

Incident ID	NRM2026959173
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: Todd Wells Title: Environmental Specialist
Signature: Todd Wells Date: 4/22/21
email: Todd_Wells@eogresources.com Telephone: (432) 686-3613

OCD Only

Received by: Chad Hensley Date: 07/28/2021

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: Chad Hensley Date: 07/28/2021
Printed Name: Chad Hensley Title: Environmental Specialist Advanced

SITE INFORMATION

Report Type: Closure Report NRM2026959173

General Site Information:

Site:	Lomas Rojas 26 State Com #2H Oil Transfer Line					
Company:	EOG Resources					
Section, Township and Range	Unit E	Sec. 26	T 25S	R 33E		
Lease Number:						
County:	Lea County					
GPS:	32.103106			-103.549328		
Surface Owner:	Fee					
Mineral Owner:						
Directions:	From intersection of 128 and Vaca Ln, travel south on Vaca Ln for 12 miles. Site is located on the left.					

Release Data:

Date Released:	7/25/2020
Type Release:	Oil
Source of Contamination:	Transfer Line
Fluid Released:	6 bbl oil
Fluids Recovered:	0 bbl oil

Official Communication:

Name:	Todd Wells		Clair Gonzales
Company:	EOG Resources		Tetra Tech
Address:	5509 Champions Dr.		901 W. Wall St.
			Ste 100
City:	Midland, Texas, 79706		Midland, Texas, 79701
Phone number:	(432) 686-3613		(432) 682-4559
Fax:			
Email:	Todd_Wells@eogresources.com		clair.gonzales@tetrattech.com

Site Characterization

Depth to Groundwater:	Greater than 55' below surface
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**

April 21, 2021

Environmental Specialist
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

**Re: Closure Report for the EOG Resources, Lomas Rojas 26 State Com #2H Oil Transfer Line, Unit E, Section 26, Township 25 South, Range 33 East, Lea County, New Mexico.
Incident # NRM2026959173**

Oil Conservation Division:

Tetra Tech, Inc. (Tetra Tech) was contacted by EOG Resources (EOG) to assess and remediate a release that occurred at the EOG, Lomas Rojas 26 State Com #2H Oil Transfer Line, Unit E, Section 26, Township 25 South, Range 33 East, Lea County, New Mexico (Site). The site coordinates are 32.103106°, -103.549328°. The site location is shown on Figures 1 and 2.

Background

According to the State of New Mexico, C-141 Initial Report, the release was discovered on July 25, 2020, and released approximately 6 barrels of crude oil due to a hole in an oil transfer line. None of the released fluids were recovered. The release occurred on a right of way, measuring approximately 168' X 60'. The 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, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the specified distances and the site is in a low karst potential area. The nearest well is listed in the USGS National Water Information Database website in Section 20, approximately 2.25 miles Northwest of the site, and has a reported depth to groundwater of 204.36 feet below ground surface. Site characterization data is included in Appendix B.

Depth to Water Determination

On December 7, 2020, HCI Drilling was onsite to drill a groundwater determination borehole 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 surface. The borehole coordinates are 32.1033, -103.5497. The driller log and borehole figure is shown in Appendix C.

Tetra Tech

901 West Wall, Suite 100, Midland, TX 79701

Tel 432.682.4559

Fax 432.682.3946

www.tetrattech.com

**TETRA TECH**

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.

Soil Assessment and Analytical Results

Auger Holes

On September 14, 2020, Tetra Tech personnel were onsite to evaluate and sample the release area. Tetra Tech installed a total of five (5) auger holes (AH-1 through AH-5) at total depths ranging from surface to 2.5' below surface. The areas of auger holes (AH-2, AH-3, and AH-5) were not vertically delineated due to hitting refusal. Additionally, seven (7) horizontal samples (Horizontal-1 through Horizontal-7) at depths ranging from surface to 1.0' were collected. Select samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix D. The results of the sampling are summarized in Table 1. The auger hole and horizontal sample locations are shown on Figure 3.

Referring to Table 1, none of the samples analyzed showed chloride or benzene concentrations above the RRALs. The area of auger hole (AH-4) did not report benzene, BTEX, TPH, or chloride concentrations above the laboratory reporting limits. However, total BTEX and TPH concentrations were detected above the RRALs in the areas of auger holes (AH-2, AH-3, and AH-5), the area of auger hole (AH-1) reported TPH concentrations above RRALs but did not report exceedances in BTEX concentrations. TPH concentrations ranged from 72.2 mg/kg to 14,000 mg/kg at depths ranging from surface to 2.5' below surface. BTEX concentrations ranged from 0.01474 mg/kg to 367 mg/kg at depths ranging from surface to 2.5' below surface. These areas were not vertically defined at the time of the site assessment.

Boreholes

Based on the laboratory data, Tetra Tech returned to the site on December 8, 2020 to vertically delineate the areas of auger holes (AH-2, AH-3, and AH-5) by supervising the installation of three (3) boreholes (Borehole-1 through Borehole-3), respectively. These boreholes were installed by HCI drilling. The boreholes ranged in depth from surface to 15.0' below surface. Select samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix D. The results of the sampling are summarized in Table 1. The borehole sample locations are shown on Figure 3.

**TETRA TECH**

Referring to Table 1, none of the samples analyzed showed chloride or benzene concentrations above the RRLs. However, total BTEX and TPH concentrations above RRLs were reported in the areas of boreholes (Borehole-1 and Borehole-2). TPH concentrations ranged from <49.8 mg/kg to 14,400 mg/kg at depths ranging from surface to 7.0' below surface. BTEX concentrations ranged from <0.001980 mg/kg to 586.1 mg/kg at depths ranging from surface to 7.0' below surface. Vertical delineation was found during the borehole installation, the area of borehole (Borehole-1) was vertically delineated at 8.0' below surface and the area of borehole (Borehole-2) was vertically delineated at 6.0' below surface. The area of borehole (Borehole-3) reported benzene, BTEX, TPH, and chloride concentrations below RRLs.

Remediation and Reclamation Activities

Based on the results of the soil assessment, Tetra Tech personnel were onsite January 20, 2021 through January 26, 2021, to supervise the remediation and reclamation activities as well as to collect confirmation samples. The impacted areas were excavated to total depths ranging from 3.5' to 8.0' below surface. The excavation area and depths are shown on Figure 4 and Table 2.

Confirmation bottom hole and sidewall samples were collected every 200 square feet. A total of twenty-two (22) bottom hole samples (BH-1 through BH-22) and a total of twenty-four (24) sidewall samples (SW-1 through SW-24) were collected to ensure proper removal of the impacted soils. The samples were submitted to the laboratory to be analyzed for TPH method 8015 extended, BTEX method 8021B, and Chloride by EPA Method 300.0. The sampling results are summarized in Table 2. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix D. The excavation depths and sample locations are shown in Figure 4.

Referring to Table 2, all final confirmation samples collected showed benzene, total BTEX, and TPH concentrations below the RRLs. Additionally, all final samples showed chloride concentrations below the 600 mg/kg threshold in the top 4' of soil.

Approximately 832 cubic yards of material was excavated and transported offsite for proper disposal. The areas were then backfilled with clean material to surface grade.



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Conclusion

Based on the laboratory results and remediation activities performed, EOG 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

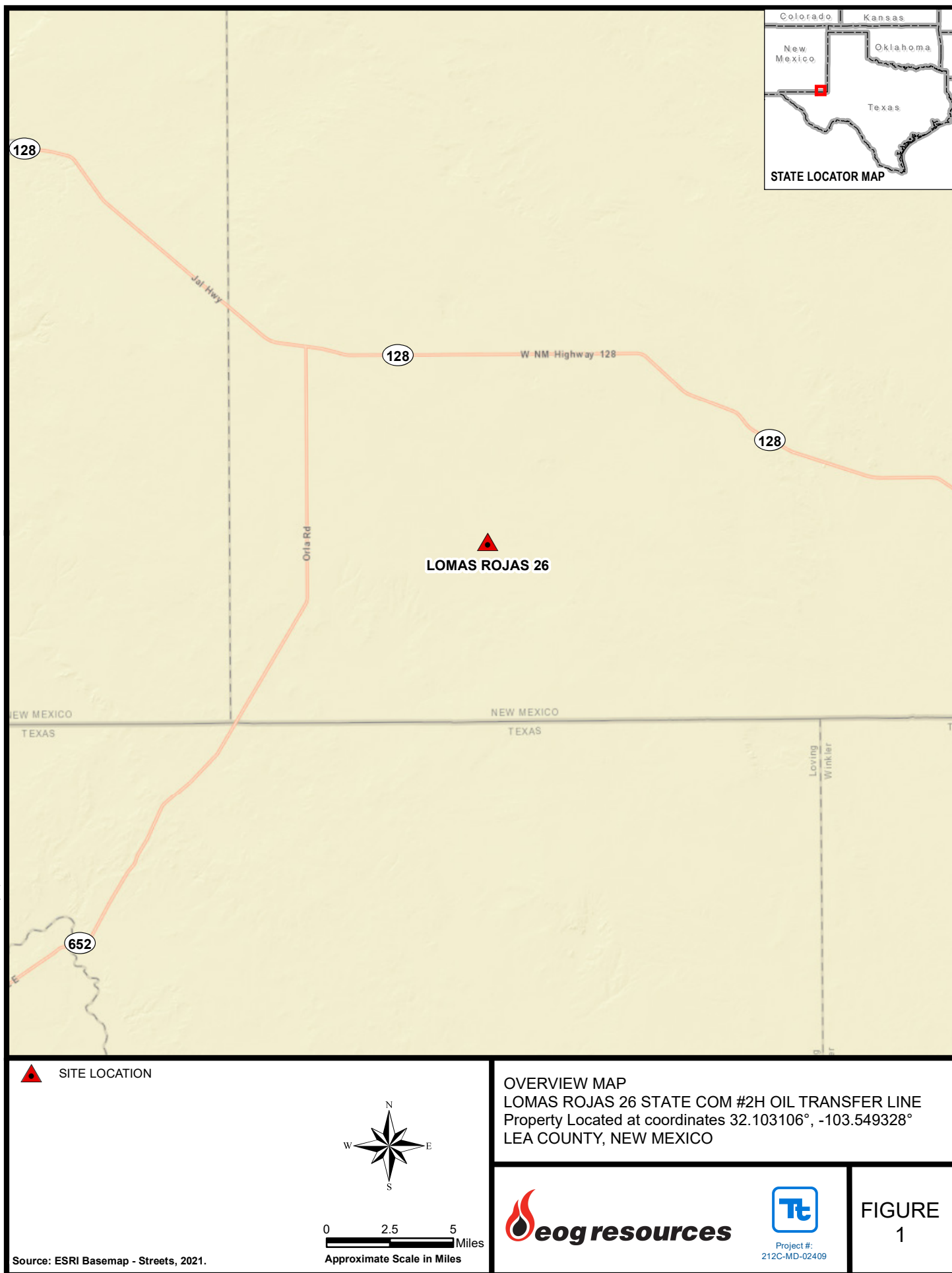


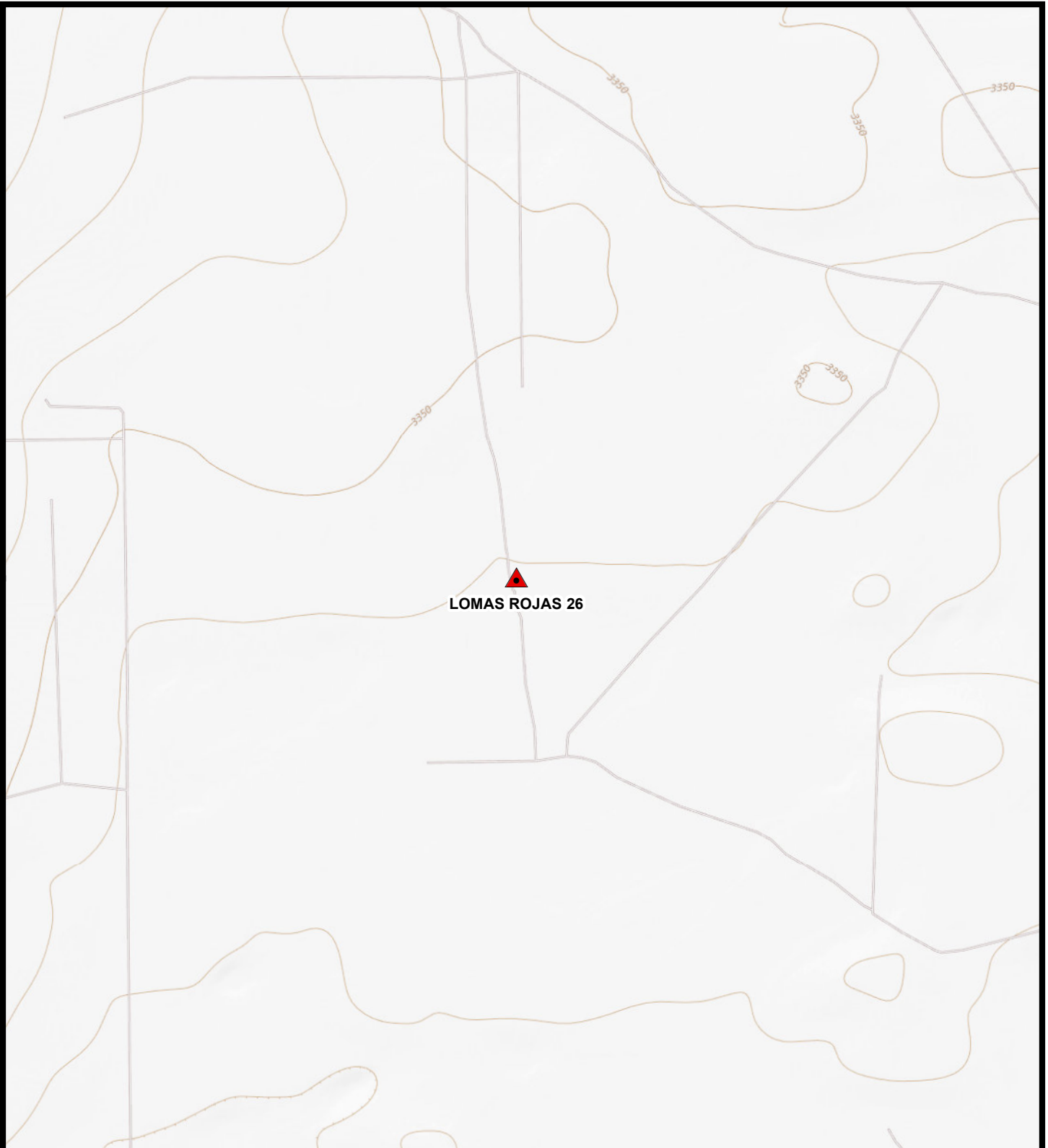
Brittany Long,
Project Manager



Clair Gonzales,
Senior Project Manager

Figures





 SITE LOCATION



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

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

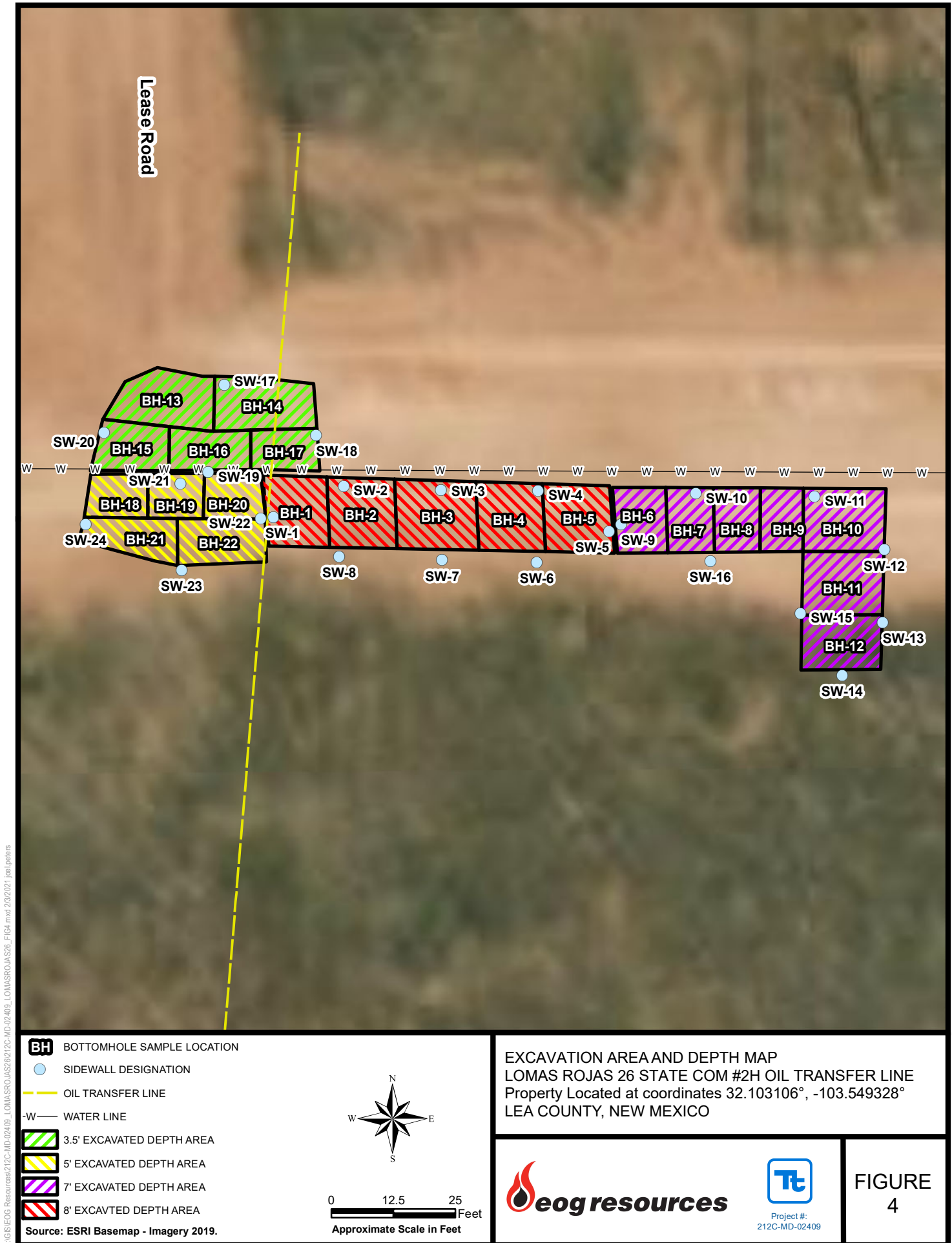
TOPOGRAPHIC MAP
LOMAS ROJAS 26 STATE COM #2H OIL TRANSFER LINE
Property Located at coordinates 32.103106°, -103.549328°
LEA COUNTY, NEW MEXICO



Project #:
212C-MD-02409

FIGURE
2





Tables

Table 1
EOG Resources
Lomas Rojas 26-2 Oil Transfer Line
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total						
AH-1	9/14/2020	0-1	X		1,110	9,660	879	11,600	<1.00	2.29	4.79	27.0	34.1	<9.94
	"	1-1.5	X		<50.0	72.2	<50.0	72.2	-	-	-	-	-	<9.90
	"	2-2.5	X		-	-	-	-	-	-	-	-	-	<9.94
AH-2	9/14/2020	0-1	X		2,440	7,060	579	10,100	2.63	56	37	147	243	<10.1
	"	1-1.5	X		2,550	6,630	515	9,700	2.43	60.2	33.5	144	240	<10.0
	"	2-2.5	X		3,030	6,470	540	10,000	3.83	87.8	38.5	146	276	<10.0
Borehole-1	12/8/2020	0-1	X		2,840	10,300	1,260	14,400	2.28	42.0	27.7	94.30	166.3	<5.03
	"	2-3	X		2,980	10,100	906	13,986	0.374	8.55	5.55	19.64	34.1	<4.95
	"	4-5	X		2,850	7,190	506	10,546	8.82	168.0	91	318.3	586.1	5.43
	"	6-7	X		1,720	5,740	428	7,888	1.12	19.1	11.8	41.00	73.02	<4.98
	"	8-9	X		<50.0	191	<50.0	191	0.00205	0.0120	0.00802	0.04140	0.06347	<4.99
	"	10-11	X		56.5	441	53.9	551.4	<0.00201	0.0327	0.0523	0.2805	0.3655	<5.03
	"	12-13	X		56.4	664	77.0	797.40	<0.00199	0.0130	0.0230	0.1419	0.1779	14.7
	"	14-15	X		<50.0	136	<50.0	136	<0.00199	0.00234	<0.00199	0.0115	0.0138	17.9
AH-3	9/14/2020	0-1	X		3,610	9,630	757	14,000	<1.00	42.5	55.8	226	324	<10.0
	"	1-1.5	X		3,040	7,580	811	11,400	1.74	75.6	40.5	165	283	<9.92
	"	2-2.5	X		3,530	7,470	601	11,600	2.61	96.3	48	176	323	10.4
Borehole-2	12/8/2020	0-1	X		780	6,200	464	7,444	0.0399	5.37	4.98	20.77	31.2	<4.95
	"	2-3	X		2,320	7,690	498	10,508	1.59	33.9	19.6	69.7	124.8	<4.99
	"	4-5	X		293	1,560	180	2,033	0.0134	1.71	2.83	10.74	15.3	<5.05
	"	6-7	X		<50.0	709	83.9	792.9	<0.00199	0.0239	0.0219	0.102	0.1478	<4.97
	"	8-9	X		<49.9	495	64.4	559.4	<0.00202	0.00497	0.0114	0.0583	0.07467	7.89
	"	10-11	X		<49.8	206	<49.8	206.0	<0.00200	0.00694	0.00204	0.00576	0.01474	83.4
	"	12-13	X		<50.0	80.9	<50.0	80.9	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	33.6
AH-4	9/14/2020	0-1	X		<50.3	<50.3	<50.3	<50.3	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<10.1
	"	1-1.5	X		-	-	-	-	-	-	-	-	-	<9.92
	"	2-2.5	X		-	-	-	-	-	-	-	-	-	<9.98

Table 1
EOG Resources
Lomas Rojas 26-2 Oil Transfer Line
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						
AH-5	9/14/2020	0-1	X		1,740	7,600	739	10,100	<1.00	32.2	20.8	80.2	133	<10.1
	"	1-1.5	X		2,460	6,100	564	9,120	3.99	115	40.7	165	325	<10.0
	"	2-2.5	X		4,160	7,890	645	12,700	7.48	130	50.8	179	367	<10.1
Borehole-3	12/8/2020	0-1	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.002000	<4.99
	"	2-3	X		<50.0	80.8	<50.0	81	<0.00201	<0.00201	<0.00201	<0.00201	<0.002010	<4.97
	"	4-5	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.002000	16.8
	"	6-7	X		<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00201	<0.002010	13.4
	"	8-9	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.001990	<4.99
	"	10-11	X		<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00198	<0.001980	<5.02
Horizontal 1	9/14/2020	0-1	X		<50.1	<50.1	<50.1	<50.1	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<10.1
Horizontal 2	9/14/2020	0-1	X		<50.3	<50.3	<50.3	<50.3	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<9.90
Horizontal 3	9/14/2020	0-1	X		<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	11.7
Horizontal 4	9/14/2020	0-1	X		<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<9.98
Horizontal 5	9/14/2020	0-1	X		<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<9.92
Horizontal 6	9/14/2020	0-1	X		<50.2	<50.2	<50.2	<50.2	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<9.94
Horizontal 7	9/14/2020	0-1	X		<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<10.1

(-)

Not Analyzed



Proposed Excavation

Table 2
EOG Resources
Lomas Rojas 26-2 Oil Transfer Line
Lea County, New Mexico

Sample ID	Sample Date	Excavation 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						
BH-1	1/20/2021	8.0'	X	-	97.1	364	<50.0	461	0.00484	0.168	0.378	1.20	1.75	8.51
BH-2	1/20/2021	8.0'	X	-	72.9	297	<49.9	370	0.00764	0.300	0.245	0.978	1.53	7.92
BH-3	1/20/2021	8.0'	X	-	<50.0	91.0	<50.0	91.0	<0.00200	<0.00200	0.00230	0.0153	0.0176	8.20
BH-4	1/20/2021	8.0'	X	-	<49.9	157	<49.9	157	<0.00200	<0.00200	<0.00200	0.00790	0.00790	9.19
BH-5	1/26/2021	8.0'	X	-	<50.0	<50.0	<50.0	<0.50	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	9.48
BH-5	1/26/2021	7.0'	X	-	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	0.00842	0.00842	8.75
BH-7	1/26/2021	7.0'	X	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	8.27
BH-8	1/26/2021	7.0'	X	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	7.96
BH-9	1/26/2021	7.0'	X	-	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	8.01
BH-10	1/26/2021	7.0'	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	9.07
BH-11	1/26/2021	7.0'	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	8.75
BH-12	1/26/2021	7.0'	X	-	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	9.01
BH-13	1/26/2021	3.5'	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	18.1
BH-14	1/26/2021	3.5'	X	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	18.3
BH-15	1/26/2021	3.5'	X	-	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	16.5
BH-16	1/26/2021	3.5'	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	16.5
BH-17	1/26/2021	3.5'	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	18.5
BH-18	1/26/2021	5.0'	X	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	7.90
BH-19	1/26/2021	5.0'	X	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	8.96
BH-20	1/26/2021	5.0'	X	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	9.70
BH-21	1/26/2021	5.0'	X	-	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	8.03
BH-22	1/26/2021	5.0'	X	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	9.41
SW-1	1/20/2021	-	X	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	0.00534	0.0439	0.0492	8.37
SW-2	1/20/2021	-	X	-	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	8.04
SW-3	1/20/2021	-	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	8.08
SW-4	1/20/2021	-	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	0.00346	<0.00200	<0.00200	0.00346	8.86
SW-5	1/20/2021	-	X	-	<49.9	<49.9	<49.9	<49.9	0.00228	0.00658	<0.00200	<0.00200	0.00886	8.41
SW-6	1/20/2021	-	X	-	<49.8	<49.8	<49.8	<49.8	0.00992	0.0214	0.00370	0.00759	0.0426	9.74
SW-7	1/26/2021	-	X	-	<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	45.1
SW-8	1/26/2021	-	X	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	54.0

