg	01.19.2021 22:29	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	116		107		70-130	%	01.19.2021 22:29
o-Terphenyl	102		107		70-130	%	01.19.2021 22:29

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

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



Tetra Tech- Midland

Tyrell Fee #1

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148031

Matrix: Solid

Prep Method: SW5035A

Date Prep: 01.16.2021

MB Sample Id: 7719356-1-BLK

LCS Sample Id: 7719356-1-BKS

LCSD Sample Id: 7719356-1-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	0.112	112	0.0990	99	70-130	12	35	mg/kg	01.16.2021 12:06	
Toluene	<0.00200	0.100	0.118	118	0.108	108	70-130	9	35	mg/kg	01.16.2021 12:06	
Ethylbenzene	<0.00200	0.100	0.114	114	0.105	105	70-130	8	35	mg/kg	01.16.2021 12:06	
m,p-Xylenes	<0.00400	0.200	0.225	113	0.211	106	70-130	6	35	mg/kg	01.16.2021 12:06	
o-Xylene	<0.00200	0.100	0.116	116	0.109	109	70-130	6	35	mg/kg	01.16.2021 12:06	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	75		96		97		70-130	%	01.16.2021 12:06
4-Bromofluorobenzene	115		149	**	153	**	70-130	%	01.16.2021 12:06

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148099

Matrix: Solid

Prep Method: SW5035A

Date Prep: 01.17.2021

MB Sample Id: 7719371-1-BLK

LCS Sample Id: 7719371-1-BKS

LCSD Sample Id: 7719371-1-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	0.106	106	0.124	124	70-130	16	35	mg/kg	01.17.2021 15:55	
Toluene	<0.00200	0.100	0.114	114	0.105	105	70-130	8	35	mg/kg	01.17.2021 15:55	
Ethylbenzene	<0.00200	0.100	0.110	110	0.119	119	70-130	8	35	mg/kg	01.17.2021 15:55	
m,p-Xylenes	<0.00400	0.200	0.219	110	0.238	119	70-130	8	35	mg/kg	01.17.2021 15:55	
o-Xylene	<0.00200	0.100	0.112	112	0.124	124	70-130	10	35	mg/kg	01.17.2021 15:55	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	76		81		96		70-130	%	01.17.2021 15:55
4-Bromofluorobenzene	133	**	141	**	186	**	70-130	%	01.17.2021 15:55

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148196

Matrix: Solid

Prep Method: SW5035A

Date Prep: 01.18.2021

MB Sample Id: 7719476-1-BLK

LCS Sample Id: 7719476-1-BKS

LCSD Sample Id: 7719476-1-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	0.112	112	0.106	106	70-130	6	35	mg/kg	01.18.2021 05:47	
Toluene	<0.00200	0.100	0.105	105	0.114	114	70-130	8	35	mg/kg	01.18.2021 05:47	
Ethylbenzene	<0.00200	0.100	0.119	119	0.114	114	70-130	4	35	mg/kg	01.18.2021 05:47	
m,p-Xylenes	<0.00400	0.200	0.239	120	0.231	116	70-130	3	35	mg/kg	01.18.2021 05:47	
o-Xylene	<0.00200	0.100	0.127	127	0.122	122	70-130	4	35	mg/kg	01.18.2021 05:47	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	78		117		120		70-130	%	01.18.2021 05:47
4-Bromofluorobenzene	139	**	183	**	181	**	70-130	%	01.18.2021 05:47

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



Tetra Tech- Midland

Tyrell Fee #1

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148188

Matrix: Solid

Prep Method: SW5035A

Date Prep: 01.18.2021

MB Sample Id: 7719469-1-BLK

LCS Sample Id: 7719469-1-BKS

LCSD Sample Id: 7719469-1-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	0.103	103	0.103	103	70-130	0	35	mg/kg	01.18.2021 16:36	
Toluene	<0.00200	0.100	0.0973	97	0.0969	97	70-130	0	35	mg/kg	01.18.2021 16:36	
Ethylbenzene	<0.00200	0.100	0.0960	96	0.0955	96	70-130	1	35	mg/kg	01.18.2021 16:36	
m,p-Xylenes	<0.00400	0.200	0.198	99	0.195	98	70-130	2	35	mg/kg	01.18.2021 16:36	
o-Xylene	<0.00200	0.100	0.0944	94	0.0934	93	70-130	1	35	mg/kg	01.18.2021 16:36	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	91		100		100		70-130	%	01.18.2021 16:36
4-Bromofluorobenzene	103		96		95		70-130	%	01.18.2021 16:36

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148192

Matrix: Solid

Prep Method: SW5035A

Date Prep: 01.18.2021

MB Sample Id: 7719474-1-BLK

LCS Sample Id: 7719474-1-BKS

LCSD Sample Id: 7719474-1-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	0.100	100	70-130	4	35	mg/kg	01.19.2021 03:29	
Toluene	<0.00200	0.100	0.0973	97	0.0943	94	70-130	3	35	mg/kg	01.19.2021 03:29	
Ethylbenzene	<0.00200	0.100	0.0945	95	0.0920	92	70-130	3	35	mg/kg	01.19.2021 03:29	
m,p-Xylenes	<0.00400	0.200	0.193	97	0.186	93	70-130	4	35	mg/kg	01.19.2021 03:29	
o-Xylene	<0.00200	0.100	0.0965	97	0.0920	92	70-130	5	35	mg/kg	01.19.2021 03:29	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	92		103		101		70-130	%	01.19.2021 03:29
4-Bromofluorobenzene	106		102		96		70-130	%	01.19.2021 03:29

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148292

Matrix: Solid

Prep Method: SW5035A

Date Prep: 01.19.2021

MB Sample Id: 7719547-1-BLK

LCS Sample Id: 7719547-1-BKS

LCSD Sample Id: 7719547-1-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	0.0956	96	0.101	101	70-130	5	35	mg/kg	01.20.2021 00:00	
Toluene	<0.00200	0.100	0.0895	90	0.0960	96	70-130	7	35	mg/kg	01.20.2021 00:00	
Ethylbenzene	<0.00200	0.100	0.0868	87	0.0939	94	70-130	8	35	mg/kg	01.20.2021 00:00	
m,p-Xylenes	<0.00400	0.200	0.174	87	0.191	96	70-130	9	35	mg/kg	01.20.2021 00:00	
o-Xylene	<0.00200	0.100	0.0860	86	0.0935	94	70-130	8	35	mg/kg	01.20.2021 00:00	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	91		101		99		70-130	%	01.20.2021 00:00
4-Bromofluorobenzene	105		95		99		70-130	%	01.20.2021 00:00

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



Tetra Tech- Midland

Tyrell Fee #1

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148296

Matrix: Solid

Prep Method: SW5035A

Date Prep: 01.19.2021

MB Sample Id: 7719546-1-BLK

LCS Sample Id: 7719546-1-BKS

LCSD Sample Id: 7719546-1-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	0.128	128	0.107	107	70-130	18	35	mg/kg	01.19.2021 14:36	
Toluene	<0.00200	0.100	0.127	127	0.109	109	70-130	15	35	mg/kg	01.19.2021 14:36	
Ethylbenzene	<0.00200	0.100	0.129	129	0.108	108	70-130	18	35	mg/kg	01.19.2021 14:36	
m,p-Xylenes	<0.00400	0.200	0.256	128	0.218	109	70-130	16	35	mg/kg	01.19.2021 14:36	
o-Xylene	<0.00200	0.100	0.129	129	0.118	118	70-130	9	35	mg/kg	01.19.2021 14:36	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	84		104		104		70-130	%	01.19.2021 14:36
4-Bromofluorobenzene	58	**	68	**	83		70-130	%	01.19.2021 14:36

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148097

Matrix: Solid

Prep Method: SW5035A

Date Prep: 01.17.2021

MB Sample Id: 7719370-1-BLK

LCS Sample Id: 7719370-1-BKS

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.106	106	70-130	mg/kg	01.17.2021 01:52	
Toluene	<0.00200	0.100	0.111	111	70-130	mg/kg	01.17.2021 01:52	
Ethylbenzene	<0.00200	0.100	0.108	108	70-130	mg/kg	01.17.2021 01:52	
m,p-Xylenes	<0.00400	0.200	0.215	108	70-130	mg/kg	01.17.2021 01:52	
o-Xylene	<0.00200	0.100	0.111	111	70-130	mg/kg	01.17.2021 01:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	79		103		70-130	%	01.17.2021 01:52
4-Bromofluorobenzene	119		148	**	70-130	%	01.17.2021 01:52

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148031

Matrix: Soil

Prep Method: SW5035A

Date Prep: 01.16.2021

Parent Sample Id: 684925-001

MS Sample Id: 684925-001 S

MSD Sample Id: 684925-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.102	102	0.102	102	70-130	0	35	mg/kg	01.16.2021 12:57	
Toluene	<0.00201	0.100	0.108	108	0.0918	92	70-130	16	35	mg/kg	01.16.2021 12:57	
Ethylbenzene	<0.00201	0.100	0.103	103	0.0998	100	70-130	3	35	mg/kg	01.16.2021 12:57	
m,p-Xylenes	<0.00402	0.201	0.206	102	0.201	100	70-130	2	35	mg/kg	01.16.2021 12:57	
o-Xylene	<0.00201	0.100	0.105	105	0.104	104	70-130	1	35	mg/kg	01.16.2021 12:57	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		100		70-130	%	01.16.2021 12:57
4-Bromofluorobenzene	158	**	162	**	70-130	%	01.16.2021 12:57

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

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

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

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



Tetra Tech- Midland

Tyrell Fee #1

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148097

Parent Sample Id: 684955-009

Matrix: Soil

MS Sample Id: 684955-009 S

Prep Method: SW5035A

Date Prep: 01.17.2021

MSD Sample Id: 684955-009 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	0.0799	80	0.0880	88	70-130	10	35	mg/kg	01.17.2021 02:43	
Toluene	<0.00200	0.0998	0.0896	90	0.0978	98	70-130	9	35	mg/kg	01.17.2021 02:43	
Ethylbenzene	<0.00200	0.0998	0.0853	85	0.0927	93	70-130	8	35	mg/kg	01.17.2021 02:43	
m,p-Xylenes	<0.00399	0.200	0.170	85	0.186	93	70-130	9	35	mg/kg	01.17.2021 02:43	
o-Xylene	<0.00200	0.0998	0.0877	88	0.0961	96	70-130	9	35	mg/kg	01.17.2021 02:43	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		111		70-130	%	01.17.2021 02:43
4-Bromofluorobenzene	168	**	175	**	70-130	%	01.17.2021 02:43

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148099

Parent Sample Id: 684955-029

Matrix: Soil

MS Sample Id: 684955-029 S

Prep Method: SW5035A

Date Prep: 01.17.2021

MSD Sample Id: 684955-029 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.110	110	0.103	103	70-130	7	35	mg/kg	01.17.2021 16:48	
Toluene	<0.00201	0.100	0.0930	93	0.0861	86	70-130	8	35	mg/kg	01.17.2021 16:48	
Ethylbenzene	<0.00201	0.100	0.104	104	0.0954	95	70-130	9	35	mg/kg	01.17.2021 16:48	
m,p-Xylenes	<0.00402	0.201	0.208	103	0.188	94	70-130	10	35	mg/kg	01.17.2021 16:48	
o-Xylene	<0.00201	0.100	0.108	108	0.0969	97	70-130	11	35	mg/kg	01.17.2021 16:48	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	77		77		70-130	%	01.17.2021 16:48
4-Bromofluorobenzene	185	**	188	**	70-130	%	01.17.2021 16:48

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148196

Parent Sample Id: 684955-049

Matrix: Soil

MS Sample Id: 684955-049 S

Prep Method: SW5035A

Date Prep: 01.18.2021

MSD Sample Id: 684955-049 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0646	64	0.0973	96	70-130	40	35	mg/kg	01.18.2021 06:39	XF
Toluene	<0.00202	0.101	0.0811	80	0.0999	99	70-130	21	35	mg/kg	01.18.2021 06:39	
Ethylbenzene	<0.00202	0.101	0.0793	79	0.0950	94	70-130	18	35	mg/kg	01.18.2021 06:39	
m,p-Xylenes	<0.00403	0.202	0.157	78	0.187	93	70-130	17	35	mg/kg	01.18.2021 06:39	
o-Xylene	<0.00202	0.101	0.0799	79	0.0981	97	70-130	20	35	mg/kg	01.18.2021 06:39	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		102		70-130	%	01.18.2021 06:39
4-Bromofluorobenzene	139	**	197	**	70-130	%	01.18.2021 06:39

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



Tetra Tech- Midland

Tyrell Fee #1

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148188

Parent Sample Id: 684955-069

Matrix: Soil

MS Sample Id: 684955-069 S

Prep Method: SW5035A

Date Prep: 01.18.2021

MSD Sample Id: 684955-069 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	0.0917	92	0.0917	92	70-130	0	35	mg/kg	01.18.2021 17:17	
Toluene	<0.00200	0.0998	0.0913	91	0.0935	94	70-130	2	35	mg/kg	01.18.2021 17:17	
Ethylbenzene	<0.00200	0.0998	0.0950	95	0.0997	100	70-130	5	35	mg/kg	01.18.2021 17:17	
m,p-Xylenes	<0.00399	0.200	0.202	101	0.211	106	70-130	4	35	mg/kg	01.18.2021 17:17	
o-Xylene	<0.00200	0.0998	0.0961	96	0.101	101	70-130	5	35	mg/kg	01.18.2021 17:17	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	93		92		70-130	%	01.18.2021 17:17
4-Bromofluorobenzene	113		118		70-130	%	01.18.2021 17:17

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148192

Parent Sample Id: 684732-001

Matrix: Soil

MS Sample Id: 684732-001 S

Prep Method: SW5035A

Date Prep: 01.18.2021

MSD Sample Id: 684732-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.101	0.0869	86	0.0778	77	70-130	11	35	mg/kg	01.19.2021 04:10	
Toluene	<0.00201	0.101	0.0800	79	0.0733	73	70-130	9	35	mg/kg	01.19.2021 04:10	
Ethylbenzene	<0.00201	0.101	0.0761	75	0.0717	71	70-130	6	35	mg/kg	01.19.2021 04:10	
m,p-Xylenes	<0.00402	0.201	0.154	77	0.149	74	70-130	3	35	mg/kg	01.19.2021 04:10	
o-Xylene	<0.00201	0.101	0.0752	74	0.0734	73	70-130	2	35	mg/kg	01.19.2021 04:10	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		101		70-130	%	01.19.2021 04:10
4-Bromofluorobenzene	99		105		70-130	%	01.19.2021 04:10

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148292

Parent Sample Id: 684953-043

Matrix: Soil

MS Sample Id: 684953-043 S

Prep Method: SW5035A

Date Prep: 01.19.2021

MSD Sample Id: 684953-043 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.0849	85	0.0804	81	70-130	5	35	mg/kg	01.20.2021 00:41	
Toluene	<0.00199	0.0994	0.0794	80	0.0750	76	70-130	6	35	mg/kg	01.20.2021 00:41	
Ethylbenzene	<0.00199	0.0994	0.0748	75	0.0713	72	70-130	5	35	mg/kg	01.20.2021 00:41	
m,p-Xylenes	<0.00398	0.199	0.150	75	0.144	73	70-130	4	35	mg/kg	01.20.2021 00:41	
o-Xylene	<0.00199	0.0994	0.0722	73	0.0693	70	70-130	4	35	mg/kg	01.20.2021 00:41	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		101		70-130	%	01.20.2021 00:41
4-Bromofluorobenzene	98		97		70-130	%	01.20.2021 00:41

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

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

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

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



Tetra Tech- Midland

Tyrell Fee #1

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148296

Parent Sample Id: 684955-087

Matrix: Soil

MS Sample Id: 684955-087 S

Prep Method: SW5035A

Date Prep: 01.19.2021

MSD Sample Id: 684955-087 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	0.00328	3	0.00331	3	70-130	1	35	mg/kg	01.19.2021 17:14	X
Toluene	<0.00200	0.0998	0.136	136	0.00352	4	70-130	190	35	mg/kg	01.19.2021 17:14	XF
Ethylbenzene	<0.00200	0.0998	0.00617	6	0.00360	4	70-130	53	35	mg/kg	01.19.2021 17:14	XF
m,p-Xylenes	<0.00399	0.200	0.00967	5	0.00747	4	70-130	26	35	mg/kg	01.19.2021 17:14	X
o-Xylene	<0.00200	0.0998	0.00521	5	0.00435	4	70-130	18	35	mg/kg	01.19.2021 17:14	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	93		100		70-130	%	01.19.2021 17:14
4-Bromofluorobenzene	93		75		70-130	%	01.19.2021 17:14

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

Analysis Request of Custody Record



Tetra Tech, Inc.

 901W Wall Street, Ste 100
 Midland, Texas 79705
 Tel (432) 682-4559
 Fax (432) 682-3946

Page 1 of 10

Client Name:		COG		Site Manager:		Conner Moehring	
Project Name:		Tyrell Fee #1		Project #:		212C-MD-02379	
Project Location: (county, state)		Lea Co, NM		Project #:		212C-MD-02379	
Invoice to:		COG - Ike Tavaréz		Sampler Signature:		Conner Moehring	
Receiving Laboratory:		Xenco		Comments:			

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD				# CONTAINERS	FILTERED (Y/N)	
		DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	None			
												YEAR: 2021
	Bottom Hole 1 (0.5')	1/14/2021		X				X			1	N
	Bottom Hole 2 (0.5')	1/14/2021		X				X			1	N
	Bottom Hole 3 (0.5')	1/14/2021		X				X			1	N
	Bottom Hole 4 (0.5')	1/14/2021		X				X			1	N
	Bottom Hole 5 (0.5')	1/14/2021		X				X			1	N
	Bottom Hole 6 (0.5')	1/14/2021		X				X			1	N
	Bottom Hole 7 (0.5')	1/14/2021		X				X			1	N
	Bottom Hole 8 (0.5')	1/14/2021		X				X			1	N
	Bottom Hole 9 (0.5')	1/14/2021		X				X			1	N
	Bottom Hole 10 (0.5')	1/14/2021		X				X			1	N

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
<i>Conner Moehring</i>	1/15/21	1040	<i>Conner Moehring</i>	1/15/21	1040
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

ORIGINAL COPY

ANALYSIS REQUEST

(Circle or Specify Method No.)

LAB USE ONLY	BTEX 8021B	BTEX 8260B	
	TPH TX1005 (Ext to C35)		
	TPH 8015M (GRO - DRO - ORO - MRO)		
	PAH 8270C		
	Total Metals Ag As Ba Cd Cr Pb Se Hg		
	TCLP Metals Ag As Ba Cd Cr Pb Se Hg		
	TCLP Volatiles		
	TCLP Semi Volatiles		
	RCI		
	GC/MS Vol. 8260B / 624		
	GC/MS Semi. Vol. 8270C/625		
	PCB's 8082 / 608		
	NORM		
	PLM (Asbestos)		
	Chloride		
Chloride Sulfate TDS			
General Water Chemistry (see attached list)			
Anion/Cation Balance			
Hold			

REMARKS:	
☐ STANDARD	
☒ RUSH: Same Day 24 hr 48 hr 72 hr	
☐ Rush Charges Authorized	
☐ Special Report Limits or TRRP Report	

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

 901 W. Wall Street, Ste 100
 Midland, Texas 79705
 Tel (432) 682-4559
 Fax (432) 682-3946

1084955

Page 2 of 10

Client Name: COG		Site Manager: Conner Moehring	
Project Name: Tyrell Fee #1			
Project Location: Lea Co, NM		Project #: 212C-MD-02379	
Invoice to: COG - Ike Tavares		Sampler Signature: Conner Moehring	
Receiving Laboratory: Xenco		Comments:	

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)	ANALYSIS REQUEST (Circle or Specify Method No.)
		DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	None				
										YEAR: 2021			
	Bottom Hole 11 (0.5')	1/14/2021		X		X					1 N		BTEX 8021B BTEX 8260B
	Bottom Hole 12 (0.5')	1/14/2021		X		X					1 N		TPH TX1005 (Ext to C35)
	Bottom Hole 13 (0.5')	1/14/2021		X		X					1 N		TPH 8015M (GRO - DRO - ORO - MRO)
	Bottom Hole 14 (0.5')	1/14/2021		X		X					1 N		PAH 8270C
	Bottom Hole 15 (0.5')	1/14/2021		X		X					1 N		Total Metals Ag As Ba Cd Cr Pb Se Hg
	Bottom Hole 16 (0.5')	1/14/2021		X		X					1 N		TCLP Metals Ag As Ba Cd Cr Pb Se Hg
	Bottom Hole 17 (0.5')	1/14/2021		X		X					1 N		TCLP Volatiles
	Bottom Hole 18 (0.5')	1/14/2021		X		X					1 N		TCLP Semi Volatiles
	Bottom Hole 19 (0.5')	1/14/2021		X		X					1 N		RCI
	Bottom Hole 20 (0.5')	1/14/2021		X		X					1 N		GC/MS Vol. 8260B / 624
													GC/MS Semi. Vol. 8270C/625
													PCB's 8082 / 608
													NORM
													PLM (Asbestos)
													Chloride
													Chloride Sulfate TDS
													General Water Chemistry (see attached list)
													Anion/Cation Balance
													Hold

Relinquished by: <i>Conner Moehring</i>	Date: 1/15/21	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

LAB USE ONLY	REMARKS:
☐ STANDARD ☒ RUSH: Same Day 24 hr 48 hr 72 hr ☐ Rush Charges Authorized ☐ Special Report Limits or TRRP Report	

ORIGINAL COPY

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

 901 W. Wall Street, Ste 100
 Midland, Texas 79705
 Tel (432) 682-4559
 Fax (432) 682-3946

1084955

Page 3 of 10

Client Name: COG		Site Manager: Conner Moehring	
Project Name: Tyrell Fee #1			
Project Location: Lea Co, NM		Project #: 212C-MD-02379	
Invoice to: COG - Ike Tavares		Sampler Signature: Conner Moehring	
Receiving Laboratory: Xenco		Comments:	

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)	
		DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	None				
										YEAR: 2021			
	Bottom Hole 21 (0.5')	1/14/2021		X				X				1	N
	Bottom Hole 22 (0.5')	1/14/2021		X				X				1	N
	Bottom Hole 23 (2-2.5')	1/14/2021		X				X				1	N
	Bottom Hole 24 (2-2.5')	1/14/2021		X				X				1	N
	Bottom Hole 25 (2-2.5')	1/14/2021		X				X				1	N
	Bottom Hole 26 (2-2.5')	1/14/2021		X				X				1	N
	Bottom Hole 27 (2-2.5')	1/14/2021		X				X				1	N
	Bottom Hole 28 (2-2.5')	1/14/2021		X				X				1	N
	Bottom Hole 29 (2-2.5')	1/14/2021		X				X				1	N
	Bottom Hole 30 (2-2.5')	1/14/2021		X				X				1	N

LAB USE ONLY	REMARKS:	ANALYSIS REQUEST (Circle or Specify Method No.)																								
		STANDARD	RUSH: Same Day 24 hr 48 hr 72 hr	Rush Charges Authorized	Special Report Limits or TRRP Report	BTX 8021B	BTX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance		

ORIGINAL COPY

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

901W Wall Street, Ste 100
Midland, Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

Client Name:		COG				Site Manager:		Conner Moehring			
Project Name:		Tyrell Fee #1									
Project Location: (county, state)		Lea Co, NM				Project #:		212C-MD-02379			
Invoice to:		COG - Ike Tavaréz									
Receiving Laboratory:		Xenco		Sampler Signature:		Conner Moehring					
Comments:											
LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD			# CONTAINERS	FILTERED (Y/N)	
		YEAR: 2021									
		DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE			None
	Bottom Hole 31 (4-4.5')	1/14/2021		X			X			1	N
	Bottom Hole 32 (4-4.5')	1/14/2021		X			X			1	N
	Bottom Hole 33 (4-4.5')	1/14/2021		X			X			1	N
	Bottom Hole 34 (4-4.5')	1/14/2021		X			X			1	N
	Bottom Hole 35 (4-4.5')	1/14/2021		X			X			1	N
	Bottom Hole 36 (4-4.5')	1/14/2021		X			X			1	N
	Bottom Hole 37 (4-4.5')	1/14/2021		X			X			1	N
	Bottom Hole 38 (4-4.5')	1/14/2021		X			X			1	N
	Bottom Hole 65 (3-3.5')	1/14/2021		X			X			1	N
	Bottom Hole 66 (3-3.5')	1/14/2021		X			X			1	N
Squashed by: <i>Conner Moehring</i>		Date: 1/15/21	Time:	Received by:		Date:	Time:				
Squashed by:		Date:	Time:	Received by:		Date:	Time:				
Squashed by:		Date:	Time:	Received by:		Date:	Time:				

[illegible]

Page 4 of 10

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

901 W Wall Street, Ste 100
Midland, Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

108495

Page 5 of 9

Client Name:						COG						Site Manager:						Conner Moehring					
Project Name:												Tyrell Fee #1											
Project Location:												Lea Co., NM											
(county, state)												Project #:											
Invoice to:												212C-MD-02379											
Receiving Laboratory:												COG - Ike Tavaréz											
Comments:												Xenco											
Sampler Signature:												Conner Moehring											
LAB # (LAB USE ONLY)												SAMPLE IDENTIFICATION											
												SAMPLING YEAR: 2021											
												DATE											
												TIME											
												WATER											
												SOIL											
												HCL											
												HNO ₃											
												ICE											
												None											
												# CONTAINERS											
												FILTERED (Y/N)											
Bottom Hole 67 (3-3.5')												1/1/4/2021											
Bottom Hole 68 (3-3.5')												1/1/4/2021											
Bottom Hole 69 (3-3.5')												1/1/4/2021											
Bottom Hole 70 (3-3.5')												1/1/4/2021											
Bottom Hole 71 (3-3.5')												1/1/4/2021											
Bottom Hole 72 (3-3.5')												1/1/4/2021											
Bottom Hole 73 (3-3.5')												1/1/4/2021											
Bottom Hole 74 (3-3.5')												1/1/4/2021											
Bottom Hole 75 (3-3.5')												1/1/4/2021											
Bottom Hole 76 (4-4.5')												1/1/4/2021											
Relinquished by:												Date: Time:											
Relinquished by:												Date: Time:											
Relinquished by:												Date: Time:											
Received by:												Date: Time:											
Received by:												Date: Time:											
LAB USE ONLY												REMARKS:											
Sample Temperature												STANDARD											
												RUSH: Same Day 24 hr 48 hr 72 hr											
												Rush Charges Authorized											
												Special Report Limits or TRRP Report											
												Hold											

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

901W Wall Street, Ste 100
Midland, Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

1084955

Page 6 of 10

Client Name:		COG		Site Manager:		Conner Moehring				
Project Name:		Tyrrell Fee #1								
Project Location:		Lea Co, NM		Project #:		212C-MD-02379				
(county, state)										
Invoice to:		COG - Ike Tavaraz								
Receiving Laboratory:		Xenco		Sampler Signature:		Conner Moehring				
Comments:										
LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX	PRESERVATIVE METHOD			# CONTAINERS	FILTERED (Y/N)	
		YEAR: 2021								
	Bottom Hole 77 (4-4.5')	DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	None	
	Bottom Hole 78 (4-4.5')	1/14/2021		X			X			1 N
	Bottom Hole 79 (4-4.5')	1/14/2021		X			X			1 N
	Bottom Hole 80 (4-4.5')	1/14/2021		X			X			1 N
	Bottom Hole 81 (4-4.5')	1/14/2021		X			X			1 N
	Bottom Hole 82 (4-4.5')	1/14/2021		X			X			1 N
	Bottom Hole 83 (4-4.5')	1/14/2021		X			X			1 N
	Bottom Hole 84 (4-4.5')	1/14/2021		X			X			1 N
	Bottom Hole 85 (4-4.5')	1/14/2021		X			X			1 N
	Bottom Hole 86 (4-4.5')	1/14/2021		X			X			1 N
Relinquished by:		Date:	Time:	Received by:		Date:	Time:			
Relinquished by: <i>Conner Moehring</i>		Date: <i>1/15/21</i>	Time:	Received by:		Date:	Time:			
Relinquished by:		Date:	Time:	Received by:		Date:	Time:			
Relinquished by:		Date:	Time:	Received by:		Date:	Time:			