Table 2
EOG Resources
Lomas Rojas 26-2 Oil Transfer Line
Lea County, New Mexico

Sample ID	Sample Date	Excavation 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						
SW-9	1/26/2021	-	X	-	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	53.6
SW-10	1/26/2021	-	X	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	51.8
SW-11	1/26/2021	-	X	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	50.6
SW-12	1/26/2021	-	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	58.3
SW-13	1/26/2021	-	X	-	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	58.9
SW-14	1/26/2021	-	X	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	59.6
SW-15	1/26/2021	-	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	50.8
SW-16	1/26/2021	-	X	-	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	58.4
SW-17	1/26/2021	-	X	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	16.0
SW-18	1/26/2021	-	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	15.9
SW-19	1/26/2021	-	X	-	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	10.5
SW-20	1/26/2021	-	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	9.19
SW-21	1/26/2021	-	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	44.1
SW-22	1/26/2021	-	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	47.1
SW-23	1/26/2021	-	X	-	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	44.9
SW-24	1/26/2021	-	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	42.0

(-)

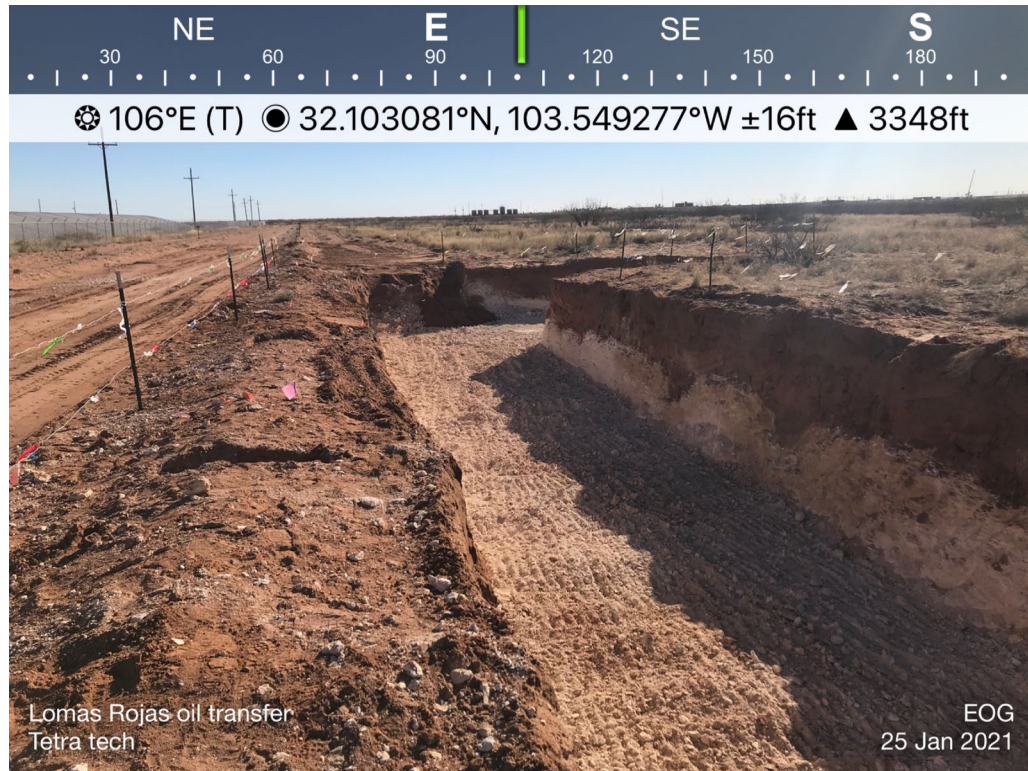
Not Analyzed

Photos

EOG Resources
Lomas Rojas 26-2 Oil Transfer
Lea County, New Mexico



TETRA TECH



View of Remediation Activities – View East



View of Remediation Activities – View East

EOG Resources
Lomas Rojas 26-2 Oil Transfer
Lea County, New Mexico



View of Remediation Activities – View East



View of Remediation Activities– View South

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	NRM2026959173
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party EOG Resources	OGRID 7377
Contact Name Todd Wells	Contact Telephone (432) 686-3613
Contact email Todd_Wells@eogresources.com	Incident # (assigned by OCD)
Contact mailing address 5509 Champions Drive Midland, TX 79706	

Location of Release Source

Latitude 32.103164° Longitude -103.549393°
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Lomas Rojas 26 State Com #2H	Site Type Oil Transfer Line
Date Release Discovered 7/25/20	API# (if applicable) 30-025-39701

Unit Letter	Section	Township	Range	County
E	26	25S	33E	Lea

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) 6	Volume Recovered (bbls) 0
☐ 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: The LO discovered a hole in the oil transfer line. After further inspection, he noticed that a vehicle struck the above ground line causing a bend and hole in the transfer line. Approximately 6 bbls of oil was released in the ROW and 0 bbls recovered.

Incident ID	NRM2026959173
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: <u>Todd Wells</u> Title: <u>Environmental Specialist</u> Signature: <u>Todd Wells</u> Date: <u>9-23-20</u> email: <u>Todd_Wells@eogresources.com</u> Telephone: <u>(432) 686-3613</u>
<u>OCD Only</u> Received by: <u>Ramona Marcus</u> Date: <u>9/25/2020</u>

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: Todd Wells Date: _____

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: Todd Wells Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

Appendix B

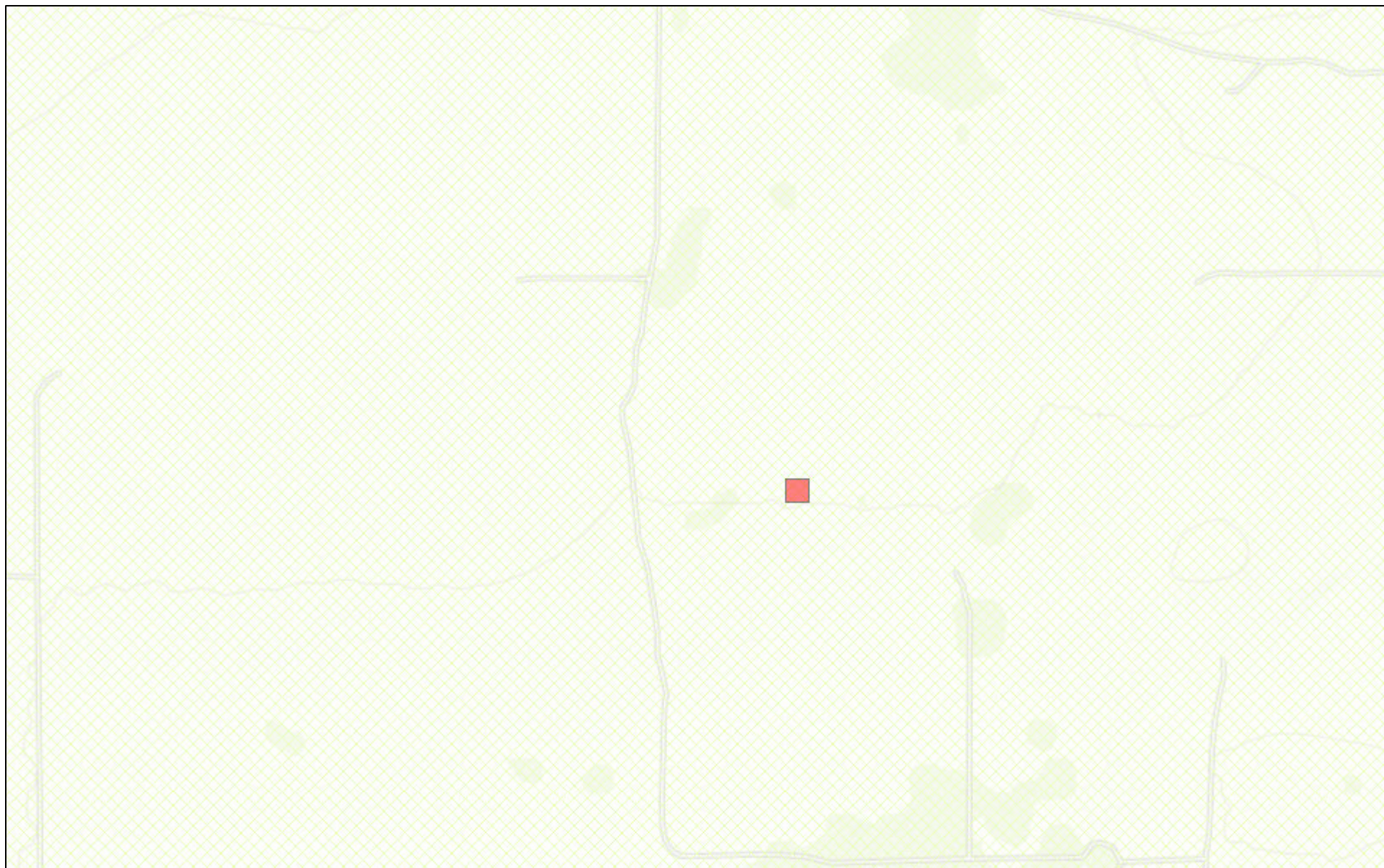


National Water Information System: Mapper



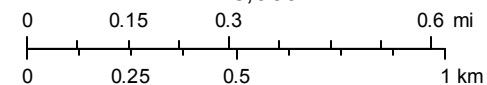
Site Information

New Mexico NFHL Data



July 29, 2020

1:18,056



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



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 =
320631103351401

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

USGS 320631103351401 25S.33E.20.443313

Lea County, New Mexico
Latitude 32°06'31", Longitude 103°35'14" NAD27
Land-surface elevation 3,398 feet above NAVD88
This well is completed in the Chinle Formation (231CHNL) local aquifer.

Output formats

Table of data

Tab-separated data

Graph of data

Reselect period

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1981-03-25			204.36				2				
			D					U		U	A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	U	Unknown method.
Measuring agency		Not determined
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 Plug-Ins 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?](https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?site_no=320631103351401&agency_cd=USGS&format=html)

Page Contact Information: [New Mexico Water Data Maintainer](#)
Page Last Modified: 2020-07-29 13:59:03 EDT
0.28 0.25 nadww01





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 02312		CUB	LE	1	2	1	05	25S	33E	632292	3559772	150	90	60
C 02313		CUB	LE	2	3	3	26	25S	33E	636971	3552098*	150	110	40
C 02373 CLW317846	O	CUB	LE	2	1	1	13	25S	33E	638518	3556544*	625	185	440
C 02373 S		CUB	LE	1	2	1	13	25S	33E	638721	3556549*	625	185	440

Average Depth to Water: **142 feet**

Minimum Depth: **90 feet**

Maximum Depth: **185 feet**

Record Count: 4

Basin/County Search:

County: Lea

PLSS Search:

Township: 25S

Range: 33E

*UTM location was derived from PLSS - see Help

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

7/29/20 12:02 PM

Page 1 of 1

WATER COLUMN/ AVERAGE
DEPTH TO WATER



Legend

- 0.50 Mile Radius
- Groundwater Determination Bore
- Lomas Rojas Oil Transfer



Groundwater Determination Bore

Lomas Rojas 26-2 Oil Transfer

2000 ft

Google Earth

© 2020 Google

OG

Lomas Rojas 26-2 Oil Transfer Line

Water Well Data
Average Depth to Groundwater (ft)
Lomas Rojas 26-2 Oil Transfer
Lea County, New Mexico

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
		290			

24 South			33 East		
6	5	4	3	2	1
7	8	9	10	20	11
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	70	34	35
		93.2			

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
	290				

25 South			33 East		
6	5	4	3	172	2
	118				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
	190				

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

26 South			32 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	333	22	23
30	29	28	27	26	25
31	32	33	34	35	36
295					

26 South			33 East		
6	5	4	3	180	2
7	8	9	106	10	11
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

26 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
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



Borehole ID:
GWDB

Soil Drilling Log

Project Name : Lomas Rojas 26-2 Oil
Project No. : _____
Location : Lea County, New Mexico
Coordinates : 32.1033, -103.5497
Elevation : N/A

Date : Monday, December 7, 2020
Sampler : EM
Driller : HCI
Method : Air Rotary

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)	Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
0		Topsoil, sand, light tan, dry			50				
5		CALICHE, powdery, dry, some aggregates 10 cm, dry			55		Total Depth = 55'		
10					60				
15		Very fine sand, light tan, dry			65				
20					70				
25		silty sand, white silt aggregates 3cm, dry			75				
30					80				
35		fine silty sand, tan, silt aggregates 1-2cm, dry			85				
40					90				
45					95				
50					100				

* H.O. = Heavy Odor
 * H.S. = Heavy Staining

* L.O. = Low Odor
 * L.S. = Low Staining

Appendix D

Certificate of Analysis Summary 672664

Tetra Tech- Midland, Midland, TX

Project Name: Lomas Rojas 26-2 Oil Transfer Line

Project Id: 212C-MD-02319
Contact: Mike Carmona
Project Location: Lea County, New Mexico

Date Received in Lab: Tue 09.15.2020 16:55**Report Date:** 09.21.2020 12:00**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	672664-001	672664-002	672664-003	672664-004	672664-005	672664-006
	<i>Field Id:</i>	AH-1 (0-1')	AH-1 (1-1.5')	AH-1 (2-2.5')	AH-2 (0-1')	AH-2 (1-1.5')	AH-2 (2-2.5')
	<i>Depth:</i>	0-1 ft	1-1.5 ft	2-2.5 ft	0-1 ft	1-1.5 ft	2-2.5 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	09.14.2020 00:00	09.14.2020 00:00	09.14.2020 00:00	09.14.2020 00:00	09.14.2020 00:00	09.14.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	09.16.2020 13:07			09.16.2020 13:07	09.17.2020 14:38	09.18.2020 12:23
	<i>Analyzed:</i>	09.17.2020 00:44			09.17.2020 01:41	09.18.2020 02:47	09.18.2020 19:24
	<i>Units/RL:</i>	mg/kg RL			mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<1.00 1.00			2.63 1.00	2.43 1.00	3.83 0.998
Toluene		2.29 1.00			56.0 1.00	60.2 1.00	87.8 0.998
Ethylbenzene		4.79 1.00			37.0 1.00	33.5 1.00	38.5 0.998
m,p-Xylenes		14.2 2.00			104 2.00	106 2.00	105 2.00
o-Xylene		12.8 1.00			43.4 1.00	37.7 1.00	40.5 0.998
Total Xylenes		27.0 1.00			147 1.00	144 1.00	146 0.998
Total BTEX		34.1 1.00			243 1.00	240 1.00	276 0.998
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	09.16.2020 12:35	09.16.2020 12:35	09.16.2020 12:35	09.16.2020 12:35	09.16.2020 12:35	09.16.2020 12:35
	<i>Analyzed:</i>	09.16.2020 16:51	09.16.2020 17:07	09.16.2020 17:13	09.16.2020 17:29	09.16.2020 17:35	09.16.2020 17:40
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		<9.94 9.94	<9.90 9.90	<9.94 9.94	<10.1 10.1	<10.0 10.0	<10.0 10.0
TPH By SW8015 Mod	<i>Extracted:</i>	09.16.2020 17:30	09.17.2020 11:00		09.16.2020 17:30	09.17.2020 11:00	09.18.2020 13:45
	<i>Analyzed:</i>	09.17.2020 04:17	09.17.2020 13:48		09.17.2020 04:37	09.17.2020 14:08	09.18.2020 16:57
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL		mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		1110 251	<50.0 50.0		2440 249	2550 250	3030 250
Diesel Range Organics (DRO)		9660 251	72.2 50.0		7060 249	6630 250	6470 250
Motor Oil Range Hydrocarbons (MRO)		879 251	<50.0 50.0		579 249	515 250	540 250
Total TPH		11600 251	72.2 50.0		10100 249	9700 250	10000 250

BRL - Below Reporting Limit

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



Certificate of Analysis Summary 672664

Tetra Tech- Midland, Midland, TX

Project Name: Lomas Rojas 26-2 Oil Transfer Line

Project Id: 212C-MD-02319
 Contact: Mike Carmona
 Project Location: Lea County, New Mexico

Date Received in Lab: Tue 09.15.2020 16:55

Report Date: 09.21.2020 12:00

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	672664-007	672664-008	672664-009	672664-010	672664-011	672664-012
	Field Id:	AH-3 (0-1')	AH-3 (1-1.5')	AH-3 (2-2.5')	AH-4 (0-1')	AH-4 (1-1.5')	AH-4 (2-2.5')
	Depth:	0-1 ft	1-1.5 ft	2-2.5 ft	0-1 ft	1-1.5 ft	2-2.5 ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	09.14.2020 00:00	09.14.2020 00:00	09.14.2020 00:00	09.14.2020 00:00	09.14.2020 00:00	09.14.2020 00:00
BTEX by EPA 8021B	Extracted:	09.16.2020 13:07	09.17.2020 14:38	09.18.2020 12:23	09.16.2020 13:07		
	Analyzed:	09.17.2020 02:38	09.18.2020 03:42	09.18.2020 20:22	09.16.2020 18:52		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		<1.00 1.00	1.74 0.992	2.61 0.998	<0.00202 0.00202		
Toluene		42.5 1.00	75.6 0.992	96.3 0.998	<0.00202 0.00202		
Ethylbenzene		55.8 1.00	40.5 0.992	48.0 0.998	<0.00202 0.00202		
m,p-Xylenes		159 2.01	123 1.98	127 2.00	<0.00403 0.00403		
o-Xylene		66.6 1.00	42.2 0.992	49.2 0.998	<0.00202 0.00202		
Total Xylenes		226 1.00	165 0.992	176 0.998	<0.00202 0.00202		
Total BTEX		324 1.00	283 0.992	323 0.998	<0.00202 0.00202		
Inorganic Anions by EPA 300/300.1	Extracted:	09.16.2020 12:35	09.16.2020 12:35	09.16.2020 12:35	09.16.2020 12:35	09.16.2020 13:38	09.16.2020 13:38
	Analyzed:	09.16.2020 17:46	09.16.2020 17:51	09.16.2020 17:57	09.16.2020 18:02	09.16.2020 18:35	09.16.2020 18:51
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		<10.0 10.0	<9.92 9.92	10.4 10.0	<10.1 10.1	<9.92 9.92	<9.98 9.98
TPH By SW8015 Mod	Extracted:	09.16.2020 17:30	09.17.2020 11:00	09.18.2020 13:45	09.16.2020 14:00		
	Analyzed:	09.17.2020 04:58	09.17.2020 15:08	09.18.2020 17:17	09.16.2020 23:55		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)		3610 250	3040 250	3530 250	<50.3 50.3		
Diesel Range Organics (DRO)		9630 250	7580 250	7470 250	<50.3 50.3		
Motor Oil Range Hydrocarbons (MRO)		757 250	811 250	601 250	<50.3 50.3		
Total TPH		14000 250	11400 250	11600 250	<50.3 50.3		

BRL - Below Reporting Limit

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



Certificate of Analysis Summary 672664



Tetra Tech- Midland, Midland, TX

Project Name: Lomas Rojas 26-2 Oil Transfer Line

Project Id: 212C-MD-02319
Contact: Mike Carmona
Project Location: Lea County, New Mexico

Date Received in Lab: Tue 09.15.2020 16:55
Report Date: 09.21.2020 12:00
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	672664-013	672664-014	672664-015	672664-016	672664-017	672664-018
	<i>Field Id:</i>	AH-5 (0-1')	AH-5 (1-1.5')	AH-5 (2-2.5')	H-1 (0-1')	H-2 (0-1')	H-3 (0-1')
	<i>Depth:</i>	0-1 ft	1-1.5 ft	2-2.5 ft	0-1 ft	0-1 ft	0-1 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	09.14.2020 00:00	09.14.2020 00:00	09.14.2020 00:00	09.14.2020 00:00	09.14.2020 00:00	09.14.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	09.16.2020 13:07	09.17.2020 14:38	09.18.2020 12:23	09.16.2020 13:07	09.16.2020 13:07	09.16.2020 13:07
	<i>Analyzed:</i>	09.17.2020 03:35	09.18.2020 04:38	09.18.2020 21:19	09.16.2020 19:14	09.16.2020 19:37	09.16.2020 19:59
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<1.00 1.00	3.99 0.994	7.48 0.990	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198
Toluene		32.2 1.00	115 0.994	130 0.990	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198
Ethylbenzene		20.8 1.00	40.7 0.994	50.8 0.990	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198
m,p-Xylenes		56.5 2.01	127 1.99	130 1.98	<0.00401 0.00401	<0.00399 0.00399	<0.00397 0.00397
o-Xylene		23.7 1.00	38.0 0.994	49.2 0.990	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198
Total Xylenes		80.2 1.00	165 0.994	179 0.990	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198
Total BTEX		133 1.00	325 0.994	367 0.990	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	09.16.2020 13:38	09.16.2020 13:38	09.16.2020 13:38	09.16.2020 13:38	09.16.2020 13:38	09.16.2020 13:38
	<i>Analyzed:</i>	09.16.2020 18:57	09.16.2020 19:02	09.16.2020 19:08	09.16.2020 19:24	09.16.2020 19:30	09.16.2020 19:35
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		<10.1 10.1	<10.0 10.0	<10.1 10.1	<10.1 10.1	<9.90 9.90	11.7 9.94
TPH By SW8015 Mod	<i>Extracted:</i>	09.16.2020 17:30	09.17.2020 11:00	09.18.2020 13:45	09.16.2020 14:00	09.16.2020 14:00	09.16.2020 14:00
	<i>Analyzed:</i>	09.17.2020 05:17	09.17.2020 15:29	09.18.2020 17:37	09.17.2020 00:15	09.17.2020 00:35	09.17.2020 00:55
	<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)		1740 250	2460 251	4160 250	<50.1 50.1	<50.3 50.3	<50.0 50.0
Diesel Range Organics (DRO)		7600 250	6100 251	7890 250	<50.1 50.1	<50.3 50.3	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		739 250	564 251	645 250	<50.1 50.1	<50.3 50.3	<50.0 50.0
Total TPH		10100 250	9120 251	12700 250	<50.1 50.1	<50.3 50.3	<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 672664

Tetra Tech- Midland, Midland, TX

Project Name: Lomas Rojas 26-2 Oil Transfer Line

Project Id: 212C-MD-02319
 Contact: Mike Carmona
 Project Location: Lea County, New Mexico

Date Received in Lab: Tue 09.15.2020 16:55
 Report Date: 09.21.2020 12:00
 Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	672664-019	672664-020	672664-021	672664-022		
	Field Id:	H-4 (0-1')	H-5 (0-1')	H-6 (0-1')	H-7 (0-1')		
	Depth:	0-1 ft	0-1 ft	0-1 ft	0-1 ft		
	Matrix:	SOIL	SOIL	SOIL	SOIL		
	Sampled:	09.14.2020 00:00	09.14.2020 00:00	09.14.2020 00:00	09.14.2020 00:00		
BTEX by EPA 8021B	Extracted:	09.16.2020 13:07	09.16.2020 13:07	09.16.2020 13:07	09.16.2020 13:07		
	Analyzed:	09.17.2020 09:18	09.16.2020 20:44	09.16.2020 22:04	09.16.2020 22:26		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199		
Toluene		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199		
Ethylbenzene		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199		
m,p-Xylenes		<0.00397 0.00397	<0.00399 0.00399	<0.00399 0.00399	<0.00398 0.00398		
o-Xylene		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199		
Total Xylenes		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199		
Total BTEX		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199		
Inorganic Anions by EPA 300/300.1	Extracted:	09.16.2020 13:38	09.16.2020 13:38	09.16.2020 13:38	09.16.2020 13:38		
	Analyzed:	09.16.2020 19:41	09.16.2020 19:46	09.16.2020 19:52	09.16.2020 20:08		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		<9.98 9.98	<9.92 9.92	<9.94 9.94	<10.1 10.1		
TPH By SW8015 Mod	Extracted:	09.16.2020 14:00	09.16.2020 14:00	09.16.2020 14:00	09.16.2020 14:00		
	Analyzed:	09.17.2020 01:15	09.17.2020 01:35	09.17.2020 01:56	09.17.2020 02:16		
	Units/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	<50.2 50.2	<49.9 49.9		
Diesel Range Organics (DRO)		<50.0 50.0	<49.8 49.8	<50.2 50.2	<49.9 49.9		
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.8 49.8	<50.2 50.2	<49.9 49.9		
Total TPH		<50.0 50.0	<49.8 49.8	<50.2 50.2	<49.9 49.9		

BRL - Below Reporting Limit

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Analytical Report 672664

for

Tetra Tech- Midland

Project Manager: Mike Carmona

Lomas Rojas 26-2 Oil Transfer Line

212C-MD-02319

09.21.2020

Collected By: Client

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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), 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 (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TN102385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



09.21.2020

Project Manager: **Mike Carmona**

Tetra Tech- Midland

901 West Wall ST

Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **672664**

Lomas Rojas 26-2 Oil Transfer Line

Project Address: Lea County, New Mexico

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) 672664. 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. 672664 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 672664

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
AH-1 (0-1')	S	09.14.2020 00:00	0 - 1 ft	672664-001
AH-1 (1-1.5')	S	09.14.2020 00:00	1 - 1.5 ft	672664-002
AH-1 (2-2.5')	S	09.14.2020 00:00	2 - 2.5 ft	672664-003
AH-2 (0-1')	S	09.14.2020 00:00	0 - 1 ft	672664-004
AH-2 (1-1.5')	S	09.14.2020 00:00	1 - 1.5 ft	672664-005
AH-2 (2-2.5')	S	09.14.2020 00:00	2 - 2.5 ft	672664-006
AH-3 (0-1')	S	09.14.2020 00:00	0 - 1 ft	672664-007
AH-3 (1-1.5')	S	09.14.2020 00:00	1 - 1.5 ft	672664-008
AH-3 (2-2.5')	S	09.14.2020 00:00	2 - 2.5 ft	672664-009
AH-4 (0-1')	S	09.14.2020 00:00	0 - 1 ft	672664-010
AH-4 (1-1.5')	S	09.14.2020 00:00	1 - 1.5 ft	672664-011
AH-4 (2-2.5')	S	09.14.2020 00:00	2 - 2.5 ft	672664-012
AH-5 (0-1')	S	09.14.2020 00:00	0 - 1 ft	672664-013
AH-5 (1-1.5')	S	09.14.2020 00:00	1 - 1.5 ft	672664-014
AH-5 (2-2.5')	S	09.14.2020 00:00	2 - 2.5 ft	672664-015
H-1 (0-1')	S	09.14.2020 00:00	0 - 1 ft	672664-016
H-2 (0-1')	S	09.14.2020 00:00	0 - 1 ft	672664-017
H-3 (0-1')	S	09.14.2020 00:00	0 - 1 ft	672664-018
H-4 (0-1')	S	09.14.2020 00:00	0 - 1 ft	672664-019
H-5 (0-1')	S	09.14.2020 00:00	0 - 1 ft	672664-020
H-6 (0-1')	S	09.14.2020 00:00	0 - 1 ft	672664-021
H-7 (0-1')	S	09.14.2020 00:00	0 - 1 ft	672664-022



CASE NARRATIVE

Client Name: Tetra Tech- Midland

Project Name: Lomas Rojas 26-2 Oil Transfer Line

Project ID: 212C-MD-02319
Work Order Number(s): 672664

Report Date: 09.21.2020
Date Received: 09.15.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 672664

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **AH-1 (0-1')**

Matrix: Soil

Date Received: 09.15.2020 16:55

Lab Sample Id: 672664-001

Date Collected: 09.14.2020 00:00

Sample Depth: 0 - 1 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.16.2020 12:35

Basis: Wet Weight

Seq Number: 3137359

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.94	9.94	mg/kg	09.16.2020 16:51	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 09.16.2020 17:30

Basis: Wet Weight

Seq Number: 3137360

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	1110	251	mg/kg	09.17.2020 04:17		5
Diesel Range Organics (DRO)	C10C28DRO	9660	251	mg/kg	09.17.2020 04:17		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	879	251	mg/kg	09.17.2020 04:17		5
Total TPH	PHC635	11600	251	mg/kg	09.17.2020 04:17		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	125	%	70-135	09.17.2020 04:17	
o-Terphenyl	84-15-1	108	%	70-135	09.17.2020 04:17	



Certificate of Analytical Results 672664

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **AH-1 (0-1')**

Matrix: Soil

Date Received: 09.15.2020 16:55

Lab Sample Id: 672664-001

Date Collected: 09.14.2020 00:00

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.16.2020 13:07

Basis: Wet Weight

Seq Number: 3137346

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<1.00	1.00	mg/kg	09.17.2020 00:44	U	500
Toluene	108-88-3	2.29	1.00	mg/kg	09.17.2020 00:44		500
Ethylbenzene	100-41-4	4.79	1.00	mg/kg	09.17.2020 00:44		500
m,p-Xylenes	179601-23-1	14.2	2.00	mg/kg	09.17.2020 00:44		500
o-Xylene	95-47-6	12.8	1.00	mg/kg	09.17.2020 00:44		500
Total Xylenes	1330-20-7	27.0	1.00	mg/kg	09.17.2020 00:44		500
Total BTEX		34.1	1.00	mg/kg	09.17.2020 00:44		500
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	70-130	09.17.2020 00:44		
1,4-Difluorobenzene	540-36-3	98	%	70-130	09.17.2020 00:44		



Certificate of Analytical Results 672664

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **AH-1 (1-1.5')** Matrix: Soil Date Received: 09.15.2020 16:55
 Lab Sample Id: 672664-002 Date Collected: 09.14.2020 00:00 Sample Depth: 1 - 1.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.16.2020 12:35 Basis: Wet Weight
 Seq Number: 3137359

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.90	9.90	mg/kg	09.16.2020 17:07	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.17.2020 11:00 Basis: Wet Weight
 Seq Number: 3137402

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.17.2020 13:48	U	1
Diesel Range Organics (DRO)	C10C28DRO	72.2	50.0	mg/kg	09.17.2020 13:48		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.17.2020 13:48	U	1
Total TPH	PHC635	72.2	50.0	mg/kg	09.17.2020 13:48		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	09.17.2020 13:48	
o-Terphenyl	84-15-1	91	%	70-135	09.17.2020 13:48	

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Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **AH-1 (2-2.5')**

Matrix: Soil

Date Received: 09.15.2020 16:55

Lab Sample Id: 672664-003

Date Collected: 09.14.2020 00:00

Sample Depth: 2 - 2.5 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.16.2020 12:35

Basis: Wet Weight

Seq Number: 3137359

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.94	9.94	mg/kg	09.16.2020 17:13	U	1



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **AH-2 (0-1')**

Matrix: Soil

Date Received: 09.15.2020 16:55

Lab Sample Id: 672664-004

Date Collected: 09.14.2020 00:00

Sample Depth: 0 - 1 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.16.2020 12:35

Basis: Wet Weight

Seq Number: 3137359

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<10.1	10.1	mg/kg	09.16.2020 17:29	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 09.16.2020 17:30

Basis: Wet Weight

Seq Number: 3137360

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	2440	249	mg/kg	09.17.2020 04:37		5
Diesel Range Organics (DRO)	C10C28DRO	7060	249	mg/kg	09.17.2020 04:37		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	579	249	mg/kg	09.17.2020 04:37		5
Total TPH	PHC635	10100	249	mg/kg	09.17.2020 04:37		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	135	%	70-135	09.17.2020 04:37	
o-Terphenyl	84-15-1	108	%	70-135	09.17.2020 04:37	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **AH-2 (0-1')**

Matrix: Soil

Date Received: 09.15.2020 16:55

Lab Sample Id: 672664-004

Date Collected: 09.14.2020 00:00

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.16.2020 13:07

Basis: Wet Weight

Seq Number: 3137346

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	2.63	1.00	mg/kg	09.17.2020 01:41		500
Toluene	108-88-3	56.0	1.00	mg/kg	09.17.2020 01:41		500
Ethylbenzene	100-41-4	37.0	1.00	mg/kg	09.17.2020 01:41		500
m,p-Xylenes	179601-23-1	104	2.00	mg/kg	09.17.2020 01:41		500
o-Xylene	95-47-6	43.4	1.00	mg/kg	09.17.2020 01:41		500
Total Xylenes	1330-20-7	147	1.00	mg/kg	09.17.2020 01:41		500
Total BTEX		243	1.00	mg/kg	09.17.2020 01:41		500
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	107	%	70-130	09.17.2020 01:41		
1,4-Difluorobenzene	540-36-3	96	%	70-130	09.17.2020 01:41		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **AH-2 (1-1.5')** Matrix: Soil Date Received: 09.15.2020 16:55
 Lab Sample Id: 672664-005 Date Collected: 09.14.2020 00:00 Sample Depth: 1 - 1.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.16.2020 12:35 Basis: Wet Weight
 Seq Number: 3137359

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<10.0	10.0	mg/kg	09.16.2020 17:35	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.17.2020 11:00 Basis: Wet Weight
 Seq Number: 3137402

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	2550	250	mg/kg	09.17.2020 14:08		5
Diesel Range Organics (DRO)	C10C28DRO	6630	250	mg/kg	09.17.2020 14:08		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	515	250	mg/kg	09.17.2020 14:08		5
Total TPH	PHC635	9700	250	mg/kg	09.17.2020 14:08		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-135	09.17.2020 14:08	
o-Terphenyl	84-15-1	90	%	70-135	09.17.2020 14:08	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **AH-2 (1-1.5')**

Matrix: Soil

Date Received: 09.15.2020 16:55

Lab Sample Id: 672664-005

Date Collected: 09.14.2020 00:00

Sample Depth: 1 - 1.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.17.2020 14:38

Basis: Wet Weight

Seq Number: 3137494

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	2.43	1.00	mg/kg	09.18.2020 02:47		500
Toluene	108-88-3	60.2	1.00	mg/kg	09.18.2020 02:47		500
Ethylbenzene	100-41-4	33.5	1.00	mg/kg	09.18.2020 02:47		500
m,p-Xylenes	179601-23-1	106	2.00	mg/kg	09.18.2020 02:47		500
o-Xylene	95-47-6	37.7	1.00	mg/kg	09.18.2020 02:47		500
Total Xylenes	1330-20-7	144	1.00	mg/kg	09.18.2020 02:47		500
Total BTEX		240	1.00	mg/kg	09.18.2020 02:47		500
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	90	%	70-130	09.18.2020 02:47		
1,4-Difluorobenzene	540-36-3	94	%	70-130	09.18.2020 02:47		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **AH-2 (2-2.5')** Matrix: Soil Date Received: 09.15.2020 16:55
 Lab Sample Id: 672664-006 Date Collected: 09.14.2020 00:00 Sample Depth: 2 - 2.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.16.2020 12:35 Basis: Wet Weight
 Seq Number: 3137359

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<10.0	10.0	mg/kg	09.16.2020 17:40	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.18.2020 13:45 Basis: Wet Weight
 Seq Number: 3137547

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	3030	250	mg/kg	09.18.2020 16:57		5
Diesel Range Organics (DRO)	C10C28DRO	6470	250	mg/kg	09.18.2020 16:57		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	540	250	mg/kg	09.18.2020 16:57		5
Total TPH	PHC635	10000	250	mg/kg	09.18.2020 16:57		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	09.18.2020 16:57	
o-Terphenyl	84-15-1	92	%	70-135	09.18.2020 16:57	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **AH-2 (2-2.5')**

Matrix: Soil

Date Received: 09.15.2020 16:55

Lab Sample Id: 672664-006

Date Collected: 09.14.2020 00:00

Sample Depth: 2 - 2.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.18.2020 12:23

Basis: Wet Weight

Seq Number: 3137549

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	3.83	0.998	mg/kg	09.18.2020 19:24		500
Toluene	108-88-3	87.8	0.998	mg/kg	09.18.2020 19:24		500
Ethylbenzene	100-41-4	38.5	0.998	mg/kg	09.18.2020 19:24		500
m,p-Xylenes	179601-23-1	105	2.00	mg/kg	09.18.2020 19:24		500
o-Xylene	95-47-6	40.5	0.998	mg/kg	09.18.2020 19:24		500
Total Xylenes	1330-20-7	146	0.998	mg/kg	09.18.2020 19:24		500
Total BTEX		276	0.998	mg/kg	09.18.2020 19:24		500
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	96	%	70-130	09.18.2020 19:24		
4-Bromofluorobenzene	460-00-4	110	%	70-130	09.18.2020 19:24		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **AH-3 (0-1')**

Matrix: Soil

Date Received: 09.15.2020 16:55

Lab Sample Id: 672664-007

Date Collected: 09.14.2020 00:00

Sample Depth: 0 - 1 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.16.2020 12:35

Basis: Wet Weight

Seq Number: 3137359

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<10.0	10.0	mg/kg	09.16.2020 17:46	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 09.16.2020 17:30

Basis: Wet Weight

Seq Number: 3137360

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	3610	250	mg/kg	09.17.2020 04:58		5
Diesel Range Organics (DRO)	C10C28DRO	9630	250	mg/kg	09.17.2020 04:58		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	757	250	mg/kg	09.17.2020 04:58		5
Total TPH	PHC635	14000	250	mg/kg	09.17.2020 04:58		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	09.17.2020 04:58	
o-Terphenyl	84-15-1	114	%	70-135	09.17.2020 04:58	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **AH-3 (0-1')**

Matrix: Soil

Date Received: 09.15.2020 16:55

Lab Sample Id: 672664-007

Date Collected: 09.14.2020 00:00

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.16.2020 13:07

Basis: Wet Weight

Seq Number: 3137346

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<1.00	1.00	mg/kg	09.17.2020 02:38	U	500
Toluene	108-88-3	42.5	1.00	mg/kg	09.17.2020 02:38		500
Ethylbenzene	100-41-4	55.8	1.00	mg/kg	09.17.2020 02:38		500
m,p-Xylenes	179601-23-1	159	2.01	mg/kg	09.17.2020 02:38		500
o-Xylene	95-47-6	66.6	1.00	mg/kg	09.17.2020 02:38		500
Total Xylenes	1330-20-7	226	1.00	mg/kg	09.17.2020 02:38		500
Total BTEX		324	1.00	mg/kg	09.17.2020 02:38		500
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	95	%	70-130	09.17.2020 02:38		
4-Bromofluorobenzene	460-00-4	114	%	70-130	09.17.2020 02:38		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **AH-3 (1-1.5')** Matrix: Soil Date Received: 09.15.2020 16:55
 Lab Sample Id: 672664-008 Date Collected: 09.14.2020 00:00 Sample Depth: 1 - 1.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.16.2020 12:35 Basis: Wet Weight
 Seq Number: 3137359

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.92	9.92	mg/kg	09.16.2020 17:51	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.17.2020 11:00 Basis: Wet Weight
 Seq Number: 3137402

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	3040	250	mg/kg	09.17.2020 15:08		5
Diesel Range Organics (DRO)	C10C28DRO	7580	250	mg/kg	09.17.2020 15:08		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	811	250	mg/kg	09.17.2020 15:08		5
Total TPH	PHC635	11400	250	mg/kg	09.17.2020 15:08		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	09.17.2020 15:08	
o-Terphenyl	84-15-1	105	%	70-135	09.17.2020 15:08	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **AH-3 (1-1.5')**

Matrix: Soil

Date Received: 09.15.2020 16:55

Lab Sample Id: 672664-008

Date Collected: 09.14.2020 00:00

Sample Depth: 1 - 1.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.17.2020 14:38

Basis: Wet Weight

Seq Number: 3137494

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	1.74	0.992	mg/kg	09.18.2020 03:42		500
Toluene	108-88-3	75.6	0.992	mg/kg	09.18.2020 03:42		500
Ethylbenzene	100-41-4	40.5	0.992	mg/kg	09.18.2020 03:42		500
m,p-Xylenes	179601-23-1	123	1.98	mg/kg	09.18.2020 03:42		500
o-Xylene	95-47-6	42.2	0.992	mg/kg	09.18.2020 03:42		500
Total Xylenes	1330-20-7	165	0.992	mg/kg	09.18.2020 03:42		500
Total BTEX		283	0.992	mg/kg	09.18.2020 03:42		500
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	94	%	70-130	09.18.2020 03:42		
4-Bromofluorobenzene	460-00-4	95	%	70-130	09.18.2020 03:42		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **AH-3 (2-2.5')** Matrix: Soil Date Received: 09.15.2020 16:55
 Lab Sample Id: 672664-009 Date Collected: 09.14.2020 00:00 Sample Depth: 2 - 2.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.16.2020 12:35 Basis: Wet Weight
 Seq Number: 3137359

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.4	10.0	mg/kg	09.16.2020 17:57		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.18.2020 13:45 Basis: Wet Weight
 Seq Number: 3137547

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	3530	250	mg/kg	09.18.2020 17:17		5
Diesel Range Organics (DRO)	C10C28DRO	7470	250	mg/kg	09.18.2020 17:17		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	601	250	mg/kg	09.18.2020 17:17		5
Total TPH	PHC635	11600	250	mg/kg	09.18.2020 17:17		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	09.18.2020 17:17	
o-Terphenyl	84-15-1	95	%	70-135	09.18.2020 17:17	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **AH-3 (2-2.5')**

Matrix: Soil

Date Received: 09.15.2020 16:55

Lab Sample Id: 672664-009

Date Collected: 09.14.2020 00:00

Sample Depth: 2 - 2.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.18.2020 12:23

Basis: Wet Weight

Seq Number: 3137549

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	2.61	0.998	mg/kg	09.18.2020 20:22		500
Toluene	108-88-3	96.3	0.998	mg/kg	09.18.2020 20:22		500
Ethylbenzene	100-41-4	48.0	0.998	mg/kg	09.18.2020 20:22		500
m,p-Xylenes	179601-23-1	127	2.00	mg/kg	09.18.2020 20:22		500
o-Xylene	95-47-6	49.2	0.998	mg/kg	09.18.2020 20:22		500
Total Xylenes	1330-20-7	176	0.998	mg/kg	09.18.2020 20:22		500
Total BTEX		323	0.998	mg/kg	09.18.2020 20:22		500
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.18.2020 20:22		
4-Bromofluorobenzene	460-00-4	111	%	70-130	09.18.2020 20:22		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **AH-4 (0-1')**

Matrix: Soil

Date Received: 09.15.2020 16:55

Lab Sample Id: 672664-010

Date Collected: 09.14.2020 00:00

Sample Depth: 0 - 1 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.16.2020 12:35

Basis: Wet Weight

Seq Number: 3137359

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<10.1	10.1	mg/kg	09.16.2020 18:02	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 09.16.2020 14:00

Basis: Wet Weight

Seq Number: 3137360

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	09.16.2020 23:55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	09.16.2020 23:55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	09.16.2020 23:55	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	09.16.2020 23:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	09.16.2020 23:55	
o-Terphenyl	84-15-1	105	%	70-135	09.16.2020 23:55	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **AH-4 (0-1')**

Matrix: Soil

Date Received: 09.15.2020 16:55

Lab Sample Id: 672664-010

Date Collected: 09.14.2020 00:00

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.16.2020 13:07

Basis: Wet Weight

Seq Number: 3137346

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.16.2020 18:52	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.16.2020 18:52	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.16.2020 18:52	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	09.16.2020 18:52	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.16.2020 18:52	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.16.2020 18:52	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.16.2020 18:52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	09.16.2020 18:52		
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.16.2020 18:52		

**Certificate of Analytical Results 672664****Tetra Tech- Midland, Midland, TX**

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **AH-4 (1-1.5')**

Matrix: Soil

Date Received: 09.15.2020 16:55

Lab Sample Id: 672664-011

Date Collected: 09.14.2020 00:00

Sample Depth: 1 - 1.5 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.16.2020 13:38

Basis: Wet Weight

Seq Number: 3137358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.92	9.92	mg/kg	09.16.2020 18:35	U	1

**Certificate of Analytical Results 672664****Tetra Tech- Midland, Midland, TX**

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **AH-4 (2-2.5')**

Matrix: Soil

Date Received: 09.15.2020 16:55

Lab Sample Id: 672664-012

Date Collected: 09.14.2020 00:00

Sample Depth: 2 - 2.5 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.16.2020 13:38

Basis: Wet Weight

Seq Number: 3137358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.98	9.98	mg/kg	09.16.2020 18:51	U	1



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **AH-5 (0-1')**

Matrix: Soil

Date Received: 09.15.2020 16:55

Lab Sample Id: 672664-013

Date Collected: 09.14.2020 00:00

Sample Depth: 0 - 1 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.16.2020 13:38

Basis: Wet Weight

Seq Number: 3137358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<10.1	10.1	mg/kg	09.16.2020 18:57	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 09.16.2020 17:30

Basis: Wet Weight

Seq Number: 3137360

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	1740	250	mg/kg	09.17.2020 05:17		5
Diesel Range Organics (DRO)	C10C28DRO	7600	250	mg/kg	09.17.2020 05:17		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	739	250	mg/kg	09.17.2020 05:17		5
Total TPH	PHC635	10100	250	mg/kg	09.17.2020 05:17		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	09.17.2020 05:17	
o-Terphenyl	84-15-1	109	%	70-135	09.17.2020 05:17	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **AH-5 (0-1')**

Matrix: Soil

Date Received: 09.15.2020 16:55

Lab Sample Id: 672664-013

Date Collected: 09.14.2020 00:00

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.16.2020 13:07

Basis: Wet Weight

Seq Number: 3137346

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<1.00	1.00	mg/kg	09.17.2020 03:35	U	500
Toluene	108-88-3	32.2	1.00	mg/kg	09.17.2020 03:35		500
Ethylbenzene	100-41-4	20.8	1.00	mg/kg	09.17.2020 03:35		500
m,p-Xylenes	179601-23-1	56.5	2.01	mg/kg	09.17.2020 03:35		500
o-Xylene	95-47-6	23.7	1.00	mg/kg	09.17.2020 03:35		500
Total Xylenes	1330-20-7	80.2	1.00	mg/kg	09.17.2020 03:35		500
Total BTEX		133	1.00	mg/kg	09.17.2020 03:35		500
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	105	%	70-130	09.17.2020 03:35		
1,4-Difluorobenzene	540-36-3	102	%	70-130	09.17.2020 03:35		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **AH-5 (1-1.5')** Matrix: Soil Date Received: 09.15.2020 16:55
 Lab Sample Id: 672664-014 Date Collected: 09.14.2020 00:00 Sample Depth: 1 - 1.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.16.2020 13:38 Basis: Wet Weight
 Seq Number: 3137358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<10.0	10.0	mg/kg	09.16.2020 19:02	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.17.2020 11:00 Basis: Wet Weight
 Seq Number: 3137402

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	2460	251	mg/kg	09.17.2020 15:29		5
Diesel Range Organics (DRO)	C10C28DRO	6100	251	mg/kg	09.17.2020 15:29		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	564	251	mg/kg	09.17.2020 15:29		5
Total TPH	PHC635	9120	251	mg/kg	09.17.2020 15:29		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	09.17.2020 15:29	
o-Terphenyl	84-15-1	110	%	70-135	09.17.2020 15:29	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **AH-5 (1-1.5')**

Matrix: Soil

Date Received: 09.15.2020 16:55

Lab Sample Id: 672664-014

Date Collected: 09.14.2020 00:00

Sample Depth: 1 - 1.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.17.2020 14:38

Basis: Wet Weight

Seq Number: 3137494

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	3.99	0.994	mg/kg	09.18.2020 04:38		500
Toluene	108-88-3	115	0.994	mg/kg	09.18.2020 04:38		500
Ethylbenzene	100-41-4	40.7	0.994	mg/kg	09.18.2020 04:38		500
m,p-Xylenes	179601-23-1	127	1.99	mg/kg	09.18.2020 04:38		500
o-Xylene	95-47-6	38.0	0.994	mg/kg	09.18.2020 04:38		500
Total Xylenes	1330-20-7	165	0.994	mg/kg	09.18.2020 04:38		500
Total BTEX		325	0.994	mg/kg	09.18.2020 04:38		500
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	91	%	70-130	09.18.2020 04:38		
1,4-Difluorobenzene	540-36-3	94	%	70-130	09.18.2020 04:38		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **AH-5 (2-2.5')** Matrix: Soil Date Received: 09.15.2020 16:55
 Lab Sample Id: 672664-015 Date Collected: 09.14.2020 00:00 Sample Depth: 2 - 2.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.16.2020 13:38 Basis: Wet Weight
 Seq Number: 3137358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<10.1	10.1	mg/kg	09.16.2020 19:08	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.18.2020 13:45 Basis: Wet Weight
 Seq Number: 3137547