LAB USE ONLY		REMARKS:	
STANDARD	STANDARD		
☐	☒	RUSH: Same Day	24 hr
☐	☐	Rush Charges Authorized	
☐	☐	Special Report Limits or TRRP Report	

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

 901W Wall Street, Ste 100
 Midland, Texas 79705
 Tel (432) 682-4559
 Fax (432) 682-3946

Page

7 of 10

Client Name: COG		Site Manager: Conner Moehring	
Project Name: Tyrell Fee #1			
Project Location: Lea Co, NM		Project #: 212C-MD-02379	
Invoice to: COG - Ike Tavares			
Receiving Laboratory: Xenco		Sampler Signature: Conner Moehring	
Comments:			

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)	ANALYSIS REQUEST (Circle or Specify Method No.)	
		DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	None					
										YEAR: 2021				
	Bottom Hole 87 (4-4.5')	1/14/2021		X				X				1	N	BTEX 8021B BTEX 8260B
	Bottom Hole 88 (4-4.5')	1/14/2021		X				X				1	N	TPH TX1005 (Ext to C35)
	Bottom Hole 89 (4-4.5')	1/14/2021		X				X				1	N	TPH 8015M (GRO - DRO - ORO - MRO)
	Bottom Hole 90 (4-4.5')	1/14/2021		X				X				1	N	PAH 8270C
	Bottom Hole 91 (4-4.5')	1/14/2021		X				X				1	N	Total Metals Ag As Ba Cd Cr Pb Se Hg
	Bottom Hole 92 (4-4.5')	1/14/2021		X				X				1	N	TCLP Metals Ag As Ba Cd Cr Pb Se Hg
	Bottom Hole 93 (4-4.5')	1/14/2021		X				X				1	N	TCLP Volatiles
	Bottom Hole 94 (4-4.5')	1/14/2021		X				X				1	N	TCLP Semi Volatiles
	Bottom Hole 95 (4-4.5')	1/14/2021		X				X				1	N	RCI
	Bottom Hole 96 (4-4.5')	1/14/2021		X				X				1	N	GC/MS Vol. 8260B / 624
														GC/MS Semi. Vol. 8270C/625
														PCB's 8082 / 608
														NORM
														PLM (Asbestos)
														Chloride
														Chloride Sulfate TDS
														General Water Chemistry (see attached list)
														Anion/Cation Balance
														Hold

Relinquished by: <i>Conner Moehring</i> 1/15/21	Date: 1/15/21	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

LAB USE ONLY	REMARKS:
☐ STANDARD ☒ RUSH: Same Day 24 hr 48 hr 72 hr ☐ Rush Charges Authorized ☐ Special Report Limits or TRRP Report	

ORIGINAL COPY

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

 901 W Wall Street, Ste 100
 Midland, Texas 79705
 Tel (432) 682-4559
 Fax (432) 682-3946

1084955

Page 8 of 10

Client Name: COG		Site Manager: Conner Moehring	
Project Name: Tyrell Fee #1			
Project Location: Lea Co, NM		Project #: 212C-MD-02379	
Invoice to: COG - Ike Tavares			
Receiving Laboratory: Xenco		Sampler Signature: Conner Moehring	
Comments:			

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)	
		DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	None				
										YEAR: 2021			
	Bottom Hole 97 (4-4.5')	1/14/2021		X		X						1 N	
	Bottom Hole 98 (4-4.5')	1/14/2021		X		X						1 N	
	Bottom Hole 99 (4-4.5')	1/14/2021		X		X						1 N	
	Bottom Hole 100 (4-4.5')	1/14/2021		X		X						1 N	
	Bottom Hole 101 (4-4.5')	1/14/2021		X		X						1 N	
	Bottom Hole 102 (4-4.5')	1/14/2021		X		X						1 N	
	Bottom Hole 103 (4-4.5')	1/14/2021		X		X						1 N	
	Bottom Hole 104 (4-4.5')	1/14/2021		X		X						1 N	
	Bottom Hole 105 (4-4.5')	1/14/2021		X		X						1 N	
	Bottom Hole 106 (4-4.5')	1/14/2021		X		X						1 N	

LAB USE ONLY	REMARKS:
☐ STANDARD ☒ RUSH: Same Day 24 hr 48 hr 72 hr ☐ Rush Charges Authorized ☐ Special Report Limits or TRRP Report	ANALYSIS REQUEST (Circle or Specify Method No.) BTEX 8021B BTEX 8260B TPH TX1005 (Ext to C35) TPH 8015M (GRO - DRO - ORO - MRO) PAH 8270C Total Metals Ag As Ba Cd Cr Pb Se Hg TCLP Metals Ag As Ba Cd Cr Pb Se Hg TCLP Volatiles TCLP Semi Volatiles RCI GC/MS Vol. 8260B / 624 GC/MS Semi. Vol. 8270C/625 PCB's 8082 / 608 NORM PLM (Asbestos) Chloride Chloride Sulfate TDS General Water Chemistry (see attached list) Anion/Cation Balance Hold

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #:



Tetra Tech, Inc.

901 W Wall Street, Ste 100
Midland, Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

[illegible]

ORIGINAL COPY

ANALYSIS REQUEST

(Circle or Specify Method No.)

Hold

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 01.15.2021 04.40.00 PM

Work Order #: 684955

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	-3.1
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	Yes
#18 Water VOC samples have zero headspace?	N/A

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Brianna Teel

Date: 01.15.2021

Checklist reviewed by:



Jessica Kramer

Date: 01.18.2021

Certificate of Analysis Summary 684953



Tetra Tech- Midland, Midland, TX

Project Name: COG - Tyrell Fee #1

Project Id:

Date Received in Lab: Fri 01.15.2021 16:39

Contact: Clair Gonzales

Report Date: 01.20.2021 16:26

Project Location: Lea Co NM

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	684953-001	684953-002	684953-003	684953-004	684953-005	684953-006
	<i>Field Id:</i>	Sidewall 1	Sidewall 2	Sidewall 3	Sidewall 4	Sidewall 5	Sidewall 6
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	01.18.2021 16:30	01.18.2021 16:30	01.18.2021 16:30	01.18.2021 16:30	01.18.2021 16:30	01.18.2021 16:30
	<i>Analyzed:</i>	01.18.2021 22:08	01.18.2021 22:33	01.18.2021 22:57	01.18.2021 23:22	01.18.2021 23:47	01.19.2021 00:11
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199	<0.00202 0.00202	0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200
m,p-Xylenes		<0.00399 0.00399	<0.00398 0.00398	<0.00397 0.00397	<0.00398 0.00398	<0.00403 0.00403	<0.00399 0.00399
o-Xylene		<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200
Total BTEX		<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199	<0.00202 0.00202	0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	01.19.2021 10:38	01.19.2021 10:38	01.19.2021 10:38	01.19.2021 10:38	01.19.2021 10:38	01.19.2021 10:38
	<i>Analyzed:</i>	01.19.2021 11:12	01.19.2021 11:27	01.19.2021 11:33	01.19.2021 11:38	01.19.2021 11:43	01.19.2021 11:59
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		<4.97 4.97	<5.04 5.04	7.47 4.98	6.14 5.03	8.05 5.00	<5.04 5.04
TPH by SW8015 Mod	<i>Extracted:</i>	01.19.2021 11:00	01.19.2021 11:00	01.19.2021 11:00	01.19.2021 11:00	01.19.2021 11:00	01.19.2021 11:00
	<i>Analyzed:</i>	01.19.2021 12:25	01.19.2021 13:29	01.19.2021 13:52	01.19.2021 14:14	01.19.2021 14:35	01.19.2021 14:56
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9
Total TPH		<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 684953



Tetra Tech- Midland, Midland, TX

Project Name: COG - Tyrell Fee #1

Project Id:

Date Received in Lab: Fri 01.15.2021 16:39

Contact: Clair Gonzales

Report Date: 01.20.2021 16:26

Project Location: Lea Co NM

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	684953-007	684953-008	684953-009	684953-010	684953-011	684953-027
	<i>Field Id:</i>	Sidewall 7	Sidewall 8	Sidewall 9	Sidewall 10	Sidewall 11	Sidewall 27
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	01.18.2021 16:30	01.18.2021 16:30	01.19.2021 10:00	01.18.2021 16:30	01.19.2021 10:00	01.19.2021 10:00
	<i>Analyzed:</i>	01.19.2021 00:36	01.19.2021 01:01	01.19.2021 15:27	01.19.2021 01:51	01.19.2021 15:47	01.19.2021 16:08
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00201 0.00201	<0.00202 0.00202	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198	<0.00200 0.00200
Toluene		<0.00201 0.00201	<0.00202 0.00202	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198	<0.00200 0.00200
Ethylbenzene		<0.00201 0.00201	<0.00202 0.00202	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198	<0.00200 0.00200
m,p-Xylenes		<0.00402 0.00402	<0.00403 0.00403	<0.00396 0.00396	<0.00396 0.00396	<0.00397 0.00397	<0.00400 0.00400
o-Xylene		<0.00201 0.00201	<0.00202 0.00202	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198	<0.00200 0.00200
Total Xylenes		<0.00201 0.00201	<0.00202 0.00202	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198	<0.00200 0.00200
Total BTEX		<0.00201 0.00201	<0.00202 0.00202	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	01.19.2021 10:38	01.19.2021 10:38	01.19.2021 10:38	01.19.2021 10:38	01.19.2021 10:38	01.18.2021 11:00
	<i>Analyzed:</i>	01.19.2021 12:04	01.19.2021 12:09	01.19.2021 12:14	01.19.2021 12:19	01.19.2021 12:26	01.18.2021 12:29
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		<4.99 4.99	6.18 4.96	<4.97 4.97	<4.97 4.97	5.40 5.03	6.12 5.00
TPH by SW8015 Mod	<i>Extracted:</i>	01.19.2021 11:00	01.19.2021 11:00	01.19.2021 11:00	01.19.2021 11:00	01.19.2021 11:00	01.19.2021 11:00
	<i>Analyzed:</i>	01.19.2021 15:24	01.19.2021 15:45	01.19.2021 16:06	01.19.2021 16:28	01.19.2021 17:10	01.19.2021 17:31
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.8 49.8
Diesel Range Organics (DRO)		<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.8 49.8
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.8 49.8
Total TPH		<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.8 49.8

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 684953



Tetra Tech- Midland, Midland, TX

Project Name: COG - Tyrell Fee #1

Project Id:

Date Received in Lab: Fri 01.15.2021 16:39

Contact: Clair Gonzales

Report Date: 01.20.2021 16:26

Project Location: Lea Co NM

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	684953-028	684953-029	684953-030	684953-031	684953-032	684953-033
	<i>Field Id:</i>	Sidewall 28	Sidewall 29	Sidewall 30	Sidewall 31	Sidewall 32	Sidewall 33
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	01.19.2021 10:00	01.19.2021 10:00	01.19.2021 10:00	01.19.2021 10:00	01.19.2021 10:00	01.19.2021 10:00
	<i>Analyzed:</i>	01.19.2021 16:28	01.19.2021 16:48	01.19.2021 17:09	01.19.2021 17:29	01.19.2021 17:50	01.19.2021 19:53
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198	<0.00202 0.00202
Toluene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198	<0.00202 0.00202
Ethylbenzene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198	<0.00202 0.00202
m,p-Xylenes		<0.00399 0.00399	<0.00402 0.00402	<0.00399 0.00399	<0.00396 0.00396	<0.00397 0.00397	<0.00403 0.00403
o-Xylene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198	<0.00202 0.00202
Total Xylenes		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198	<0.00202 0.00202
Total BTEX		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198	<0.00202 0.00202
Chloride by EPA 300	<i>Extracted:</i>	01.18.2021 11:00	01.18.2021 11:00	01.18.2021 11:00	01.18.2021 11:00	01.18.2021 11:00	01.18.2021 11:00
	<i>Analyzed:</i>	01.18.2021 12:45	01.18.2021 12:50	01.18.2021 13:06	01.18.2021 13:11	01.18.2021 13:16	01.18.2021 13:21
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		10.6 4.95	<5.04 5.04	5.15 4.96	7.81 4.99	<5.05 5.05	<5.05 5.05
TPH by SW8015 Mod	<i>Extracted:</i>	01.19.2021 11:00	01.19.2021 11:00	01.19.2021 11:00	01.19.2021 11:00	01.19.2021 11:00	01.19.2021 11:00
	<i>Analyzed:</i>	01.19.2021 17:52	01.19.2021 18:13	01.19.2021 18:34	01.19.2021 18:56	01.19.2021 19:17	01.19.2021 19:38
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9	<49.8 49.8
Diesel Range Organics (DRO)		<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9	<49.8 49.8
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9	<49.8 49.8
Total TPH		<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9	<49.8 49.8

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 684953

Tetra Tech- Midland, Midland, TX

Project Name: COG - Tyrell Fee #1

Project Id:

Date Received in Lab: Fri 01.15.2021 16:39

Contact: Clair Gonzales

Report Date: 01.20.2021 16:26

Project Location: Lea Co NM

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	684953-034	684953-035	684953-036	684953-037	684953-038	684953-039
	<i>Field Id:</i>	Sidewall 34	Sidewall 35	Sidewall 36	Sidewall 37	Sidewall 38	Sidewall 39
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	01.19.2021 10:00	01.19.2021 10:00	01.19.2021 10:00	01.19.2021 10:00	01.19.2021 10:00	01.19.2021 10:00
	<i>Analyzed:</i>	01.19.2021 20:14	01.19.2021 20:34	01.19.2021 20:55	01.19.2021 21:15	01.19.2021 21:36	01.19.2021 21:56
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00198 0.00198
Toluene		<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00198 0.00198
Ethylbenzene		<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00198 0.00198
m,p-Xylenes		<0.00403 0.00403	<0.00396 0.00396	<0.00400 0.00400	<0.00398 0.00398	<0.00402 0.00402	<0.00396 0.00396
o-Xylene		<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00198 0.00198
Total Xylenes		<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00198 0.00198
Total BTEX		<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00198 0.00198
Chloride by EPA 300	<i>Extracted:</i>	01.18.2021 11:00	01.18.2021 11:00	01.18.2021 12:30	01.18.2021 12:30	01.18.2021 12:30	01.18.2021 12:30
	<i>Analyzed:</i>	01.18.2021 13:27	01.18.2021 13:32	01.18.2021 14:03	01.18.2021 14:19	01.18.2021 14:24	01.18.2021 14:30
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		5.72 5.05	<4.98 4.98	9.95 5.04	15.0 4.98	19.1 4.95	12.9 4.98
TPH by SW8015 Mod	<i>Extracted:</i>	01.19.2021 11:00	01.19.2021 11:00	01.19.2021 08:00	01.19.2021 08:00	01.19.2021 08:00	01.19.2021 08:00
	<i>Analyzed:</i>	01.19.2021 20:00	01.19.2021 20:21	01.19.2021 10:08	01.19.2021 10:27	01.19.2021 10:46	01.19.2021 11:04
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0
Total TPH		<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0

BRL - Below Reporting Limit

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



Certificate of Analysis Summary 684953



Tetra Tech- Midland, Midland, TX

Project Name: COG - Tyrell Fee #1

Project Id:

Date Received in Lab: Fri 01.15.2021 16:39

Contact: Clair Gonzales

Report Date: 01.20.2021 16:26

Project Location: Lea Co NM

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	684953-040	684953-041	684953-042	684953-043	684953-044	684953-045
	<i>Field Id:</i>	Sidewall 40	Sidewall 41	Sidewall 42	Sidewall 43	Sidewall 44	Sidewall 45
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	01.19.2021 10:00	01.19.2021 10:00	01.19.2021 10:00	01.19.2021 11:00	01.19.2021 11:00	01.19.2021 11:00
	<i>Analyzed:</i>	01.19.2021 22:17	01.19.2021 22:37	01.19.2021 22:58	01.20.2021 02:21	01.20.2021 02:41	01.20.2021 03:02
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
m,p-Xylenes		<0.00399 0.00399	<0.00399 0.00399	<0.00398 0.00398	<0.00401 0.00401	<0.00400 0.00400	<0.00398 0.00398
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Chloride by EPA 300	<i>Extracted:</i>	01.18.2021 12:30	01.18.2021 12:30	01.18.2021 12:30	01.18.2021 12:30	01.18.2021 12:30	01.18.2021 12:30
	<i>Analyzed:</i>	01.18.2021 14:35	01.18.2021 14:51	01.18.2021 14:56	01.18.2021 15:02	01.18.2021 15:07	01.18.2021 15:12
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		16.6 4.99	11.7 5.00	12.5 5.00	11.5 5.02	10.5 4.97	15.1 4.98
TPH by SW8015 Mod	<i>Extracted:</i>	01.19.2021 08:00	01.19.2021 08:00	01.19.2021 08:00	01.19.2021 08:00	01.19.2021 08:00	01.19.2021 08:00
	<i>Analyzed:</i>	01.19.2021 11:23	01.19.2021 09:11	01.19.2021 11:41	01.19.2021 12:00	01.19.2021 12:18	01.19.2021 12:37
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0
Diesel Range Organics (DRO)		<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0
Total TPH		<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 684953

Tetra Tech- Midland, Midland, TX

Project Name: COG - Tyrell Fee #1

Project Id:

Contact: Clair Gonzales

Project Location: Lea Co NM

Date Received in Lab: Fri 01.15.2021 16:39

Report Date: 01.20.2021 16:26

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	684953-046	684953-047	684953-048	684953-049	684953-050	684953-051
	<i>Field Id:</i>	Sidewall 46	Sidewall 47	Sidewall 48	Sidewall 49	Sidewall 50	Sidewall 51
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00	01.14.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	01.19.2021 11:00	01.19.2021 11:00	01.19.2021 11:00	01.19.2021 11:00	01.19.2021 11:00	01.19.2021 11:00
	<i>Analyzed:</i>	01.20.2021 03:22	01.20.2021 03:43	01.20.2021 04:03	01.20.2021 04:24	01.20.2021 04:44	01.20.2021 05:05
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
Toluene		<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
Ethylbenzene		<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
m,p-Xylenes		<0.00398 0.00398	<0.00398 0.00398	<0.00398 0.00398	<0.00401 0.00401	<0.00398 0.00398	<0.00396 0.00396
o-Xylene		<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
Total Xylenes		<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
Total BTEX		<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
Chloride by EPA 300	<i>Extracted:</i>	01.18.2021 12:30	01.18.2021 12:30	01.18.2021 12:30	01.18.2021 12:30	01.18.2021 12:30	01.18.2021 12:30
	<i>Analyzed:</i>	01.18.2021 15:18	01.18.2021 15:34	01.18.2021 15:39	01.18.2021 15:55	01.18.2021 16:00	01.18.2021 16:06
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		10.5 5.05	16.6 4.99	12.8 4.96	15.4 5.03	11.6 4.95	11.4 5.00
TPH by SW8015 Mod	<i>Extracted:</i>	01.19.2021 16:00	01.19.2021 16:00	01.19.2021 16:00	01.19.2021 16:00	01.19.2021 16:00	01.19.2021 16:00
	<i>Analyzed:</i>	01.20.2021 03:07	01.20.2021 03:28	01.20.2021 03:49	01.20.2021 04:11	01.20.2021 04:33	01.20.2021 04:54
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<49.9 49.9	<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9
Total TPH		<49.9 49.9	<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9

BRL - Below Reporting Limit

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



Certificate of Analysis Summary 684953

Tetra Tech- Midland, Midland, TX

Project Name: COG - Tyrell Fee #1

Project Id:

Contact: Clair Gonzales

Project Location: Lea Co NM

Date Received in Lab: Fri 01.15.2021 16:39

Report Date: 01.20.2021 16:26

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	684953-052	684953-053				
	Field Id:	Sidewall 52	Sidewall 53				
	Depth:						
	Matrix:	SOIL	SOIL				
	Sampled:	01.14.2021 00:00	01.14.2021 00:00				
BTEX by EPA 8021B	Extracted:	01.19.2021 11:00	01.19.2021 11:00				
	Analyzed:	01.20.2021 05:25	01.20.2021 06:48				
	Units/RL:	mg/kg RL	mg/kg RL				
Benzene		<0.00202 0.00202	<0.00200 0.00200				
Toluene		<0.00202 0.00202	<0.00200 0.00200				
Ethylbenzene		<0.00202 0.00202	<0.00200 0.00200				
m,p-Xylenes		<0.00404 0.00404	<0.00399 0.00399				
o-Xylene		<0.00202 0.00202	<0.00200 0.00200				
Total Xylenes		<0.00202 0.00202	<0.00200 0.00200				
Total BTEX		<0.00202 0.00202	<0.00200 0.00200				
Chloride by EPA 300	Extracted:	01.18.2021 12:30	01.18.2021 12:30				
	Analyzed:	01.18.2021 16:11	01.18.2021 16:16				
	Units/RL:	mg/kg RL	mg/kg RL				
Chloride		11.1 4.97	14.9 4.96				
TPH by SW8015 Mod	Extracted:	01.19.2021 16:00	01.19.2021 16:00				
	Analyzed:	01.20.2021 05:15	01.20.2021 05:37				
	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		<50.0 50.0	<50.0 50.0				

BRL - Below Reporting Limit

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



Analytical Report 684953

for

Tetra Tech- Midland

Project Manager: Clair Gonzales

COG - Tyrell Fee #1

01.20.2021

Collected By: Client



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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



01.20.2021

Project Manager: **Clair Gonzales**

Tetra Tech- Midland

901 West Wall ST

Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **684953**

COG - Tyrell Fee #1

Project Address: Lea Co NM

Clair Gonzales:

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 Eurofins Xenco, LLC Report Number(s) 684953. 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 Eurofins Xenco, LLC. 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. 684953 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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



Sample Cross Reference 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Sidewall 1	S	01.14.2021 00:00		684953-001
Sidewall 2	S	01.14.2021 00:00		684953-002
Sidewall 3	S	01.14.2021 00:00		684953-003
Sidewall 4	S	01.14.2021 00:00		684953-004
Sidewall 5	S	01.14.2021 00:00		684953-005
Sidewall 6	S	01.14.2021 00:00		684953-006
Sidewall 7	S	01.14.2021 00:00		684953-007
Sidewall 8	S	01.14.2021 00:00		684953-008
Sidewall 9	S	01.14.2021 00:00		684953-009
Sidewall 10	S	01.14.2021 00:00		684953-010
Sidewall 11	S	01.14.2021 00:00		684953-011
Sidewall 27	S	01.14.2021 00:00		684953-027
Sidewall 28	S	01.14.2021 00:00		684953-028
Sidewall 29	S	01.14.2021 00:00		684953-029
Sidewall 30	S	01.14.2021 00:00		684953-030
Sidewall 31	S	01.14.2021 00:00		684953-031
Sidewall 32	S	01.14.2021 00:00		684953-032
Sidewall 33	S	01.14.2021 00:00		684953-033
Sidewall 34	S	01.14.2021 00:00		684953-034
Sidewall 35	S	01.14.2021 00:00		684953-035
Sidewall 36	S	01.14.2021 00:00		684953-036
Sidewall 37	S	01.14.2021 00:00		684953-037
Sidewall 38	S	01.14.2021 00:00		684953-038
Sidewall 39	S	01.14.2021 00:00		684953-039
Sidewall 40	S	01.14.2021 00:00		684953-040
Sidewall 41	S	01.14.2021 00:00		684953-041
Sidewall 42	S	01.14.2021 00:00		684953-042
Sidewall 43	S	01.14.2021 00:00		684953-043
Sidewall 44	S	01.14.2021 00:00		684953-044
Sidewall 45	S	01.14.2021 00:00		684953-045
Sidewall 46	S	01.14.2021 00:00		684953-046
Sidewall 47	S	01.14.2021 00:00		684953-047
Sidewall 48	S	01.14.2021 00:00		684953-048
Sidewall 49	S	01.14.2021 00:00		684953-049
Sidewall 50	S	01.14.2021 00:00		684953-050
Sidewall 51	S	01.14.2021 00:00		684953-051
Sidewall 52	S	01.14.2021 00:00		684953-052
Sidewall 53	S	01.14.2021 00:00		684953-053
Sidewall 12	S	01.14.2021 00:00		Not Analyzed
Sidewall 13	S	01.14.2021 00:00		Not Analyzed
Sidewall 14	S	01.14.2021 00:00		Not Analyzed
Sidewall 15	S	01.14.2021 00:00		Not Analyzed
Sidewall 16	S	01.14.2021 00:00		Not Analyzed

**Sample Cross Reference 684953****Tetra Tech- Midland, Midland, TX**

COG - Tyrell Fee #1

Sidewall 17	S	01.14.2021 00:00	Not Analyzed
Sidewall 18	S	01.14.2021 00:00	Not Analyzed
Sidewall 19	S	01.14.2021 00:00	Not Analyzed
Sidewall 20	S	01.14.2021 00:00	Not Analyzed
Sidewall 21	S	01.14.2021 00:00	Not Analyzed
Sidewall 22	S	01.14.2021 00:00	Not Analyzed
Sidewall 23	S	01.14.2021 00:00	Not Analyzed
Sidewall 24	S	01.14.2021 00:00	Not Analyzed
Sidewall 25	S	01.14.2021 00:00	Not Analyzed
Sidewall 26	S	01.14.2021 00:00	Not Analyzed

**CASE NARRATIVE****Client Name: Tetra Tech- Midland****Project Name: COG - Tyrell Fee #1**Project ID:
Work Order Number(s): 684953Report Date: 01.20.2021
Date Received: 01.15.2021**Sample receipt non conformances and comments:****Sample receipt non conformances and comments per sample:**

None

Analytical non conformances and comments:

Batch: LBA-3148201 BTEX by EPA 8021B

Surrogate 1,4-Difluorobenzene recovered above QC limits. Matrix interferences is suspected.

Samples affected are: 684953-008,684953-010,684953-007,684953-005,684953-004,684953-002,684953-003.

Surrogate 4-Bromofluorobenzene recovered above QC limits Data confirmed by re-analysis. Samples affected are: 7719477-1-BKS,7719477-1-BLK,7719477-1-BSD,684953-001 S,684953-001 SD,684953-001,684953-002,684953-003,684953-004,684953-005,684953-006,684953-007,684953-008,684953-010.

Batch: LBA-3148291 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered below QC limits. Matrix interferences is suspected.

Samples affected are: 684953-040.

Batch: LBA-3148292 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered below QC limits. Matrix interferences is suspected.

Samples affected are: 684953-050,684953-048.

Batch: LBA-3148364 TPH by SW8015 Mod

Surrogate 1-Chlorooctane recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 684953-033.



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 1**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-001

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.19.2021 10:38

% Moisture:

Seq Number: 3148368

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.97	4.97	mg/kg	01.19.2021 11:12	U	1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148364

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.19.2021 12:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.19.2021 12:25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.19.2021 12:25	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.19.2021 12:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-130	01.19.2021 12:25	
o-Terphenyl	84-15-1	106	%	70-130	01.19.2021 12:25	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 1**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-001

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 16:30

% Moisture:

Seq Number: 3148201

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.18.2021 22:08	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.18.2021 22:08	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.18.2021 22:08	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.18.2021 22:08	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.18.2021 22:08	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.18.2021 22:08	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.18.2021 22:08	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	213	%	70-130	01.18.2021 22:08	**	
1,4-Difluorobenzene	540-36-3	79	%	70-130	01.18.2021 22:08		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 2**
Lab Sample Id: 684953-002

Matrix: Soil
Date Collected: 01.14.2021 00:00

Date Received: 01.15.2021 16:39

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.19.2021 10:38

% Moisture:
Basis: Wet Weight

Seq Number: 3148368

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.04	5.04	mg/kg	01.19.2021 11:27	U	1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 11:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148364

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.19.2021 13:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.19.2021 13:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.19.2021 13:29	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.19.2021 13:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-130	01.19.2021 13:29	
o-Terphenyl	84-15-1	107	%	70-130	01.19.2021 13:29	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 2**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-002

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 16:30

% Moisture:

Seq Number: 3148201

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.18.2021 22:33	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.18.2021 22:33	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.18.2021 22:33	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.18.2021 22:33	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.18.2021 22:33	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.18.2021 22:33	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.18.2021 22:33	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	132	%	70-130	01.18.2021 22:33	**	
4-Bromofluorobenzene	460-00-4	198	%	70-130	01.18.2021 22:33	**	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 3**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-003

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.19.2021 10:38

% Moisture:

Seq Number: 3148368

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7.47	4.98	mg/kg	01.19.2021 11:33		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148364

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.19.2021 13:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.19.2021 13:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.19.2021 13:52	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.19.2021 13:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-130	01.19.2021 13:52	
o-Terphenyl	84-15-1	100	%	70-130	01.19.2021 13:52	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 3**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-003

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 16:30

% Moisture:

Seq Number: 3148201

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.18.2021 22:57	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.18.2021 22:57	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.18.2021 22:57	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.18.2021 22:57	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.18.2021 22:57	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.18.2021 22:57	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.18.2021 22:57	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	208	%	70-130	01.18.2021 22:57	**	
1,4-Difluorobenzene	540-36-3	132	%	70-130	01.18.2021 22:57	**	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 4**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-004

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.19.2021 10:38

% Moisture:

Seq Number: 3148368

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6.14	5.03	mg/kg	01.19.2021 11:38		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148364

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.19.2021 14:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.19.2021 14:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.19.2021 14:14	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.19.2021 14:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-130	01.19.2021 14:14	
o-Terphenyl	84-15-1	104	%	70-130	01.19.2021 14:14	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 4**
Lab Sample Id: 684953-004

Matrix: Soil
Date Collected: 01.14.2021 00:00

Date Received: 01.15.2021 16:39

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 16:30

% Moisture:
Basis: Wet Weight

Seq Number: 3148201

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.18.2021 23:22	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.18.2021 23:22	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.18.2021 23:22	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.18.2021 23:22	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.18.2021 23:22	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.18.2021 23:22	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.18.2021 23:22	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	215	%	70-130	01.18.2021 23:22	**	
1,4-Difluorobenzene	540-36-3	131	%	70-130	01.18.2021 23:22	**	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 5**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-005

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.19.2021 10:38

% Moisture:

Seq Number: 3148368

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8.05	5.00	mg/kg	01.19.2021 11:43		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148364

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.19.2021 14:35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.19.2021 14:35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.19.2021 14:35	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.19.2021 14:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-130	01.19.2021 14:35	
o-Terphenyl	84-15-1	105	%	70-130	01.19.2021 14:35	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 5**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-005

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 16:30

% Moisture:

Seq Number: 3148201

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.18.2021 23:47	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.18.2021 23:47	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.18.2021 23:47	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.18.2021 23:47	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.18.2021 23:47	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.18.2021 23:47	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.18.2021 23:47	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	212	%	70-130	01.18.2021 23:47	**	
1,4-Difluorobenzene	540-36-3	132	%	70-130	01.18.2021 23:47	**	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 6**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-006

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.19.2021 10:38

% Moisture:

Seq Number: 3148368

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.04	5.04	mg/kg	01.19.2021 11:59	U	1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148364

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.19.2021 14:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.19.2021 14:56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.19.2021 14:56	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.19.2021 14:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-130	01.19.2021 14:56	
o-Terphenyl	84-15-1	105	%	70-130	01.19.2021 14:56	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 6**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-006

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 16:30

% Moisture:

Seq Number: 3148201

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.19.2021 00:11	U	1
Toluene	108-88-3	0.00200	0.00200	mg/kg	01.19.2021 00:11		1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.19.2021 00:11	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.19.2021 00:11	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.19.2021 00:11	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.19.2021 00:11	U	1
Total BTEX		0.00200	0.00200	mg/kg	01.19.2021 00:11		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	145	%	70-130	01.19.2021 00:11	**	
1,4-Difluorobenzene	540-36-3	115	%	70-130	01.19.2021 00:11		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 7**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-007

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.19.2021 10:38

% Moisture:

Seq Number: 3148368

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.99	4.99	mg/kg	01.19.2021 12:04	U	1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148364

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.19.2021 15:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.19.2021 15:24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.19.2021 15:24	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.19.2021 15:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-130	01.19.2021 15:24	
o-Terphenyl	84-15-1	104	%	70-130	01.19.2021 15:24	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 7**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-007

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 16:30

% Moisture:

Seq Number: 3148201

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.19.2021 00:36	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.19.2021 00:36	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.19.2021 00:36	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.19.2021 00:36	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.19.2021 00:36	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.19.2021 00:36	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.19.2021 00:36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	134	%	70-130	01.19.2021 00:36	**	
4-Bromofluorobenzene	460-00-4	223	%	70-130	01.19.2021 00:36	**	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 8**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-008

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.19.2021 10:38

% Moisture:

Seq Number: 3148368

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6.18	4.96	mg/kg	01.19.2021 12:09		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148364

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.19.2021 15:45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.19.2021 15:45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.19.2021 15:45	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.19.2021 15:45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-130	01.19.2021 15:45	
o-Terphenyl	84-15-1	110	%	70-130	01.19.2021 15:45	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 8**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-008

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 16:30

% Moisture:

Seq Number: 3148201

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.19.2021 01:01	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.19.2021 01:01	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.19.2021 01:01	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.19.2021 01:01	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.19.2021 01:01	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.19.2021 01:01	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.19.2021 01:01	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	134	%	70-130	01.19.2021 01:01	**	
4-Bromofluorobenzene	460-00-4	228	%	70-130	01.19.2021 01:01	**	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 9**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-009

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.19.2021 10:38

% Moisture:

Seq Number: 3148368

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.97	4.97	mg/kg	01.19.2021 12:14	U	1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148364

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.19.2021 16:06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.19.2021 16:06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.19.2021 16:06	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.19.2021 16:06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-130	01.19.2021 16:06	
o-Terphenyl	84-15-1	98	%	70-130	01.19.2021 16:06	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 9**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-009

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 10:00

% Moisture:

Seq Number: 3148291

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.19.2021 15:27	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.19.2021 15:27	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.19.2021 15:27	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	01.19.2021 15:27	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.19.2021 15:27	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.19.2021 15:27	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.19.2021 15:27	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	103	%	70-130	01.19.2021 15:27		
1,4-Difluorobenzene	540-36-3	95	%	70-130	01.19.2021 15:27		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 10**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-010

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.19.2021 10:38

% Moisture:

Seq Number: 3148368

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.97	4.97	mg/kg	01.19.2021 12:19	U	1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148364

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.19.2021 16:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.19.2021 16:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.19.2021 16:28	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.19.2021 16:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-130	01.19.2021 16:28	
o-Terphenyl	84-15-1	100	%	70-130	01.19.2021 16:28	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 10**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-010

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.18.2021 16:30

% Moisture:

Seq Number: 3148201

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.19.2021 01:51	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.19.2021 01:51	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.19.2021 01:51	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	01.19.2021 01:51	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.19.2021 01:51	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.19.2021 01:51	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.19.2021 01:51	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	233	%	70-130	01.19.2021 01:51	**	
1,4-Difluorobenzene	540-36-3	142	%	70-130	01.19.2021 01:51	**	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 11**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-011

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.19.2021 10:38

% Moisture:

Seq Number: 3148368

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5.40	5.03	mg/kg	01.19.2021 12:26		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148364

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.19.2021 17:10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.19.2021 17:10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.19.2021 17:10	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.19.2021 17:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-130	01.19.2021 17:10	
o-Terphenyl	84-15-1	106	%	70-130	01.19.2021 17:10	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 11**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-011

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 10:00

% Moisture:

Seq Number: 3148291

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.19.2021 15:47	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.19.2021 15:47	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.19.2021 15:47	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.19.2021 15:47	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.19.2021 15:47	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.19.2021 15:47	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.19.2021 15:47	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	98	%	70-130	01.19.2021 15:47		
4-Bromofluorobenzene	460-00-4	105	%	70-130	01.19.2021 15:47		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 27**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-027

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 11:00

% Moisture:

Seq Number: 3148162

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6.12	5.00	mg/kg	01.18.2021 12:29		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148364

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.19.2021 17:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.19.2021 17:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.19.2021 17:31	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.19.2021 17:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-130	01.19.2021 17:31	
o-Terphenyl	84-15-1	106	%	70-130	01.19.2021 17:31	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 27**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-027

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 10:00

% Moisture:

Seq Number: 3148291

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.19.2021 16:08	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.19.2021 16:08	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.19.2021 16:08	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.19.2021 16:08	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.19.2021 16:08	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.19.2021 16:08	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.19.2021 16:08	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	96	%	70-130	01.19.2021 16:08		
4-Bromofluorobenzene	460-00-4	108	%	70-130	01.19.2021 16:08		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 28**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-028

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 11:00

% Moisture:

Seq Number: 3148162

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.6	4.95	mg/kg	01.18.2021 12:45		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148364

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.19.2021 17:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.19.2021 17:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.19.2021 17:52	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.19.2021 17:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-130	01.19.2021 17:52	
o-Terphenyl	84-15-1	105	%	70-130	01.19.2021 17:52	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 28**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-028

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 10:00

% Moisture:

Seq Number: 3148291

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.19.2021 16:28	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.19.2021 16:28	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.19.2021 16:28	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.19.2021 16:28	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.19.2021 16:28	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.19.2021 16:28	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.19.2021 16:28	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	96	%	70-130	01.19.2021 16:28		
4-Bromofluorobenzene	460-00-4	104	%	70-130	01.19.2021 16:28		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 29**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-029

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 11:00

% Moisture:

Seq Number: 3148162

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.04	5.04	mg/kg	01.18.2021 12:50	U	1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148364

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.19.2021 18:13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.19.2021 18:13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.19.2021 18:13	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.19.2021 18:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-130	01.19.2021 18:13	
o-Terphenyl	84-15-1	102	%	70-130	01.19.2021 18:13	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 29**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-029

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 10:00

% Moisture:

Seq Number: 3148291

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.19.2021 16:48	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.19.2021 16:48	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.19.2021 16:48	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.19.2021 16:48	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.19.2021 16:48	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.19.2021 16:48	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.19.2021 16:48	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	97	%	70-130	01.19.2021 16:48		
4-Bromofluorobenzene	460-00-4	104	%	70-130	01.19.2021 16:48		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 30**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-030

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 11:00

% Moisture:

Seq Number: 3148162

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5.15	4.96	mg/kg	01.18.2021 13:06		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148364

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.19.2021 18:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.19.2021 18:34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.19.2021 18:34	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.19.2021 18:34	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	116	%	70-130	01.19.2021 18:34		
o-Terphenyl	84-15-1	111	%	70-130	01.19.2021 18:34		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 30**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-030

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 10:00

% Moisture:

Seq Number: 3148291

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.19.2021 17:09	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.19.2021 17:09	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.19.2021 17:09	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.19.2021 17:09	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.19.2021 17:09	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.19.2021 17:09	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.19.2021 17:09	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	97	%	70-130	01.19.2021 17:09		
4-Bromofluorobenzene	460-00-4	107	%	70-130	01.19.2021 17:09		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 31**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-031

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 11:00

% Moisture:

Seq Number: 3148162

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7.81	4.99	mg/kg	01.18.2021 13:11		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148364

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.19.2021 18:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.19.2021 18:56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.19.2021 18:56	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.19.2021 18:56	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	116	%	70-130	01.19.2021 18:56		
o-Terphenyl	84-15-1	107	%	70-130	01.19.2021 18:56		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 31**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-031

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 10:00

% Moisture:

Seq Number: 3148291

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.19.2021 17:29	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.19.2021 17:29	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.19.2021 17:29	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	01.19.2021 17:29	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.19.2021 17:29	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.19.2021 17:29	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.19.2021 17:29	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	01.19.2021 17:29		
1,4-Difluorobenzene	540-36-3	96	%	70-130	01.19.2021 17:29		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 32**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-032

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 11:00

% Moisture:

Seq Number: 3148162

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.05	5.05	mg/kg	01.18.2021 13:16	U	1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148364

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.19.2021 19:17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.19.2021 19:17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.19.2021 19:17	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.19.2021 19:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-130	01.19.2021 19:17	
o-Terphenyl	84-15-1	105	%	70-130	01.19.2021 19:17	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 32**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-032

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 10:00

% Moisture:

Seq Number: 3148291

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.19.2021 17:50	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.19.2021 17:50	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.19.2021 17:50	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.19.2021 17:50	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.19.2021 17:50	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.19.2021 17:50	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.19.2021 17:50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	103	%	70-130	01.19.2021 17:50		
1,4-Difluorobenzene	540-36-3	96	%	70-130	01.19.2021 17:50		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 33**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-033

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 11:00

% Moisture:

Seq Number: 3148162

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.05	5.05	mg/kg	01.18.2021 13:21	U	1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148364

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.19.2021 19:38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.19.2021 19:38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.19.2021 19:38	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.19.2021 19:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	134	%	70-130	01.19.2021 19:38	**
o-Terphenyl	84-15-1	123	%	70-130	01.19.2021 19:38	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 33**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-033

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 10:00

% Moisture:

Seq Number: 3148291

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.19.2021 19:53	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.19.2021 19:53	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.19.2021 19:53	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.19.2021 19:53	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.19.2021 19:53	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.19.2021 19:53	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.19.2021 19:53	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	99	%	70-130	01.19.2021 19:53		
1,4-Difluorobenzene	540-36-3	97	%	70-130	01.19.2021 19:53		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 34**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-034

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 11:00

% Moisture:

Seq Number: 3148162

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5.72	5.05	mg/kg	01.18.2021 13:27		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148364

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.19.2021 20:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.19.2021 20:00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.19.2021 20:00	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.19.2021 20:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-130	01.19.2021 20:00	
o-Terphenyl	84-15-1	99	%	70-130	01.19.2021 20:00	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 34**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-034

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 10:00

% Moisture:

Seq Number: 3148291

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.19.2021 20:14	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.19.2021 20:14	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.19.2021 20:14	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.19.2021 20:14	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.19.2021 20:14	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.19.2021 20:14	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.19.2021 20:14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	01.19.2021 20:14		
1,4-Difluorobenzene	540-36-3	97	%	70-130	01.19.2021 20:14		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 35**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-035

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 11:00

% Moisture:

Seq Number: 3148162

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.98	4.98	mg/kg	01.18.2021 13:32	U	1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148364

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.19.2021 20:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.19.2021 20:21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.19.2021 20:21	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.19.2021 20:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-130	01.19.2021 20:21	
o-Terphenyl	84-15-1	102	%	70-130	01.19.2021 20:21	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 35**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-035

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 10:00

% Moisture:

Seq Number: 3148291

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.19.2021 20:34	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.19.2021 20:34	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.19.2021 20:34	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	01.19.2021 20:34	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.19.2021 20:34	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.19.2021 20:34	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.19.2021 20:34	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	98	%	70-130	01.19.2021 20:34		
4-Bromofluorobenzene	460-00-4	101	%	70-130	01.19.2021 20:34		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 36**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-036

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 12:30

% Moisture:

Seq Number: 3148167

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9.95	5.04	mg/kg	01.18.2021 14:03		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 08:00

% Moisture:

Seq Number: 3148361

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.19.2021 10:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.19.2021 10:08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.19.2021 10:08	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.19.2021 10:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	71	%	70-130	01.19.2021 10:08	
o-Terphenyl	84-15-1	80	%	70-130	01.19.2021 10:08	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 36**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-036

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 10:00

% Moisture:

Seq Number: 3148291

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.19.2021 20:55	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.19.2021 20:55	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.19.2021 20:55	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.19.2021 20:55	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.19.2021 20:55	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.19.2021 20:55	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.19.2021 20:55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	99	%	70-130	01.19.2021 20:55		
1,4-Difluorobenzene	540-36-3	97	%	70-130	01.19.2021 20:55		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 37**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-037

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 12:30

% Moisture:

Seq Number: 3148167

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	15.0	4.98	mg/kg	01.18.2021 14:19		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 08:00

% Moisture:

Seq Number: 3148361

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.19.2021 10:27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.19.2021 10:27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.19.2021 10:27	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.19.2021 10:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	73	%	70-130	01.19.2021 10:27	
o-Terphenyl	84-15-1	81	%	70-130	01.19.2021 10:27	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 37**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-037

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 10:00

% Moisture:

Seq Number: 3148291

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.19.2021 21:15	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.19.2021 21:15	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.19.2021 21:15	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.19.2021 21:15	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.19.2021 21:15	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.19.2021 21:15	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.19.2021 21:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	70-130	01.19.2021 21:15	
1,4-Difluorobenzene	540-36-3	99	%	70-130	01.19.2021 21:15	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 38**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-038

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 12:30

% Moisture:

Seq Number: 3148167

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	19.1	4.95	mg/kg	01.18.2021 14:24		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 08:00

% Moisture:

Seq Number: 3148361

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.19.2021 10:46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.19.2021 10:46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.19.2021 10:46	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.19.2021 10:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	70	%	70-130	01.19.2021 10:46	
o-Terphenyl	84-15-1	77	%	70-130	01.19.2021 10:46	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 38**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-038

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 10:00

% Moisture:

Seq Number: 3148291

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.19.2021 21:36	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.19.2021 21:36	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.19.2021 21:36	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.19.2021 21:36	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.19.2021 21:36	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.19.2021 21:36	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.19.2021 21:36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	96	%	70-130	01.19.2021 21:36		
4-Bromofluorobenzene	460-00-4	102	%	70-130	01.19.2021 21:36		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 39**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-039

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 12:30

% Moisture:

Seq Number: 3148167

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.9	4.98	mg/kg	01.18.2021 14:30		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 08:00

% Moisture:

Seq Number: 3148361

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.19.2021 11:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.19.2021 11:04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.19.2021 11:04	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.19.2021 11:04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	71	%	70-130	01.19.2021 11:04	
o-Terphenyl	84-15-1	77	%	70-130	01.19.2021 11:04	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 39**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-039

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 10:00

% Moisture:

Seq Number: 3148291

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.19.2021 21:56	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.19.2021 21:56	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.19.2021 21:56	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	01.19.2021 21:56	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.19.2021 21:56	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.19.2021 21:56	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.19.2021 21:56	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	98	%	70-130	01.19.2021 21:56		
4-Bromofluorobenzene	460-00-4	102	%	70-130	01.19.2021 21:56		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 40**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-040

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 12:30

% Moisture:

Seq Number: 3148167

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16.6	4.99	mg/kg	01.18.2021 14:35		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 08:00

% Moisture:

Seq Number: 3148361

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.19.2021 11:23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.19.2021 11:23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.19.2021 11:23	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.19.2021 11:23	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	70	%	70-130	01.19.2021 11:23		
o-Terphenyl	84-15-1	80	%	70-130	01.19.2021 11:23		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 40**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-040

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 10:00

% Moisture:

Seq Number: 3148291

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.19.2021 22:17	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.19.2021 22:17	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.19.2021 22:17	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.19.2021 22:17	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.19.2021 22:17	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.19.2021 22:17	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.19.2021 22:17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	67	%	70-130	01.19.2021 22:17	**	
1,4-Difluorobenzene	540-36-3	113	%	70-130	01.19.2021 22:17		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 41**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-041

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 12:30

% Moisture:

Seq Number: 3148167

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.7	5.00	mg/kg	01.18.2021 14:51		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 08:00

% Moisture:

Seq Number: 3148361

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.19.2021 09:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.19.2021 09:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.19.2021 09:11	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.19.2021 09:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	71	%	70-130	01.19.2021 09:11	
o-Terphenyl	84-15-1	79	%	70-130	01.19.2021 09:11	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 41**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-041

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 10:00

% Moisture:

Seq Number: 3148291

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.19.2021 22:37	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.19.2021 22:37	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.19.2021 22:37	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.19.2021 22:37	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.19.2021 22:37	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.19.2021 22:37	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.19.2021 22:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	95	%	70-130	01.19.2021 22:37	
4-Bromofluorobenzene	460-00-4	114	%	70-130	01.19.2021 22:37	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 42**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-042

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 12:30

% Moisture:

Seq Number: 3148167

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.5	5.00	mg/kg	01.18.2021 14:56		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 08:00

% Moisture:

Seq Number: 3148361

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.19.2021 11:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.19.2021 11:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.19.2021 11:41	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.19.2021 11:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	71	%	70-130	01.19.2021 11:41	
o-Terphenyl	84-15-1	79	%	70-130	01.19.2021 11:41	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 42**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-042

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 10:00

% Moisture:

Seq Number: 3148291

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.19.2021 22:58	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.19.2021 22:58	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.19.2021 22:58	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.19.2021 22:58	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.19.2021 22:58	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.19.2021 22:58	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.19.2021 22:58	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	01.19.2021 22:58		
1,4-Difluorobenzene	540-36-3	96	%	70-130	01.19.2021 22:58		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 43**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-043

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 12:30

% Moisture:

Seq Number: 3148167

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.5	5.02	mg/kg	01.18.2021 15:02		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 08:00

% Moisture:

Seq Number: 3148361

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.19.2021 12:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.19.2021 12:00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.19.2021 12:00	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.19.2021 12:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	72	%	70-130	01.19.2021 12:00	
o-Terphenyl	84-15-1	80	%	70-130	01.19.2021 12:00	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 43**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-043

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148292

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.20.2021 02:21	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.20.2021 02:21	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.20.2021 02:21	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.20.2021 02:21	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.20.2021 02:21	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.20.2021 02:21	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.20.2021 02:21	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	96	%	70-130	01.20.2021 02:21		
4-Bromofluorobenzene	460-00-4	103	%	70-130	01.20.2021 02:21		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 44**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-044

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 12:30

% Moisture:

Seq Number: 3148167

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.5	4.97	mg/kg	01.18.2021 15:07		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 08:00

% Moisture:

Seq Number: 3148361

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.19.2021 12:18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.19.2021 12:18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.19.2021 12:18	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.19.2021 12:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	72	%	70-130	01.19.2021 12:18	
o-Terphenyl	84-15-1	79	%	70-130	01.19.2021 12:18	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 44**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-044

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148292

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.20.2021 02:41	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.20.2021 02:41	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.20.2021 02:41	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.20.2021 02:41	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.20.2021 02:41	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.20.2021 02:41	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.20.2021 02:41	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	71	%	70-130	01.20.2021 02:41		
1,4-Difluorobenzene	540-36-3	114	%	70-130	01.20.2021 02:41		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 45**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-045

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 12:30

% Moisture:

Seq Number: 3148167

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	15.1	4.98	mg/kg	01.18.2021 15:12		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 08:00

% Moisture:

Seq Number: 3148361

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.19.2021 12:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.19.2021 12:37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.19.2021 12:37	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.19.2021 12:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	70	%	70-130	01.19.2021 12:37	
o-Terphenyl	84-15-1	80	%	70-130	01.19.2021 12:37	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 45**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-045

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148292

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.20.2021 03:02	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.20.2021 03:02	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.20.2021 03:02	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.20.2021 03:02	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.20.2021 03:02	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.20.2021 03:02	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.20.2021 03:02	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	70-130	01.20.2021 03:02		
1,4-Difluorobenzene	540-36-3	94	%	70-130	01.20.2021 03:02		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 46**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-046

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 12:30

% Moisture:

Seq Number: 3148167

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.5	5.05	mg/kg	01.18.2021 15:18		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 16:00

% Moisture:

Seq Number: 3148365

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.20.2021 03:07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.20.2021 03:07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.20.2021 03:07	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.20.2021 03:07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-130	01.20.2021 03:07	
o-Terphenyl	84-15-1	104	%	70-130	01.20.2021 03:07	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 46**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-046

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148292

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.20.2021 03:22	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.20.2021 03:22	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.20.2021 03:22	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.20.2021 03:22	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.20.2021 03:22	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.20.2021 03:22	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.20.2021 03:22	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	91	%	70-130	01.20.2021 03:22		
4-Bromofluorobenzene	460-00-4	106	%	70-130	01.20.2021 03:22		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 47**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-047

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 12:30

% Moisture:

Seq Number: 3148167

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16.6	4.99	mg/kg	01.18.2021 15:34		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 16:00

% Moisture:

Seq Number: 3148365

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.20.2021 03:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.20.2021 03:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.20.2021 03:28	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.20.2021 03:28	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	108	%	70-130	01.20.2021 03:28		
o-Terphenyl	84-15-1	107	%	70-130	01.20.2021 03:28		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 47**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-047

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148292

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.20.2021 03:43	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.20.2021 03:43	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.20.2021 03:43	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.20.2021 03:43	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.20.2021 03:43	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.20.2021 03:43	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.20.2021 03:43	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	97	%	70-130	01.20.2021 03:43		
4-Bromofluorobenzene	460-00-4	105	%	70-130	01.20.2021 03:43		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 48**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-048

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 12:30

% Moisture:

Seq Number: 3148167

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.8	4.96	mg/kg	01.18.2021 15:39		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 16:00

% Moisture:

Seq Number: 3148365

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.20.2021 03:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.20.2021 03:49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.20.2021 03:49	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.20.2021 03:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-130	01.20.2021 03:49	
o-Terphenyl	84-15-1	107	%	70-130	01.20.2021 03:49	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 48**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-048

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148292

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.20.2021 04:03	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.20.2021 04:03	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.20.2021 04:03	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.20.2021 04:03	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.20.2021 04:03	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.20.2021 04:03	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.20.2021 04:03	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	96	%	70-130	01.20.2021 04:03		
4-Bromofluorobenzene	460-00-4	63	%	70-130	01.20.2021 04:03	**	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 49**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-049

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 12:30

% Moisture:

Seq Number: 3148167

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	15.4	5.03	mg/kg	01.18.2021 15:55		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 16:00

% Moisture:

Seq Number: 3148365

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.20.2021 04:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.20.2021 04:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.20.2021 04:11	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.20.2021 04:11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	116	%	70-130	01.20.2021 04:11		
o-Terphenyl	84-15-1	119	%	70-130	01.20.2021 04:11		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 49**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-049

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148292

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.20.2021 04:24	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.20.2021 04:24	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.20.2021 04:24	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.20.2021 04:24	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.20.2021 04:24	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.20.2021 04:24	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.20.2021 04:24	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	92	%	70-130	01.20.2021 04:24		
1,4-Difluorobenzene	540-36-3	91	%	70-130	01.20.2021 04:24		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 50**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-050

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 12:30

% Moisture:

Seq Number: 3148167

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.6	4.95	mg/kg	01.18.2021 16:00		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 16:00

% Moisture:

Seq Number: 3148365

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.20.2021 04:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.20.2021 04:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.20.2021 04:33	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.20.2021 04:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-130	01.20.2021 04:33	
o-Terphenyl	84-15-1	109	%	70-130	01.20.2021 04:33	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 50**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-050

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148292

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.20.2021 04:44	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.20.2021 04:44	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.20.2021 04:44	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.20.2021 04:44	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.20.2021 04:44	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.20.2021 04:44	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.20.2021 04:44	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	56	%	70-130	01.20.2021 04:44	**	
1,4-Difluorobenzene	540-36-3	120	%	70-130	01.20.2021 04:44		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 51**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-051

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 12:30

% Moisture:

Seq Number: 3148167

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.4	5.00	mg/kg	01.18.2021 16:06		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 16:00

% Moisture:

Seq Number: 3148365

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.20.2021 04:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.20.2021 04:54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.20.2021 04:54	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.20.2021 04:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-130	01.20.2021 04:54	
o-Terphenyl	84-15-1	96	%	70-130	01.20.2021 04:54	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 51**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-051

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148292

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.20.2021 05:05	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.20.2021 05:05	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.20.2021 05:05	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	01.20.2021 05:05	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.20.2021 05:05	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.20.2021 05:05	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.20.2021 05:05	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	73	%	70-130	01.20.2021 05:05		
1,4-Difluorobenzene	540-36-3	103	%	70-130	01.20.2021 05:05		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 52**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-052

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 12:30

% Moisture:

Seq Number: 3148167

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.1	4.97	mg/kg	01.18.2021 16:11		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 16:00

% Moisture:

Seq Number: 3148365

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.20.2021 05:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.20.2021 05:15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.20.2021 05:15	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.20.2021 05:15	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	102	%	70-130	01.20.2021 05:15		
o-Terphenyl	84-15-1	97	%	70-130	01.20.2021 05:15		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 52**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-052

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148292

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.20.2021 05:25	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.20.2021 05:25	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.20.2021 05:25	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	01.20.2021 05:25	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.20.2021 05:25	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.20.2021 05:25	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.20.2021 05:25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	78	%	70-130	01.20.2021 05:25		
1,4-Difluorobenzene	540-36-3	99	%	70-130	01.20.2021 05:25		



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 53**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-053

Date Collected: 01.14.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.18.2021 12:30

% Moisture:

Seq Number: 3148167

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	14.9	4.96	mg/kg	01.18.2021 16:16		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.19.2021 16:00

% Moisture:

Seq Number: 3148365

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.20.2021 05:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.20.2021 05:37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.20.2021 05:37	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.20.2021 05:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-130	01.20.2021 05:37	
o-Terphenyl	84-15-1	104	%	70-130	01.20.2021 05:37	



Certificate of Analytical Results 684953

Tetra Tech- Midland, Midland, TX

COG - Tyrell Fee #1

Sample Id: **Sidewall 53**

Matrix: Soil

Date Received: 01.15.2021 16:39

Lab Sample Id: 684953-053

Date Collected: 01.14.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.19.2021 11:00

% Moisture:

Seq Number: 3148292

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.20.2021 06:48	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.20.2021 06:48	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.20.2021 06:48	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.20.2021 06:48	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.20.2021 06:48	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.20.2021 06:48	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.20.2021 06:48	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	01.20.2021 06:48		
1,4-Difluorobenzene	540-36-3	96	%	70-130	01.20.2021 06:48		

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. **ND** Not Detected.