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	4160	250	mg/kg	09.18.2020 17:37		5
Diesel Range Organics (DRO)	C10C28DRO	7890	250	mg/kg	09.18.2020 17:37		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	645	250	mg/kg	09.18.2020 17:37		5
Total TPH	PHC635	12700	250	mg/kg	09.18.2020 17:37		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	09.18.2020 17:37	
o-Terphenyl	84-15-1	100	%	70-135	09.18.2020 17:37	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **AH-5 (2-2.5')**

Matrix: Soil

Date Received: 09.15.2020 16:55

Lab Sample Id: 672664-015

Date Collected: 09.14.2020 00:00

Sample Depth: 2 - 2.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.18.2020 12:23

Basis: Wet Weight

Seq Number: 3137549

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	7.48	0.990	mg/kg	09.18.2020 21:19		500
Toluene	108-88-3	130	0.990	mg/kg	09.18.2020 21:19		500
Ethylbenzene	100-41-4	50.8	0.990	mg/kg	09.18.2020 21:19		500
m,p-Xylenes	179601-23-1	130	1.98	mg/kg	09.18.2020 21:19		500
o-Xylene	95-47-6	49.2	0.990	mg/kg	09.18.2020 21:19		500
Total Xylenes	1330-20-7	179	0.990	mg/kg	09.18.2020 21:19		500
Total BTEX		367	0.990	mg/kg	09.18.2020 21:19		500
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	09.18.2020 21:19		
1,4-Difluorobenzene	540-36-3	92	%	70-130	09.18.2020 21:19		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **H-1 (0-1')** Matrix: Soil Date Received: 09.15.2020 16:55
 Lab Sample Id: 672664-016 Date Collected: 09.14.2020 00:00 Sample Depth: 0 - 1 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.16.2020 13:38 Basis: Wet Weight
 Seq Number: 3137358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<10.1	10.1	mg/kg	09.16.2020 19:24	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.16.2020 14:00 Basis: Wet Weight
 Seq Number: 3137360

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	09.17.2020 00:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	09.17.2020 00:15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	09.17.2020 00:15	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	09.17.2020 00:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	09.17.2020 00:15	
o-Terphenyl	84-15-1	110	%	70-135	09.17.2020 00:15	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **H-1 (0-1')**
Lab Sample Id: 672664-016

Matrix: Soil
Date Collected: 09.14.2020 00:00

Date Received: 09.15.2020 16:55
Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.16.2020 13:07

Basis: Wet Weight

Seq Number: 3137346

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.16.2020 19:14	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.16.2020 19:14	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.16.2020 19:14	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	09.16.2020 19:14	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.16.2020 19:14	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.16.2020 19:14	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.16.2020 19:14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	09.16.2020 19:14		
4-Bromofluorobenzene	460-00-4	107	%	70-130	09.16.2020 19:14		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **H-2 (0-1')** Matrix: Soil Date Received: 09.15.2020 16:55
 Lab Sample Id: 672664-017 Date Collected: 09.14.2020 00:00 Sample Depth: 0 - 1 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.16.2020 13:38 Basis: Wet Weight
 Seq Number: 3137358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.90	9.90	mg/kg	09.16.2020 19:30	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.16.2020 14:00 Basis: Wet Weight
 Seq Number: 3137360

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	09.17.2020 00:35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	09.17.2020 00:35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	09.17.2020 00:35	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	09.17.2020 00:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	09.17.2020 00:35	
o-Terphenyl	84-15-1	107	%	70-135	09.17.2020 00:35	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **H-2 (0-1')**
Lab Sample Id: 672664-017

Matrix: Soil
Date Collected: 09.14.2020 00:00

Date Received: 09.15.2020 16:55
Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.16.2020 13:07

Basis: Wet Weight

Seq Number: 3137346

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.16.2020 19:37	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.16.2020 19:37	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.16.2020 19:37	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.16.2020 19:37	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.16.2020 19:37	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.16.2020 19:37	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.16.2020 19:37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	110	%	70-130	09.16.2020 19:37		
1,4-Difluorobenzene	540-36-3	105	%	70-130	09.16.2020 19:37		



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Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **H-3 (0-1')**
Lab Sample Id: 672664-018

Matrix: Soil
Date Collected: 09.14.2020 00:00

Date Received: 09.15.2020 16:55
Sample Depth: 0 - 1 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Tech: MAB

Analyst: MAB

Seq Number: 3137358

Date Prep: 09.16.2020 13:38

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.7	9.94	mg/kg	09.16.2020 19:35		1

Analytical Method: TPH By SW8015 Mod

Tech: DTH

Analyst: DTH

Seq Number: 3137360

Date Prep: 09.16.2020 14:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.17.2020 00:55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.17.2020 00:55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.17.2020 00:55	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.17.2020 00:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	09.17.2020 00:55	
o-Terphenyl	84-15-1	110	%	70-135	09.17.2020 00:55	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **H-3 (0-1')**

Matrix: Soil

Date Received: 09.15.2020 16:55

Lab Sample Id: 672664-018

Date Collected: 09.14.2020 00:00

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.16.2020 13:07

Basis: Wet Weight

Seq Number: 3137346

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.16.2020 19:59	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.16.2020 19:59	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.16.2020 19:59	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	09.16.2020 19:59	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.16.2020 19:59	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.16.2020 19:59	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.16.2020 19:59	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	113	%	70-130	09.16.2020 19:59		
1,4-Difluorobenzene	540-36-3	107	%	70-130	09.16.2020 19:59		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **H-4 (0-1')** Matrix: Soil Date Received: 09.15.2020 16:55
 Lab Sample Id: 672664-019 Date Collected: 09.14.2020 00:00 Sample Depth: 0 - 1 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.16.2020 13:38 Basis: Wet Weight
 Seq Number: 3137358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.98	9.98	mg/kg	09.16.2020 19:41	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.16.2020 14:00 Basis: Wet Weight
 Seq Number: 3137360

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.17.2020 01:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.17.2020 01:15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.17.2020 01:15	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.17.2020 01:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	09.17.2020 01:15	
o-Terphenyl	84-15-1	110	%	70-135	09.17.2020 01:15	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **H-4 (0-1')**

Matrix: Soil

Date Received: 09.15.2020 16:55

Lab Sample Id: 672664-019

Date Collected: 09.14.2020 00:00

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.16.2020 13:07

Basis: Wet Weight

Seq Number: 3137346

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.17.2020 09:18	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.17.2020 09:18	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.17.2020 09:18	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	09.17.2020 09:18	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.17.2020 09:18	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.17.2020 09:18	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.17.2020 09:18	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	70-130	09.17.2020 09:18		
1,4-Difluorobenzene	540-36-3	97	%	70-130	09.17.2020 09:18		



Certificate of Analytical Results 672664

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **H-5 (0-1')** Matrix: Soil Date Received: 09.15.2020 16:55
 Lab Sample Id: 672664-020 Date Collected: 09.14.2020 00:00 Sample Depth: 0 - 1 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.16.2020 13:38 Basis: Wet Weight
 Seq Number: 3137358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.92	9.92	mg/kg	09.16.2020 19:46	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.16.2020 14:00 Basis: Wet Weight
 Seq Number: 3137360

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.17.2020 01:35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.17.2020 01:35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.17.2020 01:35	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.17.2020 01:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	09.17.2020 01:35	
o-Terphenyl	84-15-1	112	%	70-135	09.17.2020 01:35	



Certificate of Analytical Results 672664

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **H-5 (0-1')**

Matrix: Soil

Date Received: 09.15.2020 16:55

Lab Sample Id: 672664-020

Date Collected: 09.14.2020 00:00

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.16.2020 13:07

Basis: Wet Weight

Seq Number: 3137346

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.16.2020 20:44	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.16.2020 20:44	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.16.2020 20:44	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.16.2020 20:44	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.16.2020 20:44	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.16.2020 20:44	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.16.2020 20:44	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	106	%	70-130	09.16.2020 20:44		
4-Bromofluorobenzene	460-00-4	110	%	70-130	09.16.2020 20:44		



Certificate of Analytical Results 672664

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **H-6 (0-1')** Matrix: Soil Date Received: 09.15.2020 16:55
 Lab Sample Id: 672664-021 Date Collected: 09.14.2020 00:00 Sample Depth: 0 - 1 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.16.2020 13:38 Basis: Wet Weight
 Seq Number: 3137358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.94	9.94	mg/kg	09.16.2020 19:52	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.16.2020 14:00 Basis: Wet Weight
 Seq Number: 3137360

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	09.17.2020 01:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	09.17.2020 01:56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	09.17.2020 01:56	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	09.17.2020 01:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	09.17.2020 01:56	
o-Terphenyl	84-15-1	110	%	70-135	09.17.2020 01:56	



Certificate of Analytical Results 672664

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **H-6 (0-1')**

Matrix: Soil

Date Received: 09.15.2020 16:55

Lab Sample Id: 672664-021

Date Collected: 09.14.2020 00:00

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.16.2020 13:07

Basis: Wet Weight

Seq Number: 3137346

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.16.2020 22:04	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.16.2020 22:04	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.16.2020 22:04	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.16.2020 22:04	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.16.2020 22:04	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.16.2020 22:04	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.16.2020 22:04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	109	%	70-130	09.16.2020 22:04		
1,4-Difluorobenzene	540-36-3	102	%	70-130	09.16.2020 22:04		



Certificate of Analytical Results 672664

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **H-7 (0-1')** Matrix: Soil Date Received: 09.15.2020 16:55
 Lab Sample Id: 672664-022 Date Collected: 09.14.2020 00:00 Sample Depth: 0 - 1 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.16.2020 13:38 Basis: Wet Weight
 Seq Number: 3137358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<10.1	10.1	mg/kg	09.16.2020 20:08	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.16.2020 14:00 Basis: Wet Weight
 Seq Number: 3137360

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.17.2020 02:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.17.2020 02:16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.17.2020 02:16	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.17.2020 02:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	09.17.2020 02:16	
o-Terphenyl	84-15-1	109	%	70-135	09.17.2020 02:16	



Certificate of Analytical Results 672664

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **H-7 (0-1')**

Matrix: Soil

Date Received: 09.15.2020 16:55

Lab Sample Id: 672664-022

Date Collected: 09.14.2020 00:00

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.16.2020 13:07

Basis: Wet Weight

Seq Number: 3137346

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.16.2020 22:26	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.16.2020 22:26	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.16.2020 22:26	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.16.2020 22:26	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.16.2020 22:26	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.16.2020 22:26	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.16.2020 22:26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	107	%	70-130	09.16.2020 22:26		
1,4-Difluorobenzene	540-36-3	105	%	70-130	09.16.2020 22:26		

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
Lomas Rojas 26-2 Oil Transfer Line

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3137359

Matrix: Solid

Prep Method: E300P

Date Prep: 09.16.2020

MB Sample Id: 7711442-1-BLK

LCS Sample Id: 7711442-1-BKS

LCSD Sample Id: 7711442-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	257	103	258	103	90-110	0	20	mg/kg	09.16.2020 13:10	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3137358

Matrix: Solid

Prep Method: E300P

Date Prep: 09.16.2020

MB Sample Id: 7711443-1-BLK

LCS Sample Id: 7711443-1-BKS

LCSD Sample Id: 7711443-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	257	103	257	103	90-110	0	20	mg/kg	09.16.2020 18:24	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3137359

Matrix: Soil

Prep Method: E300P

Date Prep: 09.16.2020

Parent Sample Id: 672640-001

MS Sample Id: 672640-001 S

MSD Sample Id: 672640-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	21.8	200	225	102	225	102	90-110	0	20	mg/kg	09.16.2020 13:27	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3137359

Matrix: Soil

Prep Method: E300P

Date Prep: 09.16.2020

Parent Sample Id: 672664-001

MS Sample Id: 672664-001 S

MSD Sample Id: 672664-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<9.98	200	211	106	211	106	90-110	0	20	mg/kg	09.16.2020 16:56	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3137358

Matrix: Soil

Prep Method: E300P

Date Prep: 09.16.2020

Parent Sample Id: 672664-011

MS Sample Id: 672664-011 S

MSD Sample Id: 672664-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<9.96	199	207	104	206	104	90-110	0	20	mg/kg	09.16.2020 18:41	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3137358

Matrix: Soil

Prep Method: E300P

Date Prep: 09.16.2020

Parent Sample Id: 672664-021

MS Sample Id: 672664-021 S

MSD Sample Id: 672664-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<9.98	200	205	103	205	103	90-110	0	20	mg/kg	09.16.2020 19:57	

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

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

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

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



Tetra Tech- Midland

Lomas Rojas 26-2 Oil Transfer Line

Analytical Method: TPH By SW8015 Mod

Seq Number: 3137360

MB Sample Id: 7711446-1-BLK

Matrix: Solid

LCS Sample Id: 7711446-1-BKS

Prep Method: SW8015P

Date Prep: 09.16.2020

LCSD Sample Id: 7711446-1-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	795	80	798	80	70-135	0	35	mg/kg	09.16.2020 22:14	
Diesel Range Organics (DRO)	<50.0	1000	859	86	851	85	70-135	1	35	mg/kg	09.16.2020 22:14	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag		LCSD %Rec	LCSD Flag		Limits	Units	Analysis Date	
1-Chlorooctane	117		98			98			70-135	%	09.16.2020 22:14	
o-Terphenyl	110		87			86			70-135	%	09.16.2020 22:14	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3137402

MB Sample Id: 7711528-1-BLK

Matrix: Solid

LCS Sample Id: 7711528-1-BKS

Prep Method: SW8015P

Date Prep: 09.17.2020

LCSD Sample Id: 7711528-1-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	805	81	809	81	70-135	0	35	mg/kg	09.17.2020 11:26	
Diesel Range Organics (DRO)	<50.0	1000	876	88	869	87	70-135	1	35	mg/kg	09.17.2020 11:26	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag		LCSD %Rec	LCSD Flag		Limits	Units	Analysis Date	
1-Chlorooctane	117		99			99			70-135	%	09.17.2020 11:26	
o-Terphenyl	111		89			90			70-135	%	09.17.2020 11:26	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3137547

MB Sample Id: 7711587-1-BLK

Matrix: Solid

LCS Sample Id: 7711587-1-BKS

Prep Method: SW8015P

Date Prep: 09.18.2020

LCSD Sample Id: 7711587-1-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	832	83	800	80	70-135	4	35	mg/kg	09.18.2020 10:13	
Diesel Range Organics (DRO)	<50.0	1000	909	91	812	81	70-135	11	35	mg/kg	09.18.2020 10:13	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag		LCSD %Rec	LCSD Flag		Limits	Units	Analysis Date	
1-Chlorooctane	135		111			92			70-135	%	09.18.2020 10:13	
o-Terphenyl	135		103			78			70-135	%	09.18.2020 10:13	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3137360

Matrix: Solid
MB Sample Id: 7711446-1-BLK

Prep Method: SW8015P

Date Prep: 09.16.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	09.16.2020 21:54	

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

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

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

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



Tetra Tech- Midland

Lomas Rojas 26-2 Oil Transfer Line

Analytical Method: TPH By SW8015 Mod

Seq Number: 3137402

Matrix: Solid

Prep Method: SW8015P

Date Prep: 09.17.2020

MB Sample Id: 7711528-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	09.17.2020 11:06	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3137547

Matrix: Solid

Prep Method: SW8015P

Date Prep: 09.18.2020

MB Sample Id: 7711587-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	09.18.2020 09:53	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3137360

Matrix: Soil

Prep Method: SW8015P

Date Prep: 09.16.2020

Parent Sample Id: 672640-003

MS Sample Id: 672640-003 S

MSD Sample Id: 672640-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.2	1000	733	73	717	72	70-135	2	35	mg/kg	09.16.2020 23:14	
Diesel Range Organics (DRO)	<50.2	1000	766	77	739	74	70-135	4	35	mg/kg	09.16.2020 23:14	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	119		117		70-135	%	09.16.2020 23:14
o-Terphenyl	108		105		70-135	%	09.16.2020 23:14

Analytical Method: TPH By SW8015 Mod

Seq Number: 3137402

Matrix: Soil

Prep Method: SW8015P

Date Prep: 09.17.2020

Parent Sample Id: 672770-002

MS Sample Id: 672770-002 S

MSD Sample Id: 672770-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.2	1000	767	77	770	77	70-135	0	35	mg/kg	09.17.2020 12:27	
Diesel Range Organics (DRO)	<50.2	1000	778	78	804	80	70-135	3	35	mg/kg	09.17.2020 12:27	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	84		85		70-135	%	09.17.2020 12:27
o-Terphenyl	71		76		70-135	%	09.17.2020 12:27

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

Lomas Rojas 26-2 Oil Transfer Line

Analytical Method: TPH By SW8015 Mod

Seq Number: 3137547

Parent Sample Id: 672935-001

Matrix: Soil

MS Sample Id: 672935-001 S

Prep Method: SW8015P

Date Prep: 09.18.2020

MSD Sample Id: 672935-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.3	1010	834	83	767	77	70-135	8	35	mg/kg	09.18.2020 11:14	
Diesel Range Organics (DRO)	<50.3	1010	907	90	838	84	70-135	8	35	mg/kg	09.18.2020 11:14	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	113		105		70-135	%	09.18.2020 11:14
o-Terphenyl	104		97		70-135	%	09.18.2020 11:14

Analytical Method: BTEX by EPA 8021B

Seq Number: 3137346

MB Sample Id: 7711450-1-BLK

Matrix: Solid

LCS Sample Id: 7711450-1-BKS

Prep Method: SW5035A

Date Prep: 09.16.2020

LCSD Sample Id: 7711450-1-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	0.0868	87	0.0863	86	70-130	1	35	mg/kg	09.16.2020 13:45	
Toluene	<0.00200	0.100	0.0835	84	0.0861	86	70-130	3	35	mg/kg	09.16.2020 13:45	
Ethylbenzene	<0.00200	0.100	0.0880	88	0.0889	89	71-129	1	35	mg/kg	09.16.2020 13:45	
m,p-Xylenes	<0.00400	0.200	0.175	88	0.180	90	70-135	3	35	mg/kg	09.16.2020 13:45	
o-Xylene	<0.00200	0.100	0.0857	86	0.0893	89	71-133	4	35	mg/kg	09.16.2020 13:45	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		98		98		70-130	%	09.16.2020 13:45
4-Bromofluorobenzene	107		100		101		70-130	%	09.16.2020 13:45

Analytical Method: BTEX by EPA 8021B

Seq Number: 3137494

MB Sample Id: 7711602-1-BLK

Matrix: Solid

LCS Sample Id: 7711602-1-BKS

Prep Method: SW5035A

Date Prep: 09.17.2020

LCSD Sample Id: 7711602-1-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	0.118	118	0.116	116	70-130	2	35	mg/kg	09.17.2020 16:21	
Toluene	<0.00200	0.100	0.112	112	0.112	112	70-130	0	35	mg/kg	09.17.2020 16:21	
Ethylbenzene	<0.00200	0.100	0.104	104	0.103	103	71-129	1	35	mg/kg	09.17.2020 16:21	
m,p-Xylenes	<0.00400	0.200	0.209	105	0.209	105	70-135	0	35	mg/kg	09.17.2020 16:21	
o-Xylene	<0.00200	0.100	0.103	103	0.104	104	71-133	1	35	mg/kg	09.17.2020 16:21	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		100		99		70-130	%	09.17.2020 16:21
4-Bromofluorobenzene	88		92		87		70-130	%	09.17.2020 16:21

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

Lomas Rojas 26-2 Oil Transfer Line

Analytical Method: BTEX by EPA 8021B

Seq Number: 3137549

Matrix: Solid

Prep Method: SW5035A

Date Prep: 09.18.2020

MB Sample Id: 7711608-1-BLK

LCS Sample Id: 7711608-1-BKS

LCSD Sample Id: 7711608-1-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	0.0898	90	0.0857	86	70-130	5	35	mg/kg	09.18.2020 09:58	
Toluene	<0.00200	0.100	0.0858	86	0.0845	85	70-130	2	35	mg/kg	09.18.2020 09:58	
Ethylbenzene	<0.00200	0.100	0.0916	92	0.0886	89	71-129	3	35	mg/kg	09.18.2020 09:58	
m,p-Xylenes	<0.00400	0.200	0.185	93	0.179	90	70-135	3	35	mg/kg	09.18.2020 09:58	
o-Xylene	<0.00200	0.100	0.0923	92	0.0866	87	71-133	6	35	mg/kg	09.18.2020 09:58	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		99		100		70-130	%	09.18.2020 09:58
4-Bromofluorobenzene	107		104		103		70-130	%	09.18.2020 09:58

Analytical Method: BTEX by EPA 8021B

Seq Number: 3137346

Matrix: Soil

Prep Method: SW5035A

Date Prep: 09.16.2020

Parent Sample Id: 672640-001

MS Sample Id: 672640-001 S

MSD Sample Id: 672640-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.101	102	0.0905	91	70-130	11	35	mg/kg	09.16.2020 15:27	
Toluene	<0.00199	0.0994	0.0971	98	0.0875	88	70-130	10	35	mg/kg	09.16.2020 15:27	
Ethylbenzene	<0.00199	0.0994	0.0993	100	0.0887	89	71-129	11	35	mg/kg	09.16.2020 15:27	
m,p-Xylenes	0.00454	0.199	0.196	96	0.175	85	70-135	11	35	mg/kg	09.16.2020 15:27	
o-Xylene	0.00405	0.0994	0.0961	93	0.0782	74	71-133	21	35	mg/kg	09.16.2020 15:27	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		103		70-130	%	09.16.2020 15:27
4-Bromofluorobenzene	99		102		70-130	%	09.16.2020 15:27

Analytical Method: BTEX by EPA 8021B

Seq Number: 3137494

Matrix: Soil

Prep Method: SW5035A

Date Prep: 09.17.2020

Parent Sample Id: 672834-009

MS Sample Id: 672834-009 S

MSD Sample Id: 672834-009 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	0.100	0.125	125	0.121	120	70-130	3	35	mg/kg	09.17.2020 17:06	
Toluene	<0.00200	0.100	0.127	127	0.125	124	70-130	2	35	mg/kg	09.17.2020 17:06	
Ethylbenzene	<0.00200	0.100	0.118	118	0.125	124	71-129	6	35	mg/kg	09.17.2020 17:06	
m,p-Xylenes	<0.00401	0.200	0.237	119	0.253	126	70-135	7	35	mg/kg	09.17.2020 17:06	
o-Xylene	<0.00200	0.100	0.115	115	0.123	122	71-133	7	35	mg/kg	09.17.2020 17:06	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		99		70-130	%	09.17.2020 17:06
4-Bromofluorobenzene	87		86		70-130	%	09.17.2020 17:06

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

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

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

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



Tetra Tech- Midland
Lomas Rojas 26-2 Oil Transfer Line

Analytical Method: BTEX by EPA 8021B

Seq Number: 3137549

Parent Sample Id: 672935-001

Matrix: Soil

MS Sample Id: 672935-001 S

Prep Method: SW5035A

Date Prep: 09.18.2020

MSD Sample Id: 672935-001 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	0.125	124	0.116	115	70-130	7	35	mg/kg	09.18.2020 10:43	
Toluene	<0.00201	0.101	0.119	118	0.110	109	70-130	8	35	mg/kg	09.18.2020 10:43	
Ethylbenzene	<0.00201	0.101	0.121	120	0.112	111	71-129	8	35	mg/kg	09.18.2020 10:43	
m,p-Xylenes	<0.00402	0.201	0.246	122	0.229	114	70-135	7	35	mg/kg	09.18.2020 10:43	
o-Xylene	<0.00201	0.101	0.121	120	0.111	110	71-133	9	35	mg/kg	09.18.2020 10:43	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		101		70-130	%	09.18.2020 10:43
4-Bromofluorobenzene	112		108		70-130	%	09.18.2020 10:43

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

Analysis Request of Custody Record

Page 1 of 1



Tetra Tech, Inc.

901 West Wall Street, Ste 100
Midland, Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

672664

Client Name: EOG		Site Manager: Mike Carmona	
Project Name: Lomas Rojas 26-2 Oil Transfer Line		Project #: 212C-MD-02319	
Project Location: Lea County, New Mexico		Invoice to: EOG - Todd Wells	
Receiving Laboratory: Xenco		Sampler Signature: John Thurston	
Comments: Run deeper samples if TPH (GRO + DRO + MRO) exceeds 100 mg/kg. Run deeper samples if benzene exceeds 10 mg/kg or Total BTEX exceeds 50 mg/kg.			