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



Tetra Tech- Midland

COG - Tyrell Fee #1

Analytical Method: Chloride by EPA 300

Seq Number: 3148162

MB Sample Id: 7719417-1-BLK

Matrix: Solid

LCS Sample Id: 7719417-1-BKS

Prep Method: E300P

Date Prep: 01.18.2021

LCSD Sample Id: 7719417-1-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	256	102	256	102	90-110	0	20	mg/kg	01.18.2021 11:06	

Analytical Method: Chloride by EPA 300

Seq Number: 3148167

MB Sample Id: 7719418-1-BLK

Matrix: Solid

LCS Sample Id: 7719418-1-BKS

Prep Method: E300P

Date Prep: 01.18.2021

LCSD Sample Id: 7719418-1-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	254	102	255	102	90-110	0	20	mg/kg	01.18.2021 13:53	

Analytical Method: Chloride by EPA 300

Seq Number: 3148368

MB Sample Id: 7719484-1-BLK

Matrix: Solid

LCS Sample Id: 7719484-1-BKS

Prep Method: E300P

Date Prep: 01.19.2021

LCSD Sample Id: 7719484-1-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	253	101	252	101	90-110	0	20	mg/kg	01.19.2021 11:01	

Analytical Method: Chloride by EPA 300

Seq Number: 3148162

Parent Sample Id: 684888-001

Matrix: Soil

MS Sample Id: 684888-001 S

Prep Method: E300P

Date Prep: 01.18.2021

MSD Sample Id: 684888-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	68.1	248	316	100	311	98	90-110	2	20	mg/kg	01.18.2021 11:22	

Analytical Method: Chloride by EPA 300

Seq Number: 3148162

Parent Sample Id: 684953-027

Matrix: Soil

MS Sample Id: 684953-027 S

Prep Method: E300P

Date Prep: 01.18.2021

MSD Sample Id: 684953-027 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	6.12	250	260	102	272	106	90-110	5	20	mg/kg	01.18.2021 12:35	

Analytical Method: Chloride by EPA 300

Seq Number: 3148167

Parent Sample Id: 684953-036

Matrix: Soil

MS Sample Id: 684953-036 S

Prep Method: E300P

Date Prep: 01.18.2021

MSD Sample Id: 684953-036 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	9.95	252	262	100	263	100	90-110	0	20	mg/kg	01.18.2021 14:09	

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

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

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

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



Tetra Tech- Midland

COG - Tyrell Fee #1

Analytical Method: Chloride by EPA 300

Seq Number: 3148167

Parent Sample Id: 684953-046

Matrix: Soil

MS Sample Id: 684953-046 S

Prep Method: E300P

Date Prep: 01.18.2021

MSD Sample Id: 684953-046 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	10.5	253	269	102	270	103	90-110	0	20	mg/kg	01.18.2021 15:23	

Analytical Method: Chloride by EPA 300

Seq Number: 3148368

Parent Sample Id: 684953-001

Matrix: Soil

MS Sample Id: 684953-001 S

Prep Method: E300P

Date Prep: 01.19.2021

MSD Sample Id: 684953-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<4.97	249	248	100	248	100	90-110	0	20	mg/kg	01.19.2021 11:17	

Analytical Method: Chloride by EPA 300

Seq Number: 3148368

Parent Sample Id: 684953-011

Matrix: Soil

MS Sample Id: 684953-011 S

Prep Method: E300P

Date Prep: 01.19.2021

MSD Sample Id: 684953-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	5.40	252	246	95	245	95	90-110	0	20	mg/kg	01.19.2021 12:31	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3148361

MB Sample Id: 7719548-1-BLK

Matrix: Solid

LCS Sample Id: 7719548-1-BKS

Prep Method: SW8015P

Date Prep: 01.19.2021

LCSD Sample Id: 7719548-1-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	811	81	893	89	70-130	10	20	mg/kg	01.19.2021 08:33	
Diesel Range Organics (DRO)	<50.0	1000	888	89	907	91	70-130	2	20	mg/kg	01.19.2021 08:33	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	70		87		90		70-130	%	01.19.2021 08:33
o-Terphenyl	82		80		79		70-130	%	01.19.2021 08:33

Analytical Method: TPH by SW8015 Mod

Seq Number: 3148364

MB Sample Id: 7719550-1-BLK

Matrix: Solid

LCS Sample Id: 7719550-1-BKS

Prep Method: SW8015P

Date Prep: 01.19.2021

LCSD Sample Id: 7719550-1-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	1010	101	997	100	70-130	1	20	mg/kg	01.19.2021 11:43	
Diesel Range Organics (DRO)	<50.0	1000	990	99	974	97	70-130	2	20	mg/kg	01.19.2021 11:43	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	112		117		116		70-130	%	01.19.2021 11:43
o-Terphenyl	103		103		106		70-130	%	01.19.2021 11:43

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

Tetra Tech- Midland

COG - Tyrell Fee #1

Analytical Method: TPH by SW8015 Mod

Seq Number: 3148365

MB Sample Id: 7719552-1-BLK

Matrix: Solid

Prep Method: SW8015P

Date Prep: 01.19.2021

LCS Sample Id: 7719552-1-BKS

LCSD Sample Id: 7719552-1-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	1070	107	1030	103	70-130	4	20	mg/kg	01.19.2021 21:25	
Diesel Range Organics (DRO)	<50.0	1000	1160	116	1150	115	70-130	1	20	mg/kg	01.19.2021 21:25	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	117		121		113		70-130	%	01.19.2021 21:25
o-Terphenyl	110		125		127		70-130	%	01.19.2021 21:25

Analytical Method: TPH by SW8015 Mod

Seq Number: 3148361

Matrix: Solid

Prep Method: SW8015P

Date Prep: 01.19.2021

MB Sample Id: 7719548-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.19.2021 08:13	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3148364

Matrix: Solid

Prep Method: SW8015P

Date Prep: 01.19.2021

MB Sample Id: 7719550-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.19.2021 11:22	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3148365

Matrix: Solid

Prep Method: SW8015P

Date Prep: 01.19.2021

MB Sample Id: 7719552-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.19.2021 21:04	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3148361

Matrix: Soil

Prep Method: SW8015P

Date Prep: 01.19.2021

Parent Sample Id: 684953-041

MS Sample Id: 684953-041 S

MSD Sample Id: 684953-041 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	844	85	871	87	70-130	3	20	mg/kg	01.19.2021 09:30	
Diesel Range Organics (DRO)	<49.9	998	850	85	841	84	70-130	1	20	mg/kg	01.19.2021 09:30	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	93		86		70-130	%	01.19.2021 09:30
o-Terphenyl	79		75		70-130	%	01.19.2021 09:30

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

Tetra Tech- Midland

COG - Tyrell Fee #1

Analytical Method: TPH by SW8015 Mod

Seq Number: 3148364

Parent Sample Id: 684953-001

Matrix: Soil

MS Sample Id: 684953-001 S

Prep Method: SW8015P

Date Prep: 01.19.2021

MSD Sample Id: 684953-001 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	1050	105	1020	102	70-130	3	20	mg/kg	01.19.2021 12:46	
Diesel Range Organics (DRO)	<49.9	998	1080	108	1110	111	70-130	3	20	mg/kg	01.19.2021 12:46	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	119		122		70-130	%	01.19.2021 12:46
o-Terphenyl	103		103		70-130	%	01.19.2021 12:46

Analytical Method: TPH by SW8015 Mod

Seq Number: 3148365

Parent Sample Id: 684955-081

Matrix: Soil

MS Sample Id: 684955-081 S

Prep Method: SW8015P

Date Prep: 01.19.2021

MSD Sample Id: 684955-081 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	1060	106	1000	100	70-130	6	20	mg/kg	01.19.2021 22:29	
Diesel Range Organics (DRO)	<49.9	998	1000	100	1070	107	70-130	7	20	mg/kg	01.19.2021 22:29	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	116		107		70-130	%	01.19.2021 22:29
o-Terphenyl	102		107		70-130	%	01.19.2021 22:29

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148201

MB Sample Id: 7719477-1-BLK

Matrix: Solid

LCS Sample Id: 7719477-1-BKS

Prep Method: SW5035A

Date Prep: 01.18.2021

LCSD Sample Id: 7719477-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.109	109	0.116	116	70-130	6	35	mg/kg	01.18.2021 19:14	
Toluene	<0.00200	0.100	0.120	120	0.129	129	70-130	7	35	mg/kg	01.18.2021 19:14	
Ethylbenzene	<0.00200	0.100	0.121	121	0.129	129	70-130	6	35	mg/kg	01.18.2021 19:14	
m,p-Xylenes	<0.00400	0.200	0.242	121	0.260	130	70-130	7	35	mg/kg	01.18.2021 19:14	
o-Xylene	<0.00200	0.100	0.124	124	0.127	127	70-130	2	35	mg/kg	01.18.2021 19:14	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	85		111		127		70-130	%	01.18.2021 19:14
4-Bromofluorobenzene	152	**	173	**	193	**	70-130	%	01.18.2021 19:14

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



Tetra Tech- Midland

COG - Tyrell Fee #1

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148291

Matrix: Solid

Prep Method: SW5035A

Date Prep: 01.19.2021

MB Sample Id: 7719545-1-BLK

LCS Sample Id: 7719545-1-BKS

LCSD Sample Id: 7719545-1-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	0.106	106	0.101	101	70-130	5	35	mg/kg	01.19.2021 13:06	
Toluene	<0.00200	0.100	0.101	101	0.0954	95	70-130	6	35	mg/kg	01.19.2021 13:06	
Ethylbenzene	<0.00200	0.100	0.101	101	0.0950	95	70-130	6	35	mg/kg	01.19.2021 13:06	
m,p-Xylenes	<0.00400	0.200	0.207	104	0.196	98	70-130	5	35	mg/kg	01.19.2021 13:06	
o-Xylene	<0.00200	0.100	0.0992	99	0.0941	94	70-130	5	35	mg/kg	01.19.2021 13:06	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	91		101		102		70-130	%	01.19.2021 13:06
4-Bromofluorobenzene	111		96		96		70-130	%	01.19.2021 13:06

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148292

Matrix: Solid

Prep Method: SW5035A

Date Prep: 01.19.2021

MB Sample Id: 7719547-1-BLK

LCS Sample Id: 7719547-1-BKS

LCSD Sample Id: 7719547-1-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	0.0956	96	0.101	101	70-130	5	35	mg/kg	01.20.2021 00:00	
Toluene	<0.00200	0.100	0.0895	90	0.0960	96	70-130	7	35	mg/kg	01.20.2021 00:00	
Ethylbenzene	<0.00200	0.100	0.0868	87	0.0939	94	70-130	8	35	mg/kg	01.20.2021 00:00	
m,p-Xylenes	<0.00400	0.200	0.174	87	0.191	96	70-130	9	35	mg/kg	01.20.2021 00:00	
o-Xylene	<0.00200	0.100	0.0860	86	0.0935	94	70-130	8	35	mg/kg	01.20.2021 00:00	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	91		101		99		70-130	%	01.20.2021 00:00
4-Bromofluorobenzene	105		95		99		70-130	%	01.20.2021 00:00

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148201

Matrix: Soil

Prep Method: SW5035A

Date Prep: 01.18.2021

Parent Sample Id: 684953-001

MS Sample Id: 684953-001 S

MSD Sample Id: 684953-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0990	0.0764	77	0.0880	89	70-130	14	35	mg/kg	01.18.2021 20:03	
Toluene	<0.00198	0.0990	0.0950	96	0.100	101	70-130	5	35	mg/kg	01.18.2021 20:03	
Ethylbenzene	<0.00198	0.0990	0.0969	98	0.0982	99	70-130	1	35	mg/kg	01.18.2021 20:03	
m,p-Xylenes	<0.00396	0.198	0.193	97	0.197	99	70-130	2	35	mg/kg	01.18.2021 20:03	
o-Xylene	<0.00198	0.0990	0.100	101	0.103	104	70-130	3	35	mg/kg	01.18.2021 20:03	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	126		130		70-130	%	01.18.2021 20:03
4-Bromofluorobenzene	162	**	200	**	70-130	%	01.18.2021 20:03