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)
		DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	None			
										YEAR: 2020		
	AH-1 (0-1')	9/14/2020		X		X					1	N
	AH-1 (1-1.5')	9/14/2020		X		X					1	N
	AH-1 (2-2.5')	9/14/2020		X		X					1	N
	AH-2 (0-1')	9/14/2020		X		X					1	N
	AH-2 (1-1.5')	9/14/2020		X		X					1	N
	AH-2 (2-2.5')	9/14/2020		X		X					1	N
	AH-3 (0-1')	9/14/2020		X		X					1	N
	AH-3 (1-1.5')	9/14/2020		X		X					1	N
	AH-3 (2-2.5')	9/14/2020		X		X					1	N
	AH-4 (0-1')	9/14/2020		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	

LAB USE ONLY	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
	TPH 8015R
	Hold

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

901 West Wall Street, Ste 100
Midland, Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

Client Name: EOG Site Manager: Mike Carmona

Project Name: Lomas Rojas 26-2 Oil Transfer Line

Project Location: Lea County, New Mexico Project #: 212C-MD-02319

Invoice to: EOG - Todd Wells

Receiving Laboratory: Xenco Sampler Signature: John Thurston

Comments: Run deeper samples if TPH (GRO + DRO + MRO) exceeds 100 mg/kg. Run deeper samples if benzene exceeds 10 mg/kg or Total BTEX exceeds 50 mg/kg.

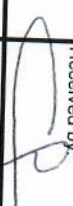
	AH-4 (1-1.5')	9/14/2020			X				X			1	N
	AH-4 (2-2.5')	9/14/2020			X				X			1	N
	AH-5 (0-1')	9/14/2020			X				X			1	N
	AH-5 (1-1.5')	9/14/2020			X				X			1	N
	AH-5 (2-2.5')	9/14/2020			X				X			1	N
	H-1 (0-1')	9/14/2020			X				X			1	N
	H-2 (0-1')	9/14/2020			X				X			1	N
	H-3 (0-1')	9/14/2020			X				X			1	N
	H-4 (0-1')	9/14/2020			X				X			1	N
	H-5 (0-1')	9/14/2020			X				X			1	N

Disinquired by: 

9/5/20 16:55

Date: 9/14/2020

Time: 16:55

Received by: 

9/15/20 16:55

Date: 9/14/2020

Time: 16:55

Received by: *[Signature]* Date: 9/15/20 Time: 16:55

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	
TPH 8015R	
Hold	

Received by: *[Signature]* Date: 9/15/20 Time: 16:55

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

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Page 3 of 3



10726104

ANALYSIS REQUEST
(Circle or Specify Method No.)

(Circle) **HAND DELIVERED** FEDEX UPS Tracking #

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 09.15.2020 04.55.00 PM

Work Order #: 672664

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T_NM_007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	4.4
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6 *Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

Samples received in bulk containers.

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Cloe Clifton

Date: 09.16.2020

Checklist reviewed by:



Jessica Kramer

Date: 09.16.2020

Certificate of Analysis Summary 680447

Tetra Tech- Midland, Midland, TX

Project Name: Lomas Rojas 26-2 Oil Transfer

Project Id: 212C-MD-02319

Contact: Mike Carmona

Project Location: Lea Co, NM

Date Received in Lab: Wed 12.09.2020 15:31

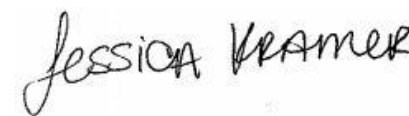
Report Date: 12.16.2020 16:58

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	680447-001	680447-002	680447-003	680447-004	680447-005	680447-006
	<i>Field Id:</i>	Bore Hole-1 (0-1')	Bore Hole-1 (2-3')	Bore Hole-1 (4-5')	Bore Hole-1 (6-7')	Bore Hole-1 (8-9')	Bore Hole-1 (10-11')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	12.08.2020 00:00	12.08.2020 00:00	12.08.2020 00:00	12.08.2020 00:00	12.08.2020 00:00	12.08.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	12.11.2020 14:00	12.11.2020 14:00	12.11.2020 14:00	12.11.2020 17:00	12.10.2020 16:30	12.10.2020 16:30
	<i>Analyzed:</i>	12.12.2020 00:36	12.12.2020 00:56	12.12.2020 01:17	12.12.2020 11:28	12.11.2020 09:17	12.11.2020 09:37
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		2.28 0.994	0.374 0.201	8.82 0.994	1.12 0.996	0.00205 0.00200	<0.00201 0.00201
Toluene		42.0 0.994	8.55 0.201	168 0.994	19.1 0.996	0.0120 0.00200	0.0327 0.00201
Ethylbenzene		27.7 0.994	5.55 0.201	91.0 0.994	11.8 0.996	0.00802 0.00200	0.0523 0.00201
m,p-Xylenes		68.4 1.99	14.0 0.402	232 1.99	28.7 1.99	0.0275 0.00399	0.185 0.00402
o-Xylene		25.9 0.994	5.64 0.201	86.3 0.994	12.3 0.996	0.0139 0.00200	0.0955 0.00201
Total Xylenes		94.30 0.9940	19.64 0.2010	318.3 0.9940	41.00 0.9960	0.04140 0.002000	0.2805 0.002010
Total BTEX		166.3 0.9940	34.11 0.2010	586.1 0.9940	73.02 0.9960	0.06347 0.002000	0.3655 0.002010
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	12.10.2020 11:35	12.10.2020 11:35	12.10.2020 11:35	12.10.2020 11:35	12.10.2020 11:35	12.10.2020 11:35
	<i>Analyzed:</i>	12.10.2020 14:26	12.10.2020 14:42	12.10.2020 14:47	12.10.2020 15:03	12.10.2020 15:08	12.10.2020 15:13
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		<5.03 5.03	<4.95 4.95	5.43 5.04	<4.98 4.98	<4.99 4.99	<5.03 5.03
TPH By SW8015 Mod	<i>Extracted:</i>	12.09.2020 16:00	12.09.2020 16:00	12.09.2020 16:00	12.09.2020 16:00	12.09.2020 16:00	12.09.2020 16:00
	<i>Analyzed:</i>	12.10.2020 08:01	12.10.2020 08:56	12.09.2020 19:29	12.09.2020 19:48	12.09.2020 17:53	12.09.2020 20:07
	<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)		2840 250	2980 249	2850 50.0	1720 49.8	<50.0 50.0	56.5 50.0
Diesel Range Organics (DRO)		10300 250	10100 249	7190 50.0	5740 49.8	191 50.0	441 50.0
Motor Oil Range Hydrocarbons (MRO)		1260 250	906 249	506 50.0	428 49.8	<50.0 50.0	53.9 50.0
Total TPH		14400 250.0	13990 249.0	10550 50.00	7888 49.80	191.0 50.00	551.4 50.00

BRL - Below Reporting Limit

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



Certificate of Analysis Summary 680447



Tetra Tech- Midland, Midland, TX

Project Name: Lomas Rojas 26-2 Oil Transfer

Project Id: 212C-MD-02319

Date Received in Lab: Wed 12.09.2020 15:31

Contact: Mike Carmona

Report Date: 12.16.2020 16:58

Project Location: Lea Co, NM

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	680447-007	680447-008	680447-012	680447-013	680447-014	680447-015
	<i>Field Id:</i>	Bore Hole-1 (12-13')	Bore Hole-1 (14-15')	Bore Hole-2 (0-1')	Bore Hole-2 (2-3')	Bore Hole-2 (4-5')	Bore Hole-2 (6-7')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	12.08.2020 00:00	12.08.2020 00:00	12.08.2020 00:00	12.08.2020 00:00	12.08.2020 00:00	12.08.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	12.10.2020 16:30	12.15.2020 10:00	12.10.2020 16:30	12.11.2020 17:00	12.11.2020 17:00	12.11.2020 17:00
	<i>Analyzed:</i>	12.11.2020 09:58	12.15.2020 20:04	12.11.2020 10:18	12.12.2020 12:09	12.12.2020 10:06	12.12.2020 10:27
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	<0.00199 0.00199	0.0399 0.00200	1.59 0.994	0.0134 0.00201	<0.00199 0.00199
Toluene		0.0130 0.00199	0.00234 0.00199	5.37 D 0.200	33.9 0.994	1.71 D 0.201	0.0239 0.00199
Ethylbenzene		0.0230 0.00199	<0.00199 0.00199	4.98 D 0.200	19.6 0.994	2.83 D 0.201	0.0219 0.00199
m,p-Xylenes		0.0895 0.00398	0.00683 0.00398	14.5 D 0.400	48.4 1.99	7.58 D 0.402	0.0655 0.00398
o-Xylene		0.0524 0.00199	0.00471 0.00199	6.27 D 0.200	21.3 0.994	3.16 D 0.201	0.0365 0.00199
Total Xylenes		0.1419 0.001990	0.0115 0.00199	20.77 0.2000	69.70 0.9940	10.74 0.2010	0.1020 0.001990
Total BTEX		0.1779 0.001990	0.0139 0.00199	31.16 0.002000	124.8 0.9940	15.29 0.002010	0.1478 0.001990
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	12.10.2020 11:35	12.15.2020 12:40	12.10.2020 11:35	12.10.2020 11:35	12.10.2020 11:35	12.11.2020 17:45
	<i>Analyzed:</i>	12.10.2020 15:18	12.15.2020 12:57	12.10.2020 15:24	12.10.2020 15:29	12.10.2020 15:34	12.12.2020 14:43
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		14.7 4.98	17.9 5.02	<4.95 4.95	<4.99 4.99	<5.05 5.05	<4.97 4.97
TPH By SW8015 Mod	<i>Extracted:</i>	12.09.2020 16:00	12.14.2020 11:00	12.09.2020 16:00	12.09.2020 16:00	12.09.2020 16:00	12.09.2020 16:00
	<i>Analyzed:</i>	12.09.2020 20:26	12.15.2020 00:50	12.09.2020 20:45	12.09.2020 21:04	12.09.2020 21:23	12.09.2020 22:02
	<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)		56.4 50.0	<50.0 50.0	780 49.9	2320 49.8	293 50.0	<50.0 50.0
Diesel Range Organics (DRO)		664 50.0	136 50.0	6200 49.9	7690 49.8	1560 50.0	709 50.0
Motor Oil Range Hydrocarbons (MRO)		77.0 50.0	<50.0 50.0	464 49.9	498 49.8	180 50.0	83.9 50.0
Total TPH		797.4 50.00	136.0 50.00	7444 49.90	10510 49.80	2033 50.00	792.9 50.00

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 680447

Tetra Tech- Midland, Midland, TX

Project Name: Lomas Rojas 26-2 Oil Transfer

Project Id: 212C-MD-02319

Contact: Mike Carmona

Project Location: Lea Co, NM

Date Received in Lab: Wed 12.09.2020 15:31

Report Date: 12.16.2020 16:58

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	680447-016	680447-017	680447-018	680447-020	680447-021	680447-022
	<i>Field Id:</i>	Bore Hole-2 (8-9')	Bore Hole-2 (10-11')	Bore Hole-2 (12-13')	Bore Hole-3 (0-1')	Bore Hole-3 (2-3')	Bore Hole-3 (4-5')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	12.08.2020 00:00	12.08.2020 00:00	12.08.2020 00:00	12.08.2020 00:00	12.08.2020 00:00	12.08.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	12.11.2020 17:00	12.11.2020 17:00	12.15.2020 10:00	12.10.2020 13:00	12.10.2020 13:00	12.10.2020 13:00
	<i>Analyzed:</i>	12.12.2020 10:47	12.12.2020 11:08	12.15.2020 21:48	12.10.2020 18:34	12.10.2020 18:54	12.10.2020 19:15
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00202 0.00202	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200
Toluene		0.00497 0.00202	0.00694 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200
Ethylbenzene		0.0114 0.00202	0.00204 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200
m,p-Xylenes		0.0230 0.00404	<0.00401 0.00401	<0.00397 0.00397	<0.00399 0.00399	<0.00402 0.00402	<0.00401 0.00401
o-Xylene		0.0353 0.00202	0.00576 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200
Total Xylenes		0.05830 0.002020	0.005760 0.002000	<0.00198 0.00198	<0.002000 0.002000	<0.002010 0.002010	<0.002000 0.002000
Total BTEX		0.07467 0.002020	0.01474 0.002000	<0.00198 0.00198	<0.002000 0.002000	<0.002010 0.002010	<0.002000 0.002000
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	12.11.2020 17:45	12.11.2020 17:45	12.15.2020 12:40	12.11.2020 17:45	12.11.2020 17:45	12.11.2020 17:45
	<i>Analyzed:</i>	12.12.2020 14:58	12.12.2020 15:03	12.15.2020 13:12	12.12.2020 15:09	12.12.2020 15:14	12.12.2020 15:29
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		7.89 5.04	83.4 5.01	33.6 4.99	<4.99 4.99	<4.97 4.97	16.8 4.96
TPH By SW8015 Mod	<i>Extracted:</i>	12.09.2020 16:00	12.09.2020 16:00	12.14.2020 11:00	12.09.2020 16:00	12.09.2020 16:00	12.09.2020 16:00
	<i>Analyzed:</i>	12.09.2020 22:21	12.09.2020 22:40	12.15.2020 01:09	12.09.2020 22:59	12.09.2020 23:18	12.09.2020 23:36
	<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	<50.0 50.0	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		495 49.9	206 49.8	80.9 50.0	<50.0 50.0	80.8 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		64.4 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9
Total TPH		559.4 49.90	206.0 49.80	80.90 50.00	<50.00 50.00	80.80 50.00	<49.90 49.90

BRL - Below Reporting Limit

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



Certificate of Analysis Summary 680447

Tetra Tech- Midland, Midland, TX

Project Name: Lomas Rojas 26-2 Oil Transfer

Project Id: 212C-MD-02319

Contact: Mike Carmona

Project Location: Lea Co, NM

Date Received in Lab: Wed 12.09.2020 15:31

Report Date: 12.16.2020 16:58

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	680447-023	680447-024	680447-025			
	Field Id:	Bore Hole-3 (6-7')	Bore Hole-3 (8-9')	Bore Hole-3 (10-11')			
	Depth:						
	Matrix:	SOIL	SOIL	SOIL			
	Sampled:	12.08.2020 00:00	12.08.2020 00:00	12.08.2020 00:00			
BTEX by EPA 8021B	Extracted:	12.10.2020 13:00	12.10.2020 13:00	12.10.2020 13:00			
	Analyzed:	12.10.2020 19:36	12.10.2020 19:56	12.10.2020 20:17			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
Benzene		<0.00201 0.00201	<0.00199 0.00199	<0.00198 0.00198			
Toluene		<0.00201 0.00201	<0.00199 0.00199	<0.00198 0.00198			
Ethylbenzene		<0.00201 0.00201	<0.00199 0.00199	<0.00198 0.00198			
m,p-Xylenes		<0.00402 0.00402	<0.00398 0.00398	<0.00397 0.00397			
o-Xylene		<0.00201 0.00201	<0.00199 0.00199	<0.00198 0.00198			
Total Xylenes		<0.002010 0.002010	<0.001990 0.001990	<0.001980 0.001980			
Total BTEX		<0.002010 0.002010	<0.001990 0.001990	<0.001980 0.001980			
Inorganic Anions by EPA 300/300.1	Extracted:	12.11.2020 17:45	12.11.2020 17:45	12.11.2020 17:45			
	Analyzed:	12.12.2020 15:35	12.12.2020 15:40	12.12.2020 15:45			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
Chloride		13.4 5.00	<4.99 4.99	<5.02 5.02			
TPH By SW8015 Mod	Extracted:	12.09.2020 16:00	12.09.2020 16:00	12.09.2020 16:00			
	Analyzed:	12.09.2020 23:55	12.10.2020 08:37	12.10.2020 00:33			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<50.0 50.0	<49.8 49.8			
Diesel Range Organics (DRO)		<49.8 49.8	<50.0 50.0	<49.8 49.8			
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	<50.0 50.0	<49.8 49.8			
Total TPH		<49.80 49.80	<50.00 50.00	<49.80 49.80			

BRL - Below Reporting Limit

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



Analytical Report 680447

for

Tetra Tech- Midland

Project Manager: Mike Carmona

Lomas Rojas 26-2 Oil Transfer

212C-MD-02319

12.16.2020

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 (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



12.16.2020

Project Manager: **Mike Carmona**

Tetra Tech- Midland

901 West Wall ST

Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **680447**

Lomas Rojas 26-2 Oil Transfer

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) 680447. 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. 680447 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 680447

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Bore Hole-1 (0-1')	S	12.08.2020 00:00		680447-001
Bore Hole-1 (2-3')	S	12.08.2020 00:00		680447-002
Bore Hole-1 (4-5')	S	12.08.2020 00:00		680447-003
Bore Hole-1 (6-7')	S	12.08.2020 00:00		680447-004
Bore Hole-1 (8-9')	S	12.08.2020 00:00		680447-005
Bore Hole-1 (10-11')	S	12.08.2020 00:00		680447-006
Bore Hole-1 (12-13')	S	12.08.2020 00:00		680447-007
Bore Hole-1 (14-15')	S	12.08.2020 00:00		680447-008
Bore Hole-2 (0-1')	S	12.08.2020 00:00		680447-012
Bore Hole-2 (2-3')	S	12.08.2020 00:00		680447-013
Bore Hole-2 (4-5')	S	12.08.2020 00:00		680447-014
Bore Hole-2 (6-7')	S	12.08.2020 00:00		680447-015
Bore Hole-2 (8-9')	S	12.08.2020 00:00		680447-016
Bore Hole-2 (10-11')	S	12.08.2020 00:00		680447-017
Bore Hole-2 (12-13')	S	12.08.2020 00:00		680447-018
Bore Hole-3 (0-1')	S	12.08.2020 00:00		680447-020
Bore Hole-3 (2-3')	S	12.08.2020 00:00		680447-021
Bore Hole-3 (4-5')	S	12.08.2020 00:00		680447-022
Bore Hole-3 (6-7')	S	12.08.2020 00:00		680447-023
Bore Hole-3 (8-9')	S	12.08.2020 00:00		680447-024
Bore Hole-3 (10-11')	S	12.08.2020 00:00		680447-025
Bore Hole-1 (19-20')	S	12.08.2020 00:00		Not Analyzed
Bore Hole-1 (24-25')	S	12.08.2020 00:00		Not Analyzed
Bore Hole-1 (29-30')	S	12.08.2020 00:00		Not Analyzed
Bore Hole-2 (14-16')	S	12.08.2020 00:00		Not Analyzed
Bore Hole-3 (12-13')	S	12.08.2020 00:00		Not Analyzed
Bore Hole-3 (14-15')	S	12.08.2020 00:00		Not Analyzed

**CASE NARRATIVE****Client Name: Tetra Tech- Midland****Project Name: Lomas Rojas 26-2 Oil Transfer**Project ID: 212C-MD-02319
Work Order Number(s): 680447Report Date: 12.16.2020
Date Received: 12.09.2020**Sample receipt non conformances and comments:****Sample receipt non conformances and comments per sample:**

None

Analytical non conformances and comments:

Batch: LBA-3144417 TPH By SW8015 Mod

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

Samples affected are: 680447-007.

Batch: LBA-3144512 Inorganic Anions by EPA 300/300.1

Lab Sample ID 680447-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 680447-001, -002, -003, -004, -005, -006, -007, -012, -013, -014.

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

Batch: LBA-3144554 BTEX by EPA 8021B

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

Samples affected are: 680447-006,680447-012,680447-007.

Batch: LBA-3144695 BTEX by EPA 8021B

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

Samples affected are: 680447-001,680447-003,680447-002.

Batch: LBA-3144696 BTEX by EPA 8021B

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

Samples affected are: 680447-014.



Certificate of Analytical Results 680447

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-1 (0-1')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-001

Date Collected: 12.08.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 12.10.2020 11:35

% Moisture:

Seq Number: 3144512

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.03	5.03	mg/kg	12.10.2020 14:26	UX	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 12.09.2020 16:00

% Moisture:

Seq Number: 3144417

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	2840	250	mg/kg	12.10.2020 08:01		5
Diesel Range Organics (DRO)	C10C28DRO	10300	250	mg/kg	12.10.2020 08:01		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	1260	250	mg/kg	12.10.2020 08:01		5
Total TPH	PHC635	14400	250.0	mg/kg	12.10.2020 08:01		5
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	103	%	70-130	12.10.2020 08:01		
o-Terphenyl	84-15-1	88	%	70-130	12.10.2020 08:01		



Certificate of Analytical Results 680447

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-1 (0-1')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-001

Date Collected: 12.08.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 12.11.2020 14:00

% Moisture:

Seq Number: 3144695

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	2.28	0.994	mg/kg	12.12.2020 00:36		500
Toluene	108-88-3	42.0	0.994	mg/kg	12.12.2020 00:36		500
Ethylbenzene	100-41-4	27.7	0.994	mg/kg	12.12.2020 00:36		500
m,p-Xylenes	179601-23-1	68.4	1.99	mg/kg	12.12.2020 00:36		500
o-Xylene	95-47-6	25.9	0.994	mg/kg	12.12.2020 00:36		500
Total Xylenes	1330-20-7	94.30	0.9940	mg/kg	12.12.2020 00:36		500
Total BTEX		166.3	0.9940	mg/kg	12.12.2020 00:36		500
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	131	%	70-130	12.12.2020 00:36	**	
1,4-Difluorobenzene	540-36-3	95	%	70-130	12.12.2020 00:36		



Certificate of Analytical Results 680447

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-1 (2-3')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-002

Date Collected: 12.08.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 12.10.2020 11:35

% Moisture:

Seq Number: 3144512

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.95	4.95	mg/kg	12.10.2020 14:42	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 12.09.2020 16:00

% Moisture:

Seq Number: 3144417

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	2980	249	mg/kg	12.10.2020 08:56		5
Diesel Range Organics (DRO)	C10C28DRO	10100	249	mg/kg	12.10.2020 08:56		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	906	249	mg/kg	12.10.2020 08:56		5
Total TPH	PHC635	13990	249.0	mg/kg	12.10.2020 08:56		5
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	100	%	70-130	12.10.2020 08:56		
o-Terphenyl	84-15-1	117	%	70-130	12.10.2020 08:56		



Certificate of Analytical Results 680447

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-1 (2-3')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-002

Date Collected: 12.08.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 12.11.2020 14:00

% Moisture:
Basis: Wet Weight

Seq Number: 3144695

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.374	0.201	mg/kg	12.12.2020 00:56		100
Toluene	108-88-3	8.55	0.201	mg/kg	12.12.2020 00:56		100
Ethylbenzene	100-41-4	5.55	0.201	mg/kg	12.12.2020 00:56		100
m,p-Xylenes	179601-23-1	14.0	0.402	mg/kg	12.12.2020 00:56		100
o-Xylene	95-47-6	5.64	0.201	mg/kg	12.12.2020 00:56		100
Total Xylenes	1330-20-7	19.64	0.2010	mg/kg	12.12.2020 00:56		100
Total BTEX		34.11	0.2010	mg/kg	12.12.2020 00:56		100

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	94	%	70-130	12.12.2020 00:56	
4-Bromofluorobenzene	460-00-4	135	%	70-130	12.12.2020 00:56	**



Certificate of Analytical Results 680447

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-1 (4-5')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-003

Date Collected: 12.08.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 12.10.2020 11:35

% Moisture:

Seq Number: 3144512

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5.43	5.04	mg/kg	12.10.2020 14:47		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 12.09.2020 16:00

% Moisture:

Seq Number: 3144417

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	2850	50.0	mg/kg	12.09.2020 19:29		1
Diesel Range Organics (DRO)	C10C28DRO	7190	50.0	mg/kg	12.09.2020 19:29		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	506	50.0	mg/kg	12.09.2020 19:29		1
Total TPH	PHC635	10550	50.00	mg/kg	12.09.2020 19:29		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	88	%	70-130	12.09.2020 19:29		
o-Terphenyl	84-15-1	94	%	70-130	12.09.2020 19:29		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-1 (4-5')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-003

Date Collected: 12.08.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 12.11.2020 14:00

% Moisture:

Seq Number: 3144695

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	8.82	0.994	mg/kg	12.12.2020 01:17		500
Toluene	108-88-3	168	0.994	mg/kg	12.12.2020 01:17		500
Ethylbenzene	100-41-4	91.0	0.994	mg/kg	12.12.2020 01:17		500
m,p-Xylenes	179601-23-1	232	1.99	mg/kg	12.12.2020 01:17		500
o-Xylene	95-47-6	86.3	0.994	mg/kg	12.12.2020 01:17		500
Total Xylenes	1330-20-7	318.3	0.9940	mg/kg	12.12.2020 01:17		500
Total BTEX		586.1	0.9940	mg/kg	12.12.2020 01:17		500
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	183	%	70-130	12.12.2020 01:17	**	
1,4-Difluorobenzene	540-36-3	111	%	70-130	12.12.2020 01:17		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-1 (6-7')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-004

Date Collected: 12.08.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 12.10.2020 11:35

% Moisture:

Seq Number: 3144512

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.98	4.98	mg/kg	12.10.2020 15:03	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 12.09.2020 16:00

% Moisture:

Seq Number: 3144417

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	1720	49.8	mg/kg	12.09.2020 19:48		1
Diesel Range Organics (DRO)	C10C28DRO	5740	49.8	mg/kg	12.09.2020 19:48		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	428	49.8	mg/kg	12.09.2020 19:48		1
Total TPH	PHC635	7888	49.80	mg/kg	12.09.2020 19:48		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	124	%	70-130	12.09.2020 19:48		
o-Terphenyl	84-15-1	111	%	70-130	12.09.2020 19:48		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-1 (6-7')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-004

Date Collected: 12.08.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 12.11.2020 17:00

% Moisture:

Seq Number: 3144696

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	1.12	0.996	mg/kg	12.12.2020 11:28		500
Toluene	108-88-3	19.1	0.996	mg/kg	12.12.2020 11:28		500
Ethylbenzene	100-41-4	11.8	0.996	mg/kg	12.12.2020 11:28		500
m,p-Xylenes	179601-23-1	28.7	1.99	mg/kg	12.12.2020 11:28		500
o-Xylene	95-47-6	12.3	0.996	mg/kg	12.12.2020 11:28		500
Total Xylenes	1330-20-7	41.00	0.9960	mg/kg	12.12.2020 11:28		500
Total BTEX		73.02	0.9960	mg/kg	12.12.2020 11:28		500
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	122	%	70-130	12.12.2020 11:28		
1,4-Difluorobenzene	540-36-3	101	%	70-130	12.12.2020 11:28		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-1 (8-9')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-005

Date Collected: 12.08.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 12.10.2020 11:35

% Moisture:

Seq Number: 3144512

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.99	4.99	mg/kg	12.10.2020 15:08	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 12.09.2020 16:00

% Moisture:

Seq Number: 3144417

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.09.2020 17:53	U	1
Diesel Range Organics (DRO)	C10C28DRO	191	50.0	mg/kg	12.09.2020 17:53		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.09.2020 17:53	U	1
Total TPH	PHC635	191.0	50.00	mg/kg	12.09.2020 17:53		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-130	12.09.2020 17:53	
o-Terphenyl	84-15-1	121	%	70-130	12.09.2020 17:53	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-1 (8-9')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-005

Date Collected: 12.08.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 12.10.2020 16:30

% Moisture:

Seq Number: 3144554

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00205	0.00200	mg/kg	12.11.2020 09:17		1
Toluene	108-88-3	0.0120	0.00200	mg/kg	12.11.2020 09:17		1
Ethylbenzene	100-41-4	0.00802	0.00200	mg/kg	12.11.2020 09:17		1
m,p-Xylenes	179601-23-1	0.0275	0.00399	mg/kg	12.11.2020 09:17		1
o-Xylene	95-47-6	0.0139	0.00200	mg/kg	12.11.2020 09:17		1
Total Xylenes	1330-20-7	0.04140	0.002000	mg/kg	12.11.2020 09:17		1
Total BTEX		0.06347	0.002000	mg/kg	12.11.2020 09:17		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	121	%	70-130	12.11.2020 09:17		
1,4-Difluorobenzene	540-36-3	99	%	70-130	12.11.2020 09:17		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-1 (10-11')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-006

Date Collected: 12.08.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 12.10.2020 11:35

% Moisture:

Seq Number: 3144512

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.03	5.03	mg/kg	12.10.2020 15:13	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 12.09.2020 16:00

% Moisture:

Seq Number: 3144417

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	56.5	50.0	mg/kg	12.09.2020 20:07		1
Diesel Range Organics (DRO)	C10C28DRO	441	50.0	mg/kg	12.09.2020 20:07		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	53.9	50.0	mg/kg	12.09.2020 20:07		1
Total TPH	PHC635	551.4	50.00	mg/kg	12.09.2020 20:07		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	122	%	70-130	12.09.2020 20:07		
o-Terphenyl	84-15-1	129	%	70-130	12.09.2020 20:07		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-1 (10-11')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-006

Date Collected: 12.08.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 12.10.2020 16:30

% Moisture:

Seq Number: 3144554

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	12.11.2020 09:37	U	1
Toluene	108-88-3	0.0327	0.00201	mg/kg	12.11.2020 09:37		1
Ethylbenzene	100-41-4	0.0523	0.00201	mg/kg	12.11.2020 09:37		1
m,p-Xylenes	179601-23-1	0.185	0.00402	mg/kg	12.11.2020 09:37		1
o-Xylene	95-47-6	0.0955	0.00201	mg/kg	12.11.2020 09:37		1
Total Xylenes	1330-20-7	0.2805	0.002010	mg/kg	12.11.2020 09:37		1
Total BTEX		0.3655	0.002010	mg/kg	12.11.2020 09:37		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	94	%	70-130	12.11.2020 09:37		
4-Bromofluorobenzene	460-00-4	140	%	70-130	12.11.2020 09:37	**	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-1 (12-13')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-007

Date Collected: 12.08.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 12.10.2020 11:35

% Moisture:

Seq Number: 3144512

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	14.7	4.98	mg/kg	12.10.2020 15:18		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 12.09.2020 16:00

% Moisture:

Seq Number: 3144417

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	56.4	50.0	mg/kg	12.09.2020 20:26		1
Diesel Range Organics (DRO)	C10C28DRO	664	50.0	mg/kg	12.09.2020 20:26		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	77.0	50.0	mg/kg	12.09.2020 20:26		1
Total TPH	PHC635	797.4	50.00	mg/kg	12.09.2020 20:26		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	115	%	70-130	12.09.2020 20:26		
o-Terphenyl	84-15-1	152	%	70-130	12.09.2020 20:26	**	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-1 (12-13')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-007

Date Collected: 12.08.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 12.10.2020 16:30

% Moisture:

Seq Number: 3144554

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	12.11.2020 09:58	U	1
Toluene	108-88-3	0.0130	0.00199	mg/kg	12.11.2020 09:58		1
Ethylbenzene	100-41-4	0.0230	0.00199	mg/kg	12.11.2020 09:58		1
m,p-Xylenes	179601-23-1	0.0895	0.00398	mg/kg	12.11.2020 09:58		1
o-Xylene	95-47-6	0.0524	0.00199	mg/kg	12.11.2020 09:58		1
Total Xylenes	1330-20-7	0.1419	0.001990	mg/kg	12.11.2020 09:58		1
Total BTEX		0.1779	0.001990	mg/kg	12.11.2020 09:58		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	135	%	70-130	12.11.2020 09:58	**	
1,4-Difluorobenzene	540-36-3	95	%	70-130	12.11.2020 09:58		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-1 (14-15')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-008

Date Collected: 12.08.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 12.15.2020 12:40

% Moisture:

Seq Number: 3145032

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	17.9	5.02	mg/kg	12.15.2020 12:57		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 12.14.2020 11:00

% Moisture:

Seq Number: 3144886

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.15.2020 00:50	U	1
Diesel Range Organics (DRO)	C10C28DRO	136	50.0	mg/kg	12.15.2020 00:50		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.15.2020 00:50	U	1
Total TPH	PHC635	136.0	50.00	mg/kg	12.15.2020 00:50		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	93	%	70-130	12.15.2020 00:50		
o-Terphenyl	84-15-1	106	%	70-130	12.15.2020 00:50		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-1 (14-15')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-008

Date Collected: 12.08.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 12.15.2020 10:00

% Moisture:

Seq Number: 3145007

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	12.15.2020 20:04	U	1
Toluene	108-88-3	0.00234	0.00199	mg/kg	12.15.2020 20:04		1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	12.15.2020 20:04	U	1
m,p-Xylenes	179601-23-1	0.00683	0.00398	mg/kg	12.15.2020 20:04		1
o-Xylene	95-47-6	0.00471	0.00199	mg/kg	12.15.2020 20:04		1
Total Xylenes	1330-20-7	0.0115	0.00199	mg/kg	12.15.2020 20:04		1
Total BTEX		0.0139	0.00199	mg/kg	12.15.2020 20:04		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	121	%	70-130	12.15.2020 20:04	
1,4-Difluorobenzene	540-36-3	85	%	70-130	12.15.2020 20:04	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-2 (0-1')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-012

Date Collected: 12.08.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 12.10.2020 11:35

% Moisture:

Seq Number: 3144512

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.95	4.95	mg/kg	12.10.2020 15:24	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 12.09.2020 16:00

% Moisture:

Seq Number: 3144417

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	780	49.9	mg/kg	12.09.2020 20:45		1
Diesel Range Organics (DRO)	C10C28DRO	6200	49.9	mg/kg	12.09.2020 20:45		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	464	49.9	mg/kg	12.09.2020 20:45		1
Total TPH	PHC635	7444	49.90	mg/kg	12.09.2020 20:45		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	128	%	70-130	12.09.2020 20:45		
o-Terphenyl	84-15-1	128	%	70-130	12.09.2020 20:45		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-2 (0-1')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-012

Date Collected: 12.08.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 12.10.2020 16:30

% Moisture:

Seq Number: 3144554

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.0399	0.00200	mg/kg	12.11.2020 10:18		1
Toluene	108-88-3	5.37	0.200	mg/kg	12.12.2020 11:49	D	100
Ethylbenzene	100-41-4	4.98	0.200	mg/kg	12.12.2020 11:49	D	100
m,p-Xylenes	179601-23-1	14.5	0.400	mg/kg	12.12.2020 11:49	D	100
o-Xylene	95-47-6	6.27	0.200	mg/kg	12.12.2020 11:49	D	100
Total Xylenes	1330-20-7	20.77	0.2000	mg/kg	12.12.2020 11:49		100
Total BTEX		31.16	0.002000	mg/kg	12.12.2020 11:49		100
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	107	%	70-130	12.11.2020 10:18		
4-Bromofluorobenzene	460-00-4	1183	%	70-130	12.11.2020 10:18	**	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-2 (2-3')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-013

Date Collected: 12.08.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 12.10.2020 11:35

% Moisture:

Seq Number: 3144512

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.99	4.99	mg/kg	12.10.2020 15:29	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 12.09.2020 16:00

% Moisture:

Seq Number: 3144417

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	2320	49.8	mg/kg	12.09.2020 21:04		1
Diesel Range Organics (DRO)	C10C28DRO	7690	49.8	mg/kg	12.09.2020 21:04		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	498	49.8	mg/kg	12.09.2020 21:04		1
Total TPH	PHC635	10510	49.80	mg/kg	12.09.2020 21:04		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	94	%	70-130	12.09.2020 21:04		
o-Terphenyl	84-15-1	126	%	70-130	12.09.2020 21:04		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-2 (2-3')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-013

Date Collected: 12.08.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 12.11.2020 17:00

% Moisture:

Seq Number: 3144696

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	1.59	0.994	mg/kg	12.12.2020 12:09		500
Toluene	108-88-3	33.9	0.994	mg/kg	12.12.2020 12:09		500
Ethylbenzene	100-41-4	19.6	0.994	mg/kg	12.12.2020 12:09		500
m,p-Xylenes	179601-23-1	48.4	1.99	mg/kg	12.12.2020 12:09		500
o-Xylene	95-47-6	21.3	0.994	mg/kg	12.12.2020 12:09		500
Total Xylenes	1330-20-7	69.70	0.9940	mg/kg	12.12.2020 12:09		500
Total BTEX		124.8	0.9940	mg/kg	12.12.2020 12:09		500

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	94	%	70-130	12.12.2020 12:09	
4-Bromofluorobenzene	460-00-4	124	%	70-130	12.12.2020 12:09	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-2 (4-5')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-014

Date Collected: 12.08.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 12.10.2020 11:35

% Moisture:

Seq Number: 3144512

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.05	5.05	mg/kg	12.10.2020 15:34	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 12.09.2020 16:00

% Moisture:

Seq Number: 3144417

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	293	50.0	mg/kg	12.09.2020 21:23		1
Diesel Range Organics (DRO)	C10C28DRO	1560	50.0	mg/kg	12.09.2020 21:23		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	180	50.0	mg/kg	12.09.2020 21:23		1
Total TPH	PHC635	2033	50.00	mg/kg	12.09.2020 21:23		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	129	%	70-130	12.09.2020 21:23		
o-Terphenyl	84-15-1	119	%	70-130	12.09.2020 21:23		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-2 (4-5')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-014

Date Collected: 12.08.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 12.11.2020 17:00

% Moisture:

Seq Number: 3144696

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.0134	0.00201	mg/kg	12.12.2020 10:06		1
Toluene	108-88-3	1.71	0.201	mg/kg	12.13.2020 11:31	D	100
Ethylbenzene	100-41-4	2.83	0.201	mg/kg	12.13.2020 11:31	D	100
m,p-Xylenes	179601-23-1	7.58	0.402	mg/kg	12.13.2020 11:31	D	100
o-Xylene	95-47-6	3.16	0.201	mg/kg	12.13.2020 11:31	D	100
Total Xylenes	1330-20-7	10.74	0.2010	mg/kg	12.13.2020 11:31		100
Total BTEX		15.29	0.002010	mg/kg	12.13.2020 11:31		100
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	104	%	70-130	12.12.2020 10:06		
4-Bromofluorobenzene	460-00-4	360	%	70-130	12.12.2020 10:06	**	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-2 (6-7')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-015

Date Collected: 12.08.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 12.11.2020 17:45

% Moisture:

Seq Number: 3144712

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.97	4.97	mg/kg	12.12.2020 14:43	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 12.09.2020 16:00

% Moisture:

Seq Number: 3144417

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.09.2020 22:02	U	1
Diesel Range Organics (DRO)	C10C28DRO	709	50.0	mg/kg	12.09.2020 22:02		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	83.9	50.0	mg/kg	12.09.2020 22:02		1
Total TPH	PHC635	792.9	50.00	mg/kg	12.09.2020 22:02		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	103	%	70-130	12.09.2020 22:02		
o-Terphenyl	84-15-1	119	%	70-130	12.09.2020 22:02		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-2 (6-7')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-015

Date Collected: 12.08.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 12.11.2020 17:00

% Moisture:

Seq Number: 3144696

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	12.12.2020 10:27	U	1
Toluene	108-88-3	0.0239	0.00199	mg/kg	12.12.2020 10:27		1
Ethylbenzene	100-41-4	0.0219	0.00199	mg/kg	12.12.2020 10:27		1
m,p-Xylenes	179601-23-1	0.0655	0.00398	mg/kg	12.12.2020 10:27		1
o-Xylene	95-47-6	0.0365	0.00199	mg/kg	12.12.2020 10:27		1
Total Xylenes	1330-20-7	0.1020	0.001990	mg/kg	12.12.2020 10:27		1
Total BTEX		0.1478	0.001990	mg/kg	12.12.2020 10:27		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	96	%	70-130	12.12.2020 10:27		
4-Bromofluorobenzene	460-00-4	127	%	70-130	12.12.2020 10:27		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-2 (8-9')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-016

Date Collected: 12.08.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 12.11.2020 17:45

% Moisture:

Seq Number: 3144712

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7.89	5.04	mg/kg	12.12.2020 14:58		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 12.09.2020 16:00

% Moisture:

Seq Number: 3144417

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	12.09.2020 22:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	495	49.9	mg/kg	12.09.2020 22:21		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	64.4	49.9	mg/kg	12.09.2020 22:21		1
Total TPH	PHC635	559.4	49.90	mg/kg	12.09.2020 22:21		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	114	%	70-130	12.09.2020 22:21		
o-Terphenyl	84-15-1	125	%	70-130	12.09.2020 22:21		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-2 (8-9')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-016

Date Collected: 12.08.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 12.11.2020 17:00

% Moisture:

Seq Number: 3144696

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	12.12.2020 10:47	U	1
Toluene	108-88-3	0.00497	0.00202	mg/kg	12.12.2020 10:47		1
Ethylbenzene	100-41-4	0.0114	0.00202	mg/kg	12.12.2020 10:47		1
m,p-Xylenes	179601-23-1	0.0230	0.00404	mg/kg	12.12.2020 10:47		1
o-Xylene	95-47-6	0.0353	0.00202	mg/kg	12.12.2020 10:47		1
Total Xylenes	1330-20-7	0.05830	0.002020	mg/kg	12.12.2020 10:47		1
Total BTEX		0.07467	0.002020	mg/kg	12.12.2020 10:47		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	98	%	70-130	12.12.2020 10:47		
4-Bromofluorobenzene	460-00-4	126	%	70-130	12.12.2020 10:47		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-2 (10-11')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-017

Date Collected: 12.08.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 12.11.2020 17:45

% Moisture:

Seq Number: 3144712

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	83.4	5.01	mg/kg	12.12.2020 15:03		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 12.09.2020 16:00

% Moisture:

Seq Number: 3144417

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	12.09.2020 22:40	U	1
Diesel Range Organics (DRO)	C10C28DRO	206	49.8	mg/kg	12.09.2020 22:40		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	12.09.2020 22:40	U	1
Total TPH	PHC635	206.0	49.80	mg/kg	12.09.2020 22:40		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	105	%	70-130	12.09.2020 22:40		
o-Terphenyl	84-15-1	118	%	70-130	12.09.2020 22:40		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-2 (10-11')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-017

Date Collected: 12.08.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 12.11.2020 17:00

% Moisture:

Seq Number: 3144696

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.12.2020 11:08	U	1
Toluene	108-88-3	0.00694	0.00200	mg/kg	12.12.2020 11:08		1
Ethylbenzene	100-41-4	0.00204	0.00200	mg/kg	12.12.2020 11:08		1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	12.12.2020 11:08	U	1
o-Xylene	95-47-6	0.00576	0.00200	mg/kg	12.12.2020 11:08		1
Total Xylenes	1330-20-7	0.005760	0.002000	mg/kg	12.12.2020 11:08		1
Total BTEX		0.01474	0.002000	mg/kg	12.12.2020 11:08		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	118	%	70-130	12.12.2020 11:08		
1,4-Difluorobenzene	540-36-3	101	%	70-130	12.12.2020 11:08		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-2 (12-13')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-018

Date Collected: 12.08.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 12.15.2020 12:40

% Moisture:

Seq Number: 3145032

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	33.6	4.99	mg/kg	12.15.2020 13:12		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 12.14.2020 11:00

% Moisture:

Seq Number: 3144886

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.15.2020 01:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	80.9	50.0	mg/kg	12.15.2020 01:09		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.15.2020 01:09	U	1
Total TPH	PHC635	80.90	50.00	mg/kg	12.15.2020 01:09		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	91	%	70-130	12.15.2020 01:09		
o-Terphenyl	84-15-1	96	%	70-130	12.15.2020 01:09		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-2 (12-13')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-018

Date Collected: 12.08.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 12.15.2020 10:00

% Moisture:

Seq Number: 3145007

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	12.15.2020 21:48	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	12.15.2020 21:48	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	12.15.2020 21:48	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	12.15.2020 21:48	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	12.15.2020 21:48	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	12.15.2020 21:48	U	1
Total BTEX		<0.00198	0.00198	mg/kg	12.15.2020 21:48	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	115	%	70-130	12.15.2020 21:48		
1,4-Difluorobenzene	540-36-3	82	%	70-130	12.15.2020 21:48		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-3 (0-1')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-020

Date Collected: 12.08.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 12.11.2020 17:45

% Moisture:

Seq Number: 3144712

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.99	4.99	mg/kg	12.12.2020 15:09	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 12.09.2020 16:00

% Moisture:

Seq Number: 3144417

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.09.2020 22:59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.09.2020 22:59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.09.2020 22:59	U	1
Total TPH	PHC635	<50.00	50.00	mg/kg	12.09.2020 22:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-130	12.09.2020 22:59	
o-Terphenyl	84-15-1	109	%	70-130	12.09.2020 22:59	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-3 (0-1')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-020

Date Collected: 12.08.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 12.10.2020 13:00

% Moisture:
Basis: Wet Weight

Seq Number: 3144550

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.10.2020 18:34	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.10.2020 18:34	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.10.2020 18:34	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	12.10.2020 18:34	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.10.2020 18:34	U	1
Total Xylenes	1330-20-7	<0.002000	0.002000	mg/kg	12.10.2020 18:34	U	1
Total BTEX		<0.002000	0.002000	mg/kg	12.10.2020 18:34	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	12.10.2020 18:34		
1,4-Difluorobenzene	540-36-3	91	%	70-130	12.10.2020 18:34		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-3 (2-3')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-021

Date Collected: 12.08.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 12.11.2020 17:45

% Moisture:

Seq Number: 3144712

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.97	4.97	mg/kg	12.12.2020 15:14	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 12.09.2020 16:00

% Moisture:

Seq Number: 3144417

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.09.2020 23:18	U	1
Diesel Range Organics (DRO)	C10C28DRO	80.8	50.0	mg/kg	12.09.2020 23:18		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.09.2020 23:18	U	1
Total TPH	PHC635	80.80	50.00	mg/kg	12.09.2020 23:18		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	106	%	70-130	12.09.2020 23:18		
o-Terphenyl	84-15-1	114	%	70-130	12.09.2020 23:18		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-3 (2-3')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-021

Date Collected: 12.08.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 12.10.2020 13:00

% Moisture:

Seq Number: 3144550

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	12.10.2020 18:54	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	12.10.2020 18:54	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	12.10.2020 18:54	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	12.10.2020 18:54	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	12.10.2020 18:54	U	1
Total Xylenes	1330-20-7	<0.002010	0.002010	mg/kg	12.10.2020 18:54	U	1
Total BTEX		<0.002010	0.002010	mg/kg	12.10.2020 18:54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	110	%	70-130	12.10.2020 18:54		
1,4-Difluorobenzene	540-36-3	90	%	70-130	12.10.2020 18:54		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-3 (4-5')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-022

Date Collected: 12.08.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 12.11.2020 17:45

% Moisture:

Seq Number: 3144712

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16.8	4.96	mg/kg	12.12.2020 15:29		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 12.09.2020 16:00

% Moisture:

Seq Number: 3144417

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	12.09.2020 23:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	12.09.2020 23:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	12.09.2020 23:36	U	1
Total TPH	PHC635	<49.90	49.90	mg/kg	12.09.2020 23:36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	105	%	70-130	12.09.2020 23:36		
o-Terphenyl	84-15-1	118	%	70-130	12.09.2020 23:36		



Certificate of Analytical Results 680447

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-3 (4-5')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-022

Date Collected: 12.08.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 12.10.2020 13:00

% Moisture:
Basis: Wet Weight

Seq Number: 3144550

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.10.2020 19:15	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.10.2020 19:15	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.10.2020 19:15	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	12.10.2020 19:15	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.10.2020 19:15	U	1
Total Xylenes	1330-20-7	<0.002000	0.002000	mg/kg	12.10.2020 19:15	U	1
Total BTEX		<0.002000	0.002000	mg/kg	12.10.2020 19:15	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	89	%	70-130	12.10.2020 19:15		
4-Bromofluorobenzene	460-00-4	98	%	70-130	12.10.2020 19:15		



Certificate of Analytical Results 680447

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-3 (6-7')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-023

Date Collected: 12.08.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 12.11.2020 17:45

% Moisture:

Seq Number: 3144712

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	13.4	5.00	mg/kg	12.12.2020 15:35		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 12.09.2020 16:00

% Moisture:

Seq Number: 3144417

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	12.09.2020 23:55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	12.09.2020 23:55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	12.09.2020 23:55	U	1
Total TPH	PHC635	<49.80	49.80	mg/kg	12.09.2020 23:55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	111	%	70-130	12.09.2020 23:55		
o-Terphenyl	84-15-1	118	%	70-130	12.09.2020 23:55		



Certificate of Analytical Results 680447

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-3 (6-7')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-023

Date Collected: 12.08.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 12.10.2020 13:00

% Moisture:
Basis: Wet Weight

Seq Number: 3144550

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	12.10.2020 19:36	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	12.10.2020 19:36	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	12.10.2020 19:36	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	12.10.2020 19:36	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	12.10.2020 19:36	U	1
Total Xylenes	1330-20-7	<0.002010	0.002010	mg/kg	12.10.2020 19:36	U	1
Total BTEX		<0.002010	0.002010	mg/kg	12.10.2020 19:36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	88	%	70-130	12.10.2020 19:36		
4-Bromofluorobenzene	460-00-4	94	%	70-130	12.10.2020 19:36		



Certificate of Analytical Results 680447

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-3 (8-9')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-024

Date Collected: 12.08.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 12.11.2020 17:45

% Moisture:

Seq Number: 3144712

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.99	4.99	mg/kg	12.12.2020 15:40	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 12.09.2020 16:00

% Moisture:

Seq Number: 3144417

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.10.2020 08:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.10.2020 08:37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.10.2020 08:37	U	1
Total TPH	PHC635	<50.00	50.00	mg/kg	12.10.2020 08:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-130	12.10.2020 08:37	
o-Terphenyl	84-15-1	113	%	70-130	12.10.2020 08:37	



Certificate of Analytical Results 680447

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-3 (8-9')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-024

Date Collected: 12.08.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 12.10.2020 13:00

% Moisture:

Seq Number: 3144550

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	12.10.2020 19:56	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	12.10.2020 19:56	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	12.10.2020 19:56	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	12.10.2020 19:56	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	12.10.2020 19:56	U	1
Total Xylenes	1330-20-7	<0.001990	0.001990	mg/kg	12.10.2020 19:56	U	1
Total BTEX		<0.001990	0.001990	mg/kg	12.10.2020 19:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	88	%	70-130	12.10.2020 19:56	
4-Bromofluorobenzene	460-00-4	97	%	70-130	12.10.2020 19:56	



Certificate of Analytical Results 680447

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-3 (10-11')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-025