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

Tetra Tech- Midland

COG - Tyrell Fee #1

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148291

Parent Sample Id: 684953-009

Matrix: Soil

MS Sample Id: 684953-009 S

Prep Method: SW5035A

Date Prep: 01.19.2021

MSD Sample Id: 684953-009 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	0.101	101	0.120	121	70-130	17	35	mg/kg	01.19.2021 13:47	
Toluene	<0.00199	0.0996	0.0941	94	0.113	114	70-130	18	35	mg/kg	01.19.2021 13:47	
Ethylbenzene	<0.00199	0.0996	0.0920	92	0.113	114	70-130	20	35	mg/kg	01.19.2021 13:47	
m,p-Xylenes	<0.00398	0.199	0.189	95	0.228	115	70-130	19	35	mg/kg	01.19.2021 13:47	
o-Xylene	<0.00199	0.0996	0.0916	92	0.111	112	70-130	19	35	mg/kg	01.19.2021 13:47	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		103		70-130	%	01.19.2021 13:47
4-Bromofluorobenzene	100		100		70-130	%	01.19.2021 13:47

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148292

Parent Sample Id: 684953-043

Matrix: Soil

MS Sample Id: 684953-043 S

Prep Method: SW5035A

Date Prep: 01.19.2021

MSD Sample Id: 684953-043 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.0849	85	0.0804	81	70-130	5	35	mg/kg	01.20.2021 00:41	
Toluene	<0.00199	0.0994	0.0794	80	0.0750	76	70-130	6	35	mg/kg	01.20.2021 00:41	
Ethylbenzene	<0.00199	0.0994	0.0748	75	0.0713	72	70-130	5	35	mg/kg	01.20.2021 00:41	
m,p-Xylenes	<0.00398	0.199	0.150	75	0.144	73	70-130	4	35	mg/kg	01.20.2021 00:41	
o-Xylene	<0.00199	0.0994	0.0722	73	0.0693	70	70-130	4	35	mg/kg	01.20.2021 00:41	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		101		70-130	%	01.20.2021 00:41
4-Bromofluorobenzene	98		97		70-130	%	01.20.2021 00:41

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

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

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

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

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

 901 W Wall Street, Ste 100
 Midland, Texas 79705
 Tel (432) 682-4559
 Fax (432) 682-3946

6024953

Page 1 of 10

Client Name: COG		Site Manager: Conner Moehring	
Project Name: Tyrell Fee #1			
Project Location: Lea Co, NM		Project #: 212C-MD-02379	
Invoice to: COG - Ike Tavaréz			
Receiving Laboratory: Xenco		Sampler Signature: Conner Moehring	
Comments:			

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)	LAB USE ONLY	REMARKS:
		DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	None					
										YEAR: 2021				
	Sidewall 1	1/14/2021		X		X						1 N	X	
	Sidewall 2	1/14/2021		X		X						1 N	X	
	Sidewall 3	1/14/2021		X		X						1 N	X	
	Sidewall 4	1/14/2021		X		X						1 N	X	
	Sidewall 5	1/14/2021		X		X						1 N	X	
	Sidewall 6	1/14/2021		X		X						1 N	X	
	Sidewall 7	1/14/2021		X		X						1 N	X	
	Sidewall 8	1/14/2021		X		X						1 N	X	
	Sidewall 9	1/14/2021		X		X						1 N	X	
	Sidewall 10	1/14/2021		X		X						1 N	X	

LAB USE ONLY	REMARKS:
☐ STANDARD ☒ RUSH: Same Day 24 hr 48 hr 72 hr ☐ Rush Charges Authorized ☐ Special Report Limits or TRRP Report	(Circle or Specify Method No.) BTEX 8021B BTEX 8260B TPH TX1005 (Ext to C35) TPH 8015M (GRO - DRO - ORO - MRO) PAH 8270C Total Metals Ag As Ba Cd Cr Pb Se Hg TCLP Metals Ag As Ba Cd Cr Pb Se Hg TCLP Volatiles TCLP Semi Volatiles RCI GC/MS Vol. 8260B / 624 GC/MS Semi. Vol. 8270C/625 PCB's 8082 / 608 NORM PLM (Asbestos) Chloride Chloride Sulfate TDS General Water Chemistry (see attached list) Anion/Cation Balance Hold

ORIGINAL COPY

Tetra Tech, Inc.

901 W Wall Street, Ste 1000
Midland, Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

							ANALYSIS REQUEST					
							(Circle or Specify Method No.)					
X	X	X	X	X	X	X	BTEX	8021B	BTEX	8260B		
X	X	X	X	X	X	X	TPH	TX100S	(Ext to C35)			
X	X	X	X	X	X	X	TPH	8015M	(GRO - DRO - ORO - MRO)			
X	X	X	X	X	X	X	PAH	8270C				
X	X	X	X	X	X	X	Total Metals	Ag As Ba Cd Cr Pb Se Hg				
X	X	X	X	X	X	X	TCLP Metals	Ag As Ba Cd Cr Pb Se Hg				
X	X	X	X	X	X	X	TCLP Volatiles					
X	X	X	X	X	X	X	TCLP Semi Volatiles					
X	X	X	X	X	X	X	RCI					
X	X	X	X	X	X	X	GC/MS Vol.	8260B / 624				
X	X	X	X	X	X	X	GC/MS Semi. Vol.	8270C/625				
X	X	X	X	X	X	X	PCB's	8082 / 608				
X	X	X	X	X	X	X	NORM					
X	X	X	X	X	X	X	PLM (Asbestos)					
X	X	X	X	X	X	X	Chloride	Sulfate TDS				
X	X	X	X	X	X	X	General Water Chemistry	(see attached list)				
X	X	X	X	X	X	X	Anion/Cation Balance					
X	X	X	X	X	X	X	Hold					

LAB USE ONLY REMARKS:

☐ STANDARD ☒ RUSH: Same Day 24 hr 48 hr 72 hr

☐ Push Charges Authorized Special Report Limits or TRRP Report

Sample Temperature -3.1

ORIGINAL COPY

ANALYSIS REQUEST

(Circle or Specify Method No.)

Hold

Final 1,000

Analysis Request of Custody Record



Tetra Tech, Inc.

 901 W. Wall Street, Ste 100
 Midland, Texas 79705
 Tel (432) 682-4559
 Fax (432) 682-3946

1084953

Page 3 of 6

Client Name:		COG		Site Manager:		Conner Moehring	
Project Name:		Tyrell Fee #1		Project #:		212C-MD-02379	
Project Location: (county, state)		Lea Co, NM		Project #:		212C-MD-02379	
Invoice to:		COG - Ike Tavaréz		Sampler Signature:		Conner Moehring	
Receiving Laboratory:		Xenco		Comments:			

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)	
		DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	None				
										YEAR: 2021			
	Sidewall 21	1/14/2021		X				X				1	N
	Sidewall 22	1/14/2021		X				X				1	N
	Sidewall 23	1/14/2021		X				X				1	N
	Sidewall 24	1/14/2021		X				X				1	N
	Sidewall 25	1/14/2021		X				X				1	N
	Sidewall 26	1/14/2021		X				X				1	N
	Sidewall 27	1/14/2021		X				X				1	N
	Sidewall 28	1/14/2021		X				X				1	N
	Sidewall 29	1/14/2021		X				X				1	N
	Sidewall 30	1/14/2021		X				X				1	N

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
<i>Conner Moehring</i>	1/15/21		<i>[Signature]</i>	1/15/21	14:37
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

ORIGINAL COPY

ANALYSIS REQUEST

(Circle or Specify Method No.)

BTEX 8021B BTEX 8260B
 TPH TX1005 (Ext to C35)
 TPH 8015M (GRO - DRO - ORO - MRO)
 PAH 8270C
 Total Metals Ag As Ba Cd Cr Pb Se Hg
 TCLP Metals Ag As Ba Cd Cr Pb Se Hg
 TCLP Volatiles
 TCLP Semi Volatiles
 RCI
 GC/MS Vol. 8260B / 624
 GC/MS Semi. Vol. 8270C/625
 PCB's 8082 / 608
 NORM
 PLM (Asbestos)
 Chloride
 Chloride Sulfate TDS
 General Water Chemistry (see attached list)
 Anion/Cation Balance

Hold

LAB USE ONLY

REMARKS:

☐ STANDARD

☒ RUSH: Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

-3.1

Sample Temperature

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Analysis Request of Custody Record



Tetra Tech, Inc.

 901W Wall Street, Ste 100
 Midland, Texas 79705
 Tel (432) 682-4559
 Fax (432) 682-3946

684953

Page

4 of

6

Client Name: COG		Site Manager: Conner Moehring	
Project Name: Tyrell Fee #1			
Project Location: Lea Co, NM		Project #: 212C-MD-02379	
Invoice to: COG - Ike Tavaréz			
Receiving Laboratory: Xenco		Sampler Signature: Conner Moehring	
Comments:			

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)
		DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	None			
										YEAR: 2021		
	Sidewall 31	1/14/2021		X		X					1 N	
	Sidewall 32	1/14/2021		X		X					1 N	
	Sidewall 33	1/14/2021		X		X					1 N	
	Sidewall 34	1/14/2021		X		X					1 N	
	Sidewall 35	1/14/2021		X		X					1 N	
	Sidewall 36	1/14/2021		X		X					1 N	
	Sidewall 37	1/14/2021		X		X					1 N	
	Sidewall 38	1/14/2021		X		X					1 N	
	Sidewall 39	1/14/2021		X		X					1 N	
	Sidewall 40	1/14/2021		X		X					1 N	

Requested by: <i>Conner Moehring</i> 1/15/21 Date: 1/15/21 Time: 10:39 Received by: <i>ATG</i> Date: 1-15-21 Time: 10:39	Date: _____ Time: _____ Received by: _____ Date: _____ Time: _____
---	---

 ANALYSIS REQUEST
 (Circle or Specify Method No.)

LAB USE ONLY	BTEX 8021B	BTEX 8260B	
	TPH TX1005 (Ext to C35)		
	TPH 8015M (GRO - DRO - ORO - MRO)		
	PAH 8270C		
	Total Metals Ag As Ba Cd Cr Pb Se Hg		
	TCLP Metals Ag As Ba Cd Cr Pb Se Hg		
	TCLP Volatiles		
	TCLP Semi Volatiles		
	RCI		
	GC/MS Vol. 8260B / 624		
	GC/MS Semi. Vol. 8270C/625		
	PCB's 8082 / 608		
	NORM		
	PLM (Asbestos)		
	Chloride		
Chloride Sulfate TDS			
General Water Chemistry (see attached list)			
Anion/Cation Balance			
Hold			

☐ STANDARD
☒ RUSH: Same Day 24 hr 48 hr (72 hr)
☐ Rush Charges Authorized
☐ Special Report Limits or TRRP Report

Sample Temperature: -3.1

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

 901 W Wall Street, Ste 100
 Midland, Texas 79705
 Tel (432) 682-4559
 Fax (432) 682-3946

Page 5 of 6

1084953

Client Name:		COG		Site Manager:		Conner Moehring	
Project Name:		Tyrell Fee #1		Received by:		Conner Moehring	
Project Location: (county, state)		Lea Co, NM		Project #:		212C-MD-02379	
Invoice to:		COG - Ike Tavares		Sampler Signature:		Conner Moehring	
Receiving Laboratory:		Xenco		Comments:			

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)	LAB USE ONLY	REMARKS:
		DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	None					
										YEAR: 2021				
	Sidewall 41	1/14/2021		X		X					1	N	X	
	Sidewall 42	1/14/2021		X		X					1	N	X	
	Sidewall 43	1/14/2021		X		X					1	N	X	
	Sidewall 44	1/14/2021		X		X					1	N	X	
	Sidewall 45	1/14/2021		X		X					1	N	X	
	Sidewall 46	1/14/2021		X		X					1	N	X	
	Sidewall 47	1/14/2021		X		X					1	N	X	
	Sidewall 48	1/14/2021		X		X					1	N	X	
	Sidewall 49	1/14/2021		X		X					1	N	X	
	Sidewall 50	1/14/2021		X		X					1	N	X	

LAB USE ONLY	REMARKS:
STANDARD	
FRUSH: Same Day 24 hr 48 hr 72 hr	
Push Charges Authorized	
Special Report Limits or TRRP Report	

ORIGINAL COPY

(Circle or Specify Method No.)

ANALYSIS REQUEST

Special Report Limits or TRRP Report

LAB USE ONLY

FRUSH: Same Day 24 hr 48 hr 72 hr

Push Charges Authorized

Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

Midland, Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

[illegible]

ANALYSIS REQUEST												
(Circle or Specify Method No.)												
BTEX 8260B BTEX 8260B												
TPH TX1005 (Ext to C35)												
TPH 8015M (GRO - DRO - ORO - MRO)												
PAH 8270C												
Total Metals Ag As Ba Cd Cr Pb Se Hg												
TCLP Metals Ag As Ba Cd Cr Pb Se Hg												
TCLP Volatiles												
TCLP Semi Volatiles												
RCI												
GC/MS Vol. 8260B / 624												
GC/MS Semi. Vol. 8270C/625												
PCB's 8082 / 608												
NORM												
PLM (Asbestos)												
Chloride												
Chloride Sulfate TDS												
General Water Chemistry (see attached list)												
Anion/Cation Balance												
Hold												

1084953 Page 6 of 6

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 01.15.2021 04.39.00 PM

Work Order #: 684953

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	-3.1
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	Yes
#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

Did not receive samples 012-026 - samples on HOLD

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Brianna Teel

Date: 01.15.2021

Checklist reviewed by:



Jessica Kramer

Date: 01.18.2021

Incident ID	NRM2019952683
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

Printed Name: Ike Tavaraz Title: Sr. HSE Supervisor
Signature:  Date: 1/27/2021
email: itavaraz@concho.com Telephone: 432-701-8630

OCD Only

Received by: Chad Hensley Date: 03/24/2021

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: 03/24/2021
Printed Name: Chad Hensley Title: Environmental Specialist Advanced

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 15813

CONDITIONS OF APPROVAL

Operator:	COG OPERATING LLC	600 W Illinois Ave	Midland, TX79701	OGRID:	229137	Action Number:	15813	Action Type:	C-141
OCD Reviewer	Condition								
chensley	None								