Date Collected: 12.08.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 12.11.2020 17:45

% Moisture:

Seq Number: 3144712

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.02	5.02	mg/kg	12.12.2020 15:45	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 12.09.2020 16:00

% Moisture:

Seq Number: 3144417

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	12.10.2020 00:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	12.10.2020 00:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	12.10.2020 00:33	U	1
Total TPH	PHC635	<49.80	49.80	mg/kg	12.10.2020 00:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-130	12.10.2020 00:33	
o-Terphenyl	84-15-1	118	%	70-130	12.10.2020 00:33	



Certificate of Analytical Results 680447

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Bore Hole-3 (10-11')**

Matrix: Soil

Date Received: 12.09.2020 15:31

Lab Sample Id: 680447-025

Date Collected: 12.08.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 12.10.2020 13:00

% Moisture:
Basis: Wet Weight

Seq Number: 3144550

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	12.10.2020 20:17	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	12.10.2020 20:17	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	12.10.2020 20:17	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	12.10.2020 20:17	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	12.10.2020 20:17	U	1
Total Xylenes	1330-20-7	<0.001980	0.001980	mg/kg	12.10.2020 20:17	U	1
Total BTEX		<0.001980	0.001980	mg/kg	12.10.2020 20:17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	90	%	70-130	12.10.2020 20:17		
4-Bromofluorobenzene	460-00-4	100	%	70-130	12.10.2020 20:17		

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

Lomas Rojas 26-2 Oil Transfer

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3144512

Matrix: Solid

Prep Method: E300P

Date Prep: 12.10.2020

MB Sample Id: 7716798-1-BLK

LCS Sample Id: 7716798-1-BKS

LCSD Sample Id: 7716798-1-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	258	103	259	104	90-110	0	20	mg/kg	12.10.2020 13:03	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3144712

Matrix: Solid

Prep Method: E300P

Date Prep: 12.11.2020

MB Sample Id: 7716948-1-BLK

LCS Sample Id: 7716948-1-BKS

LCSD Sample Id: 7716948-1-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	259	104	258	103	90-110	0	20	mg/kg	12.12.2020 14:32	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3145032

Matrix: Solid

Prep Method: E300P

Date Prep: 12.15.2020

MB Sample Id: 7717125-1-BLK

LCS Sample Id: 7717125-1-BKS

LCSD Sample Id: 7717125-1-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	251	100	90-110	0	20	mg/kg	12.15.2020 12:46	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3144512

Matrix: Solid

Prep Method: E300P

Date Prep: 12.10.2020

Parent Sample Id: 680433-002

MS Sample Id: 680433-002 S

MSD Sample Id: 680433-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	280	112	270	108	90-110	4	20	mg/kg	12.10.2020 13:19	X

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3144512

Matrix: Soil

Prep Method: E300P

Date Prep: 12.10.2020

Parent Sample Id: 680447-001

MS Sample Id: 680447-001 S

MSD Sample Id: 680447-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.03	252	288	114	282	112	90-110	2	20	mg/kg	12.10.2020 14:32	X

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3144712

Matrix: Solid

Prep Method: E300P

Date Prep: 12.11.2020

Parent Sample Id: 680433-006

MS Sample Id: 680433-006 S

MSD Sample Id: 680433-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	3.89	252	261	102	258	101	90-110	1	20	mg/kg	12.12.2020 16:00	

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

Lomas Rojas 26-2 Oil Transfer

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3144712

Matrix: Soil

Prep Method: E300P

Date Prep: 12.11.2020

Parent Sample Id: 680447-015

MS Sample Id: 680447-015 S

MSD Sample Id: 680447-015 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	253	102	252	101	90-110	0	20	mg/kg	12.12.2020 14:48	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3145032

Matrix: Soil

Prep Method: E300P

Date Prep: 12.15.2020

Parent Sample Id: 680447-008

MS Sample Id: 680447-008 S

MSD Sample Id: 680447-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	17.9	251	274	102	273	102	90-110	0	20	mg/kg	12.15.2020 13:02	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3145032

Matrix: Soil

Prep Method: E300P

Date Prep: 12.15.2020

Parent Sample Id: 681057-009

MS Sample Id: 681057-009 S

MSD Sample Id: 681057-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	3250	1250	4580	106	4590	107	90-110	0	20	mg/kg	12.15.2020 14:15	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3144417

Matrix: Solid

Prep Method: SW8015P

Date Prep: 12.09.2020

MB Sample Id: 7716768-1-BLK

LCS Sample Id: 7716768-1-BKS

LCSD Sample Id: 7716768-1-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	1180	118	1150	115	70-130	3	20	mg/kg	12.09.2020 17:15	
Diesel Range Organics (DRO)	<50.0	1000	1180	118	1180	118	70-130	0	20	mg/kg	12.09.2020 17:15	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	103		126		129		70-130	%	12.09.2020 17:15
o-Terphenyl	117		129		128		70-130	%	12.09.2020 17:15

Analytical Method: TPH By SW8015 Mod

Seq Number: 3144886

Matrix: Solid

Prep Method: SW8015P

Date Prep: 12.14.2020

MB Sample Id: 7717089-1-BLK

LCS Sample Id: 7717089-1-BKS

LCSD Sample Id: 7717089-1-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	1030	103	70-130	1	20	mg/kg	12.14.2020 12:03	
Diesel Range Organics (DRO)	<50.0	1000	1110	111	1120	112	70-130	1	20	mg/kg	12.14.2020 12:03	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	96		123		116		70-130	%	12.14.2020 12:03
o-Terphenyl	107		121		120		70-130	%	12.14.2020 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

Lomas Rojas 26-2 Oil Transfer

Analytical Method: TPH By SW8015 Mod

Seq Number: 3144417

Matrix: Solid

Prep Method: SW8015P

Date Prep: 12.09.2020

MB Sample Id: 7716768-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	12.09.2020 16:55	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3144886

Matrix: Solid

Prep Method: SW8015P

Date Prep: 12.14.2020

MB Sample Id: 7717089-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	12.14.2020 11:44	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3144417

Matrix: Soil

Prep Method: SW8015P

Date Prep: 12.09.2020

Parent Sample Id: 680447-005

MS Sample Id: 680447-005 S

MSD Sample Id: 680447-005 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	1020	102	70-130	5	20	mg/kg	12.09.2020 18:12	
Diesel Range Organics (DRO)	191	997	1170	98	1240	105	70-130	6	20	mg/kg	12.09.2020 18:12	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	124		117		70-130	%	12.09.2020 18:12
o-Terphenyl	116		122		70-130	%	12.09.2020 18:12

Analytical Method: TPH By SW8015 Mod

Seq Number: 3144886

Matrix: Soil

Prep Method: SW8015P

Date Prep: 12.14.2020

Parent Sample Id: 680875-001

MS Sample Id: 680875-001 S

MSD Sample Id: 680875-001 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	947	95	979	98	70-130	3	20	mg/kg	12.14.2020 12:59	
Diesel Range Organics (DRO)	57.4	998	1000	94	1040	99	70-130	4	20	mg/kg	12.14.2020 12:59	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	127		129		70-130	%	12.14.2020 12:59
o-Terphenyl	116		125		70-130	%	12.14.2020 12:59

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
Lomas Rojas 26-2 Oil Transfer

Analytical Method: BTEX by EPA 8021B

Seq Number: 3144550

Matrix: Solid

Prep Method: SW5035A

Date Prep: 12.10.2020

MB Sample Id: 7716871-1-BLK

LCS Sample Id: 7716871-1-BKS

LCSD Sample Id: 7716871-1-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	0.0930	93	0.0989	99	70-130	6	35	mg/kg	12.10.2020 14:49	
Toluene	<0.00200	0.100	0.103	103	0.107	107	70-130	4	35	mg/kg	12.10.2020 14:49	
Ethylbenzene	<0.00200	0.100	0.0985	99	0.0993	99	70-130	1	35	mg/kg	12.10.2020 14:49	
m,p-Xylenes	<0.00400	0.200	0.198	99	0.199	100	70-130	1	35	mg/kg	12.10.2020 14:49	
o-Xylene	<0.00200	0.100	0.0954	95	0.0966	97	70-130	1	35	mg/kg	12.10.2020 14:49	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	80		89		92		70-130	%	12.10.2020 14:49
4-Bromofluorobenzene	94		97		97		70-130	%	12.10.2020 14:49

Analytical Method: BTEX by EPA 8021B

Seq Number: 3144554

Matrix: Solid

Prep Method: SW5035A

Date Prep: 12.10.2020

MB Sample Id: 7716885-1-BLK

LCS Sample Id: 7716885-1-BKS

LCSD Sample Id: 7716885-1-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	0.0979	98	0.0990	99	70-130	1	35	mg/kg	12.11.2020 01:49	
Toluene	<0.00200	0.100	0.0906	91	0.0920	92	70-130	2	35	mg/kg	12.11.2020 01:49	
Ethylbenzene	<0.00200	0.100	0.0964	96	0.0981	98	70-130	2	35	mg/kg	12.11.2020 01:49	
m,p-Xylenes	<0.00400	0.200	0.186	93	0.191	96	70-130	3	35	mg/kg	12.11.2020 01:49	
o-Xylene	<0.00200	0.100	0.0930	93	0.0952	95	70-130	2	35	mg/kg	12.11.2020 01:49	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	95		104		103		70-130	%	12.11.2020 01:49
4-Bromofluorobenzene	111		98		96		70-130	%	12.11.2020 01:49

Analytical Method: BTEX by EPA 8021B

Seq Number: 3144695

Matrix: Solid

Prep Method: SW5035A

Date Prep: 12.11.2020

MB Sample Id: 7716988-1-BLK

LCS Sample Id: 7716988-1-BKS

LCSD Sample Id: 7716988-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0991	99	0.0961	96	70-130	3	35	mg/kg	12.11.2020 15:25	
Toluene	<0.00200	0.100	0.0965	97	0.0939	94	70-130	3	35	mg/kg	12.11.2020 15:25	
Ethylbenzene	<0.00200	0.100	0.105	105	0.103	103	70-130	2	35	mg/kg	12.11.2020 15:25	
m,p-Xylenes	<0.00400	0.200	0.210	105	0.207	104	70-130	1	35	mg/kg	12.11.2020 15:25	
o-Xylene	<0.00200	0.100	0.102	102	0.101	101	70-130	1	35	mg/kg	12.11.2020 15:25	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		103		102		70-130	%	12.11.2020 15:25
4-Bromofluorobenzene	111		101		100		70-130	%	12.11.2020 15:25

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

Lomas Rojas 26-2 Oil Transfer

Analytical Method: BTEX by EPA 8021B

Seq Number: 3144696

Matrix: Solid

Prep Method: SW5035A

Date Prep: 12.11.2020

MB Sample Id: 7716989-1-BLK

LCS Sample Id: 7716989-1-BKS

LCSD Sample Id: 7716989-1-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	0.0900	90	0.0979	98	70-130	8	35	mg/kg	12.12.2020 02:18	
Toluene	<0.00200	0.100	0.0871	87	0.0958	96	70-130	10	35	mg/kg	12.12.2020 02:18	
Ethylbenzene	<0.00200	0.100	0.0938	94	0.104	104	70-130	10	35	mg/kg	12.12.2020 02:18	
m,p-Xylenes	<0.00400	0.200	0.188	94	0.207	104	70-130	10	35	mg/kg	12.12.2020 02:18	
o-Xylene	<0.00200	0.100	0.0928	93	0.103	103	70-130	10	35	mg/kg	12.12.2020 02:18	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		102		102		70-130	%	12.12.2020 02:18
4-Bromofluorobenzene	113		101		100		70-130	%	12.12.2020 02:18

Analytical Method: BTEX by EPA 8021B

Seq Number: 3145007

Matrix: Solid

Prep Method: SW5035A

Date Prep: 12.15.2020

MB Sample Id: 7717200-1-BLK

LCS Sample Id: 7717200-1-BKS

LCSD Sample Id: 7717200-1-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	0.0760	76	0.0767	77	70-130	1	35	mg/kg	12.15.2020 12:32	
Toluene	<0.00200	0.100	0.0805	81	0.0801	80	70-130	0	35	mg/kg	12.15.2020 12:32	
Ethylbenzene	<0.00200	0.100	0.0875	88	0.0911	91	70-130	4	35	mg/kg	12.15.2020 12:32	
m,p-Xylenes	<0.00400	0.200	0.166	83	0.164	82	70-130	1	35	mg/kg	12.15.2020 12:32	
o-Xylene	<0.00200	0.100	0.103	103	0.0872	87	70-130	17	35	mg/kg	12.15.2020 12:32	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	81		99		98		70-130	%	12.15.2020 12:32
4-Bromofluorobenzene	74		107		96		70-130	%	12.15.2020 12:32

Analytical Method: BTEX by EPA 8021B

Seq Number: 3144550

Matrix: Solid

Prep Method: SW5035A

Date Prep: 12.10.2020

Parent Sample Id: 680275-001

MS Sample Id: 680275-001 S

MSD Sample Id: 680275-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.102	102	0.00598	6	70-130	178	35	mg/kg	12.10.2020 15:30	XF
Toluene	<0.00200	0.0998	0.0921	92	0.00597	6	70-130	176	35	mg/kg	12.10.2020 15:30	XF
Ethylbenzene	<0.00200	0.0998	0.0790	79	0.00422	4	70-130	180	35	mg/kg	12.10.2020 15:30	XF
m,p-Xylenes	<0.00399	0.200	0.144	72	0.00746	4	70-130	180	35	mg/kg	12.10.2020 15:30	XF
o-Xylene	<0.00200	0.0998	0.0663	66	0.00386	4	70-130	178	35	mg/kg	12.10.2020 15:30	XF

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	94		90		70-130	%	12.10.2020 15:30
4-Bromofluorobenzene	93		96		70-130	%	12.10.2020 15:30

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

Lomas Rojas 26-2 Oil Transfer

Analytical Method: BTEX by EPA 8021B

Seq Number: 3144554

Parent Sample Id: 680540-007

Matrix: Sludge

MS Sample Id: 680540-007 S

Prep Method: SW5035A

Date Prep: 12.10.2020

MSD Sample Id: 680540-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.000598	0.0996	0.0670	67	0.0631	63	70-130	6	35	mg/kg	12.11.2020 02:29	X
Toluene	0.00230	0.0996	0.0582	56	0.0566	55	70-130	3	35	mg/kg	12.11.2020 02:29	X
Ethylbenzene	0.000906	0.0996	0.0564	56	0.0552	55	70-130	2	35	mg/kg	12.11.2020 02:29	X
m,p-Xylenes	0.00170	0.199	0.108	53	0.103	51	70-130	5	35	mg/kg	12.11.2020 02:29	X
o-Xylene	0.00161	0.0996	0.0525	51	0.0778	77	70-130	39	35	mg/kg	12.11.2020 02:29	XF

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		103		70-130	%	12.11.2020 02:29
4-Bromofluorobenzene	104		109		70-130	%	12.11.2020 02:29

Analytical Method: BTEX by EPA 8021B

Seq Number: 3144695

Parent Sample Id: 680665-001

Matrix: Soil

MS Sample Id: 680665-001 S

Prep Method: SW5035A

Date Prep: 12.11.2020

MSD Sample Id: 680665-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0742	73	0.0729	73	70-130	2	35	mg/kg	12.11.2020 16:06	
Toluene	<0.00202	0.101	0.0774	77	0.0770	77	70-130	1	35	mg/kg	12.11.2020 16:06	
Ethylbenzene	<0.00202	0.101	0.0839	83	0.0834	84	70-130	1	35	mg/kg	12.11.2020 16:06	
m,p-Xylenes	<0.00404	0.202	0.172	85	0.171	86	70-130	1	35	mg/kg	12.11.2020 16:06	
o-Xylene	<0.00202	0.101	0.0857	85	0.0899	90	70-130	5	35	mg/kg	12.11.2020 16:06	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		102		70-130	%	12.11.2020 16:06
4-Bromofluorobenzene	109		109		70-130	%	12.11.2020 16:06

Analytical Method: BTEX by EPA 8021B

Seq Number: 3144696

Parent Sample Id: 680315-001

Matrix: Soil

MS Sample Id: 680315-001 S

Prep Method: SW5035A

Date Prep: 12.11.2020

MSD Sample Id: 680315-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.00149	0.101	0.0620	60	0.0719	71	70-130	15	35	mg/kg	12.12.2020 02:59	X
Toluene	0.00289	0.101	0.0582	55	0.0707	68	70-130	19	35	mg/kg	12.12.2020 02:59	X
Ethylbenzene	0.00123	0.101	0.0574	56	0.0693	68	70-130	19	35	mg/kg	12.12.2020 02:59	X
m,p-Xylenes	0.00138	0.202	0.112	55	0.135	67	70-130	19	35	mg/kg	12.12.2020 02:59	X
o-Xylene	0.000667	0.101	0.0562	55	0.0810	81	70-130	36	35	mg/kg	12.12.2020 02:59	XF

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		102		70-130	%	12.12.2020 02:59
4-Bromofluorobenzene	106		108		70-130	%	12.12.2020 02:59

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

Lomas Rojas 26-2 Oil Transfer

Analytical Method: BTEX by EPA 8021B

Seq Number: 3145007

Parent Sample Id: 680826-001

Matrix: Soil

MS Sample Id: 680826-001 S

Prep Method: SW5035A

Date Prep: 12.15.2020

MSD Sample Id: 680826-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0141	14	0.0122	12	70-130	14	35	mg/kg	12.15.2020 13:37	X
Toluene	<0.00199	0.0996	0.0142	14	0.00944	9	70-130	40	35	mg/kg	12.15.2020 13:37	XF
Ethylbenzene	<0.00199	0.0996	0.0150	15	0.0105	11	70-130	35	35	mg/kg	12.15.2020 13:37	X
m,p-Xylenes	<0.00398	0.199	0.0195	10	0.0116	6	70-130	51	35	mg/kg	12.15.2020 13:37	XF
o-Xylene	<0.00199	0.0996	0.0217	22	0.0158	16	70-130	31	35	mg/kg	12.15.2020 13:37	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		78		70-130	%	12.15.2020 13:37
4-Bromofluorobenzene	100		79		70-130	%	12.15.2020 13:37

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.

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

Client Name: EOG

Site Manager: Mike Carmona

Project Name: Lomas Rojas 26-2 Oil Transfer

Project Location: Lea Co, NM

Project #:

212C-MD-02319

Invoice to: EOG - Todd Wells

Receiving Laboratory: Xenco

Sampler Signature: Conner Moehring

Comments:

Run deeper samples if TPH (GRO + DRO + MRO) exceeds 2,500 mg/kg or (GRO + DRO) exceeds 1,000 mg/kg. Run deeper samples if benzene exceeds 10 mg/kg or Total BTEX exceeds 50 mg/kg

SAMPLE IDENTIFICATION

LAB #
(LAB USE ONLY)

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

Bore Hole-1 (0-1')	12/8/2020			X				X		1	N
Bore Hole-1 (2-3')	12/8/2020			X				X		1	N
Bore Hole-1 (4-5')	12/8/2020			X				X		1	N
Bore Hole-1 (6-7')	12/8/2020			X				X		1	N
Bore Hole-1 (8-9')	12/8/2020			X				X		1	N
Bore Hole-1 (10-11')	12/8/2020			X				X		1	N
Bore Hole-1 (12-13')	12/8/2020			X				X		1	N
Bore Hole-1 (14-15')	12/8/2020			X				X		1	N
Bore Hole-1 (19-20')	12/8/2020			X				X		1	N
Bore Hole-1 (24-25')	12/8/2020			X				X		1	N

Relinquished by:

Date: 12/9/2020

Time: 1531

Received by:

Date: 12-9-20

Time: 1531

Relinquished by: *Conner Moehring*

Date: 12/9/2020

Time: 1531

Received by:

Date: 12-9-20

Time: 1531

Relinquished by:

Date:

Time:

Received by:

Date:

Time:

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

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

1.0 IR-8

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680447 Page 1 of 3

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

Client Name:						EOG						Site Manager:						Mike Carmona									
Project Name:						Lomas Rojas 26-2 Oil Transfer																					
Project Location: (county, state)						Lea Co, NM						Project #:						212C-MD-02319									
Invoice to:						EOG - Todd Wells																					
Receiving Laboratory:						Xenco						Sampler Signature:						Conner Moehring									
Comments:						Run deeper samples if TPH (GRO + DRO + MRO) exceeds 2,500 mg/kg or (GRO + DRO) exceeds 1,000 mg/kg. Run deeper samples if benzene exceeds 10 mg/kg or Total BTEX exceeds 50 mg/kg																					
LAB # (LAB USE ONLY)		SAMPLE IDENTIFICATION				SAMPLING		MATRIX		PRESERVATIVE METHOD				# CONTAINERS		FILTERED (Y/N)											
						YEAR: 2020																					
		Bore Hole-1 (29-30')				DATE		TIME		WATER		SOIL		HCL		HNO ₃		ICE		None							
		Bore Hole-2 (0-1')				12/8/2020				X				X								1 N		X			
		Bore Hole-2 (2-3')				12/8/2020				X				X								1 N		X			
		Bore Hole-2 (4-5')				12/8/2020				X				X								1 N		X			
		Bore Hole-2 (6-7')				12/8/2020				X				X								1 N		X			
		Bore Hole-2 (8-9')				12/8/2020				X				X								1 N		X			
		Bore Hole-2 (10-11')				12/8/2020				X				X								1 N		X			
		Bore Hole-2 (12-13')				12/8/2020				X				X								1 N		X			
		Bore Hole-2 (14-15')				12/8/2020				X				X								1 N		X			
		Bore Hole-3 (0-1')				12/8/2020				X				X								1 N		X			
Relinquished by:						Date: Time:						Received by:						Date: Time:									
Comm myderry						12/9/2020 1531						Randy						12-9-20 7531									
Relinquished by:						Date: Time:						Received by:						Date: Time:									
Relinquished by:						Date: Time:						Received by:						Date: Time:									
LAB USE ONLY						REMARKS:																					
LAB USE ONLY						STANDARD																					
LAB USE ONLY						[X] RUSH: Same Day 24 hr 48 hr 72 hr																					
LAB USE ONLY						[] Rush Charges Authorized																					
LAB USE ONLY						[] Special Report Limits or TRRP Report																					

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ANALYSIS REQUEST
(Circle or Specify Method No.)

63047

Page 2 of 2

Analysis Request of Custody Record



Tetra Tech, Inc.

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

6800447

Page

3 of 3

Client Name:

EOG

Site Manager:

Mike Carmona

Project Name:

Lomas Rojas 26-2 Oil Transfer

Project Location:

Lea Co, NM

Project #:

212C-MD-02319

Invoice to:

EOG - Todd Wells

Receiving Laboratory:

Xenco

Sampler Signature:

Conner Moehring

Comments:

Run deeper samples if TPH (GRO + DRO + MRO) exceeds 2,500 mg/kg or (GRO + DRO) exceeds 1,000 mg/kg. Run deeper samples if benzene exceeds 10 mg/kg or Total BTEX exceeds 50 mg/kg

LAB #
(LAB USE ONLY)

SAMPLE IDENTIFICATION

YEAR: 2020	SAMPLING		MATRIX		PRESERVATIVE METHOD				# CONTAINERS	FILTERED (Y/N)
	DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	None		

Bore Hole-3 (2-3')	12/8/2020		X						1 N	
Bore Hole-3 (4-5')	12/8/2020		X						1 N	
Bore Hole-3 (6-7')	12/8/2020		X						1 N	
Bore Hole-3 (8-9')	12/8/2020		X						1 N	
Bore Hole-3 (10-11')	12/8/2020		X						1 N	
Bore Hole-3 (12-13')	12/8/2020		X						1 N	
Bore Hole-3 (14-15')	12/8/2020		X						1 N	

Relinquished by:

Date: 12/8/2020 Time: 1531

Received by:

Date: 12-9-20 Time: 1531

Relinquished by:

Date: 12/8/2020 Time: 1531

Received by:

Date: 12-9-20 Time: 1531

Relinquished by:

Date: 12/8/2020 Time: 1531

Received by:

Date: 12-9-20 Time: 1531

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

Sample Temperature

10

IR-8

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

ORIGINAL COPY

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 12.09.2020 03.31.00 PM

Work Order #: 680447

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)?	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: 12.09.2020

Checklist reviewed by:



Jessica Kramer

Date: 12.11.2020

Certificate of Analysis Summary 674967



Tetra Tech- Midland, Midland, TX

Project Name: Lomas Rojas 26-2 Oil Transfer

Project Id:

Date Received in Lab: Tue 10.13.2020 11:56

Contact: Mike Carmona

Report Date: 10.16.2020 16:20

Project Location: Loving Co. TX

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	674967-001	674967-002	674967-003	674967-004	674967-005	674967-006
	<i>Field Id:</i>	Trench 1 (3')	Trench 1 (4')	Trench 1 (5')	Trench 1 (6')	Trench 1 (7')	Trench 1 (8')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	10.12.2020 00:00	10.12.2020 00:00	10.12.2020 00:00	10.12.2020 00:00	10.12.2020 00:00	10.12.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	10.13.2020 12:35	10.13.2020 12:35	10.13.2020 12:35	10.13.2020 12:35	10.13.2020 12:35	10.14.2020 14:00
	<i>Analyzed:</i>	10.14.2020 00:38	10.14.2020 00:58	10.14.2020 01:19	10.14.2020 01:40	10.14.2020 02:01	10.14.2020 19:39
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		5.06 DX 1.01	5.82 D 0.201	16.2 D 0.200	1.27 D 0.100	0.0771 0.00200	<0.00199 0.00199
Toluene		84.3 DX 1.01	74.3 D 1.00	248 D 2.00	51.1 D 1.00	2.25 D 0.200	<0.00199 0.00199
Ethylbenzene		38.0 DX 1.01	25.4 D 0.201	70.2 D 1.00	15.6 D 0.100	1.61 D 0.200	<0.00199 0.00199
m,p-Xylenes		109 DX 2.01	73.4 D 0.402	203 D 2.00	87.4 D 2.00	5.68 D 0.401	<0.00398 0.00398
o-Xylene		39.4 DX 1.01	25.6 D 0.201	69.4 D 1.00	15.9 D 0.100	2.42 D 0.200	<0.00199 0.00199
Total Xylenes		148 1.01	99.0 0.201	272 1.00	103 0.100	8.10 0.200	<0.00199 0.00199
Total BTEX		276 1.01	205 0.201	607 0.200	171 0.100	12.0 0.00200	<0.00199 0.00199
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	10.13.2020 15:50					
	<i>Analyzed:</i>	10.13.2020 16:16					
	<i>Units/RL:</i>	mg/kg RL					
Chloride		<5.00 5.00					
TPH By SW8015 Mod	<i>Extracted:</i>	10.13.2020 17:00	10.13.2020 17:00	10.13.2020 17:00	10.13.2020 17:00	10.13.2020 17:00	10.13.2020 17:00
	<i>Analyzed:</i>	10.13.2020 20:27	10.13.2020 21:25	10.14.2020 07:32	10.13.2020 22:03	10.13.2020 22:22	10.13.2020 22:41
	<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)		3150 49.9	2800 50.0	6190 249	1960 49.8	277 50.0	<50.0 50.0
Diesel Range Organics (DRO)		7170 X 49.9	5960 50.0	10700 249	4840 49.8	966 50.0	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		544 49.9	442 50.0	777 249	330 49.8	104 50.0	<50.0 50.0
Total TPH		20800 49.9	17600 50.0	17700 249	7130 49.8	1350 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 674967



Tetra Tech- Midland, Midland, TX

Project Name: Lomas Rojas 26-2 Oil Transfer

Project Id:

Date Received in Lab: Tue 10.13.2020 11:56

Contact: Mike Carmona

Report Date: 10.16.2020 16:20

Project Location: Loving Co. TX

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	674967-007	674967-008	674967-009	674967-010	674967-011	674967-012
	<i>Field Id:</i>	Trench 1 (9')	Trench 1 (10')	Trench 1 (11')	Trench 1 (12')	Trench 2 (3')	Trench 2 (4')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	10.12.2020 00:00	10.12.2020 00:00	10.12.2020 00:00	10.12.2020 00:00	10.12.2020 00:00	10.12.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	10.13.2020 12:35	10.13.2020 12:35	10.13.2020 12:35	10.13.2020 12:35	10.13.2020 12:35	10.13.2020 12:35
	<i>Analyzed:</i>	10.14.2020 02:42	10.14.2020 03:03	10.14.2020 03:23	10.14.2020 03:44	10.14.2020 05:25	10.14.2020 05:45
	<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	0.00225 0.00202	0.00340 0.00200	0.00242 0.00201	9.83 D 0.990	31.4 D 0.996
Toluene		0.0214 0.00200	0.0118 0.00202	0.0569 0.00200	0.0122 0.00201	130 D 0.990	183 D 1.99
Ethylbenzene		0.00866 0.00200	0.00437 0.00202	0.0427 0.00200	0.00237 0.00201	44.4 D 0.990	93.0 D 0.996
m,p-Xylenes		0.0289 0.00399	0.0125 0.00403	0.154 0.00401	0.00734 0.00402	133 D 1.98	260 D 1.99
o-Xylene		0.0140 0.00200	0.00547 0.00202	0.0789 0.00200	0.00315 0.00201	48.4 D 0.990	91.4 D 0.996
Total Xylenes		0.0429 0.00200	0.0180 0.00202	0.233 0.00200	0.0105 0.00201	181 0.990	351 0.996
Total BTEX		0.0730 0.00200	0.0364 0.00202	0.336 0.00200	0.0275 0.00201	366 0.990	659 0.996
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>					10.13.2020 15:50	
	<i>Analyzed:</i>					10.13.2020 16:35	
	<i>Units/RL:</i>					mg/kg RL	
Chloride						<5.03 5.03	
TPH By SW8015 Mod	<i>Extracted:</i>	10.13.2020 17:00	10.13.2020 17:00	10.13.2020 17:00	10.13.2020 17:00	10.13.2020 17:00	10.13.2020 17:00
	<i>Analyzed:</i>	10.13.2020 23:01	10.13.2020 23:20	10.13.2020 23:39	10.13.2020 23:58	10.14.2020 00:37	10.14.2020 07:51
	<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	50.9 49.9	<50.0 50.0	3600 50.0	7450 249
Diesel Range Organics (DRO)		121 49.9	63.6 49.8	523 49.9	<50.0 50.0	7280 50.0	13600 249
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<49.8 49.8	66.0 49.9	<50.0 50.0	371 50.0	1000 249
Total TPH		121 49.9	63.6 49.8	640 49.9	<50.0 50.0	11300 50.0	22100 249

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 674967



Tetra Tech- Midland, Midland, TX

Project Name: Lomas Rojas 26-2 Oil Transfer

Project Id:

Date Received in Lab: Tue 10.13.2020 11:56

Contact: Mike Carmona

Report Date: 10.16.2020 16:20

Project Location: Loving Co. TX

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	674967-013	674967-014	674967-015	674967-016	674967-017	674967-018
	<i>Field Id:</i>	Trench 2 (5')	Trench 2 (6')	Trench 2 (7')	Trench 2 (8')	Trench 3 (3')	Trench 3 (4')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	10.12.2020 00:00	10.12.2020 00:00	10.12.2020 00:00	10.12.2020 00:00	10.12.2020 00:00	10.12.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	10.13.2020 12:35	10.13.2020 12:35	10.13.2020 12:35	10.14.2020 17:00	10.13.2020 12:35	10.13.2020 12:35
	<i>Analyzed:</i>	10.14.2020 06:06	10.14.2020 06:27	10.14.2020 06:47	10.15.2020 06:55	10.14.2020 07:29	10.14.2020 07:50
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		39.1 D 0.994	15.1 D 0.198	0.181 0.00200	<0.00201 0.00201	1.70 D 0.992	15.1 D 1.01
Toluene		256 D 1.99	178 D 0.990	8.32 D 0.200	<0.00201 0.00201	37.6 D 0.992	134 D 1.01
Ethylbenzene		99.1 D 0.994	60.0 D 0.990	4.18 D 0.200	<0.00201 0.00201	25.8 D 0.992	41.9 D 1.01
m,p-Xylenes		294 D 1.99	183 D 1.98	13.8 D 0.399	<0.00402 0.00402	60.6 D 1.98	125 D 2.02
o-Xylene		95.9 D 0.994	59.6 D 0.990	5.18 D 0.200	<0.00201 0.00201	57.4 D 0.992	43.8 D 1.01
Total Xylenes		390 0.994	243 0.990	19.0 0.200	<0.00201 0.00201	118 0.992	169 1.01
Total BTEX		784 0.994	496 0.198	31.7 0.00200	<0.00201 0.00201	183 0.992	360 1.01
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>					10.13.2020 15:50	
	<i>Analyzed:</i>					10.13.2020 16:41	
	<i>Units/RL:</i>					mg/kg RL	
Chloride						<4.99 4.99	
TPH By SW8015 Mod	<i>Extracted:</i>	10.13.2020 17:00	10.13.2020 17:00	10.13.2020 17:00	10.13.2020 17:00	10.13.2020 17:00	10.13.2020 17:00
	<i>Analyzed:</i>	10.14.2020 08:11	10.14.2020 08:30	10.14.2020 01:54	10.14.2020 02:13	10.14.2020 02:32	10.14.2020 02:51
	<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)		7460 249	5090 250	525 50.0	<49.9 49.9	2250 49.9	4740 49.8
Diesel Range Organics (DRO)		12100 249	8230 250	1700 50.0	<49.9 49.9	6910 49.9	7910 49.8
Motor Oil Range Hydrocarbons (MRO)		847 249	522 250	126 50.0	<49.9 49.9	345 49.9	355 49.8
Total TPH		20400 249	13800 250	2350 50.0	<49.9 49.9	9510 49.9	13000 49.8

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 674967



Tetra Tech- Midland, Midland, TX

Project Name: Lomas Rojas 26-2 Oil Transfer

Project Id:

Date Received in Lab: Tue 10.13.2020 11:56

Contact: Mike Carmona

Report Date: 10.16.2020 16:20

Project Location: Loving Co. TX

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	674967-019	674967-020	674967-021	674967-022	674967-023	
	<i>Field Id:</i>	Trench 3 (5')	Trench 3 (6')	Trench 3 (7')	Trench 3 (8')	Trench 3 (9')	
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	
	<i>Sampled:</i>	10.12.2020 00:00	10.12.2020 00:00	10.12.2020 00:00	10.12.2020 00:00	10.12.2020 00:00	
BTEX by EPA 8021B	<i>Extracted:</i>	10.13.2020 12:35	10.13.2020 12:35	10.13.2020 12:45	10.13.2020 12:45	10.13.2020 12:45	
	<i>Analyzed:</i>	10.14.2020 08:11	10.14.2020 08:53	10.13.2020 18:27	10.13.2020 18:47	10.13.2020 19:08	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Benzene		42.7 D 1.01	48.2 D 0.500	20.1 D 0.201	0.0729 0.00199	0.0204 0.00199	
Toluene		268 D 2.01	361 D 2.00	322 D 2.01	0.745 D 0.0996	0.143 0.00199	
Ethylbenzene		87.9 D 1.01	92.2 D 0.500	119 D 2.01	0.272 0.00199	0.0915 0.00199	
m,p-Xylenes		260 D 2.01	304 D 4.00	275 D 4.02	0.740 0.00398	0.260 0.00398	
o-Xylene		81.9 D 1.01	88.0 D 0.500	97.1 D 2.01	0.288 0.00199	0.107 0.00199	
Total Xylenes		342 1.01	392 0.500	372 2.01	1.03 0.00199	0.367 0.00199	
Total BTEX		741 1.01	893 0.500	833 0.201	2.12 0.00199	0.622 0.00199	
TPH By SW8015 Mod	<i>Extracted:</i>	10.13.2020 17:00	10.13.2020 17:00	10.13.2020 12:00	10.13.2020 12:00	10.13.2020 12:00	
	<i>Analyzed:</i>	10.14.2020 08:50	10.14.2020 09:09	10.14.2020 07:13	10.13.2020 17:53	10.13.2020 18:12	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Gasoline Range Hydrocarbons (GRO)		8720 250	11400 250	6070 249	91.4 50.0	<50.0 50.0	
Diesel Range Organics (DRO)		13900 250	18400 250	10400 F 249	316 F 50.0	155 F 50.0	
Motor Oil Range Hydrocarbons (MRO)		824 250	1210 250	1050 249	<50.0 50.0	<50.0 50.0	
Total TPH		23400 250	31000 250	17500 249	407 50.0	155 50.0	

BRL - Below Reporting Limit

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

Analytical Report 674967

for

Tetra Tech- Midland

Project Manager: Mike Carmona

Lomas Rojas 26-2 Oil Transfer

10.16.2020

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 (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



10.16.2020

Project Manager: **Mike Carmona**

Tetra Tech- Midland

901 West Wall ST

Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **674967**

Lomas Rojas 26-2 Oil Transfer

Project Address: Loving Co. TX

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) 674967. 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. 674967 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 674967****Tetra Tech- Midland, Midland, TX**

Lomas Rojas 26-2 Oil Transfer

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Trench 1 (3')	S	10.12.2020 00:00		674967-001
Trench 1 (4')	S	10.12.2020 00:00		674967-002
Trench 1 (5')	S	10.12.2020 00:00		674967-003
Trench 1 (6')	S	10.12.2020 00:00		674967-004
Trench 1 (7')	S	10.12.2020 00:00		674967-005
Trench 1 (8')	S	10.12.2020 00:00		674967-006
Trench 1 (9')	S	10.12.2020 00:00		674967-007
Trench 1 (10')	S	10.12.2020 00:00		674967-008
Trench 1 (11')	S	10.12.2020 00:00		674967-009
Trench 1 (12')	S	10.12.2020 00:00		674967-010
Trench 2 (3')	S	10.12.2020 00:00		674967-011
Trench 2 (4')	S	10.12.2020 00:00		674967-012
Trench 2 (5')	S	10.12.2020 00:00		674967-013
Trench 2 (6')	S	10.12.2020 00:00		674967-014
Trench 2 (7')	S	10.12.2020 00:00		674967-015
Trench 2 (8')	S	10.12.2020 00:00		674967-016
Trench 3 (3')	S	10.12.2020 00:00		674967-017
Trench 3 (4')	S	10.12.2020 00:00		674967-018
Trench 3 (5')	S	10.12.2020 00:00		674967-019
Trench 3 (6')	S	10.12.2020 00:00		674967-020
Trench 3 (7')	S	10.12.2020 00:00		674967-021
Trench 3 (8')	S	10.12.2020 00:00		674967-022
Trench 3 (9')	S	10.12.2020 00:00		674967-023

**CASE NARRATIVE****Client Name: Tetra Tech- Midland****Project Name: Lomas Rojas 26-2 Oil Transfer**Project ID:
Work Order Number(s): 674967Report Date: 10.16.2020
Date Received: 10.13.2020**Sample receipt non conformances and comments:****Sample receipt non conformances and comments per sample:**

None

Analytical non conformances and comments:

Batch: LBA-3139611 BTEX by EPA 8021B

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

Samples affected are: 674967-001 S,674967-001 SD,674967-012,674967-013,674967-014,674967-018,674967-019,674967-020,674967-004,674967-003,674967-002,674967-001.

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

Samples affected are: 674967-001 S,674967-001 SD,674967-020,674967-002,674967-003,674967-004,674967-005,674967-009,674967-011,674967-012,674967-013,674967-014,674967-015,674967-017,674967-018,674967-019,674967-001.

Lab Sample ID 674967-001 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. o-Xylene recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 674967-001, -002, -003, -004, -005, -007, -008, -009, -010, -011, -012, -013, -014, -015, -017, -018, -019, -020.

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-3139613 BTEX by EPA 8021B

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

Samples affected are: 674967-022,674967-021.

Batch: LBA-3139647 Inorganic Anions by EPA 300/300.1

Lab Sample ID 674967-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 674967-001, -011, -017.

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

Batch: LBA-3139655 TPH By SW8015 Mod

Diesel Range Organics (DRO) RPD was outside laboratory control limits.

Samples in the analytical batch are: 674967-021, -022, -023

**CASE NARRATIVE****Client Name: Tetra Tech- Midland****Project Name: Lomas Rojas 26-2 Oil Transfer**Project ID:
Work Order Number(s): 674967Report Date: 10.16.2020
Date Received: 10.13.2020

Batch: LBA-3139656 TPH By SW8015 Mod

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

Samples affected are: 674967-015.

Lab Sample ID 674967-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Diesel Range Organics (DRO) recovered above QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 674967-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013, -014, -015, -016, -017, -018, -019, -020.

The Laboratory Control Sample for Diesel Range Organics (DRO) is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3139699 BTEX by EPA 8021B

Surrogate 1,4-Difluorobenzene recovered above QC limits. Samples affected are: 7713255-1-BKS.



Certificate of Analytical Results 674967

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Trench 1 (3')**

Matrix: Soil

Date Received: 10.13.2020 11:56

Lab Sample Id: 674967-001

Date Collected: 10.12.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.13.2020 15:50

% Moisture:

Seq Number: 3139647

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	10.13.2020 16:16	UX	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.13.2020 17:00

% Moisture:

Seq Number: 3139656

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	3150	49.9	mg/kg	10.13.2020 20:27		1
Diesel Range Organics (DRO)	C10C28DRO	7170	49.9	mg/kg	10.13.2020 20:27	X	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	544	49.9	mg/kg	10.13.2020 20:27		1
Total TPH	PHC635	20800	49.9	mg/kg	10.13.2020 20:27		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	121	%	70-130	10.13.2020 20:27		
o-Terphenyl	84-15-1	100	%	70-130	10.13.2020 20:27		



Certificate of Analytical Results 674967

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Trench 1 (3')**

Matrix: Soil

Date Received: 10.13.2020 11:56

Lab Sample Id: 674967-001

Date Collected: 10.12.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 10.13.2020 12:35

% Moisture:

Seq Number: 3139611

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	5.06	1.01	mg/kg	10.14.2020 21:21	DX	500
Toluene	108-88-3	84.3	1.01	mg/kg	10.14.2020 21:21	DX	500
Ethylbenzene	100-41-4	38.0	1.01	mg/kg	10.14.2020 21:21	DX	500
m,p-Xylenes	179601-23-1	109	2.01	mg/kg	10.14.2020 21:21	DX	500
o-Xylene	95-47-6	39.4	1.01	mg/kg	10.14.2020 21:21	DX	500
Total Xylenes	1330-20-7	148	1.01	mg/kg	10.14.2020 21:21		500
Total BTEX		276	1.01	mg/kg	10.14.2020 21:21		500
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	149	%	70-130	10.14.2020 00:38	**	
4-Bromofluorobenzene	460-00-4	12300	%	70-130	10.14.2020 00:38	**	



Certificate of Analytical Results 674967

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Trench 1 (4')**

Matrix: Soil

Date Received: 10.13.2020 11:56

Lab Sample Id: 674967-002

Date Collected: 10.12.2020 00:00

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.13.2020 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3139656

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	2800	50.0	mg/kg	10.13.2020 21:25		1
Diesel Range Organics (DRO)	C10C28DRO	5960	50.0	mg/kg	10.13.2020 21:25		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	442	50.0	mg/kg	10.13.2020 21:25		1
Total TPH	PHC635	17600	50.0	mg/kg	10.13.2020 21:25		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-130	10.13.2020 21:25	
o-Terphenyl	84-15-1	118	%	70-130	10.13.2020 21:25	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 10.13.2020 12:35

% Moisture:
Basis: Wet Weight

Seq Number: 3139611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	5.82	0.201	mg/kg	10.14.2020 21:42	D	100
Toluene	108-88-3	74.3	1.00	mg/kg	10.16.2020 02:41	D	500
Ethylbenzene	100-41-4	25.4	0.201	mg/kg	10.14.2020 21:42	D	100
m,p-Xylenes	179601-23-1	73.4	0.402	mg/kg	10.14.2020 21:42	D	100
o-Xylene	95-47-6	25.6	0.201	mg/kg	10.14.2020 21:42	D	100
Total Xylenes	1330-20-7	99.0	0.201	mg/kg	10.14.2020 21:42		100
Total BTEX		205	0.201	mg/kg	10.16.2020 02:41		500

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	3533	%	70-130	10.14.2020 00:58	**
1,4-Difluorobenzene	540-36-3	132	%	70-130	10.14.2020 00:58	**



Certificate of Analytical Results 674967

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Trench 1 (5')**

Matrix: Soil

Date Received: 10.13.2020 11:56

Lab Sample Id: 674967-003

Date Collected: 10.12.2020 00:00

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.13.2020 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3139656

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	6190	249	mg/kg	10.14.2020 07:32		5
Diesel Range Organics (DRO)	C10C28DRO	10700	249	mg/kg	10.14.2020 07:32		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	777	249	mg/kg	10.14.2020 07:32		5
Total TPH	PHC635	17700	249	mg/kg	10.14.2020 07:32		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-130	10.14.2020 07:32	
o-Terphenyl	84-15-1	102	%	70-130	10.14.2020 07:32	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 10.13.2020 12:35

% Moisture:
Basis: Wet Weight

Seq Number: 3139611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	16.2	0.200	mg/kg	10.14.2020 22:02	D	100
Toluene	108-88-3	248	2.00	mg/kg	10.16.2020 13:59	D	1000
Ethylbenzene	100-41-4	70.2	1.00	mg/kg	10.16.2020 03:02	D	500
m,p-Xylenes	179601-23-1	203	2.00	mg/kg	10.16.2020 03:02	D	500
o-Xylene	95-47-6	69.4	1.00	mg/kg	10.16.2020 03:02	D	500
Total Xylenes	1330-20-7	272	1.00	mg/kg	10.16.2020 03:02		500
Total BTEX		607	0.200	mg/kg	10.16.2020 13:59		1000

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	11100	%	70-130	10.14.2020 01:19	**
1,4-Difluorobenzene	540-36-3	437	%	70-130	10.14.2020 01:19	**



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Trench 1 (5')**

Matrix: Soil

Date Received: 10.13.2020 11:56

Lab Sample Id: 674967-003

Date Collected: 10.12.2020 00:00

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.13.2020 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3139656

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	6190	249	mg/kg	10.14.2020 07:32		5
Diesel Range Organics (DRO)	C10C28DRO	10700	249	mg/kg	10.14.2020 07:32		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	777	249	mg/kg	10.14.2020 07:32		5
Total TPH	PHC635	17700	249	mg/kg	10.14.2020 07:32		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-130	10.14.2020 07:32	
o-Terphenyl	84-15-1	102	%	70-130	10.14.2020 07:32	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 10.13.2020 12:35

% Moisture:
Basis: Wet Weight

Seq Number: 3139611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	16.2	0.200	mg/kg	10.14.2020 22:02	D	100
Toluene	108-88-3	248	2.00	mg/kg	10.16.2020 13:59	D	1000
Ethylbenzene	100-41-4	70.2	1.00	mg/kg	10.16.2020 03:02	D	500
m,p-Xylenes	179601-23-1	203	2.00	mg/kg	10.16.2020 03:02	D	500
o-Xylene	95-47-6	69.4	1.00	mg/kg	10.16.2020 03:02	D	500
Total Xylenes	1330-20-7	272	1.00	mg/kg	10.16.2020 03:02		500
Total BTEX		607	0.200	mg/kg	10.16.2020 13:59		1000

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	11100	%	70-130	10.14.2020 01:19	**
1,4-Difluorobenzene	540-36-3	437	%	70-130	10.14.2020 01:19	**



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Trench 1 (6')**

Matrix: Soil

Date Received: 10.13.2020 11:56

Lab Sample Id: 674967-004

Date Collected: 10.12.2020 00:00

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.13.2020 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3139656

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	1960	49.8	mg/kg	10.13.2020 22:03		1
Diesel Range Organics (DRO)	C10C28DRO	4840	49.8	mg/kg	10.13.2020 22:03		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	330	49.8	mg/kg	10.13.2020 22:03		1
Total TPH	PHC635	7130	49.8	mg/kg	10.13.2020 22:03		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-130	10.13.2020 22:03	
o-Terphenyl	84-15-1	105	%	70-130	10.13.2020 22:03	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 10.13.2020 12:35

% Moisture:
Basis: Wet Weight

Seq Number: 3139611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	1.27	0.100	mg/kg	10.14.2020 22:23	D	50
Toluene	108-88-3	51.1	1.00	mg/kg	10.16.2020 03:23	D	500
Ethylbenzene	100-41-4	15.6	0.100	mg/kg	10.14.2020 22:23	D	50
m,p-Xylenes	179601-23-1	87.4	2.00	mg/kg	10.16.2020 03:23	D	500
o-Xylene	95-47-6	15.9	0.100	mg/kg	10.14.2020 22:23	D	50
Total Xylenes	1330-20-7	103	0.100	mg/kg	10.16.2020 03:23		500
Total BTEX		171	0.100	mg/kg	10.16.2020 03:23		500

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	1950	%	70-130	10.14.2020 01:40	**
1,4-Difluorobenzene	540-36-3	166	%	70-130	10.14.2020 01:40	**



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Trench 1 (7')**

Matrix: Soil

Date Received: 10.13.2020 11:56

Lab Sample Id: 674967-005

Date Collected: 10.12.2020 00:00

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.13.2020 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3139656

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	277	50.0	mg/kg	10.13.2020 22:22		1
Diesel Range Organics (DRO)	C10C28DRO	966	50.0	mg/kg	10.13.2020 22:22		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	104	50.0	mg/kg	10.13.2020 22:22		1
Total TPH	PHC635	1350	50.0	mg/kg	10.13.2020 22:22		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-130	10.13.2020 22:22	
o-Terphenyl	84-15-1	130	%	70-130	10.13.2020 22:22	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 10.13.2020 12:35

% Moisture:
Basis: Wet Weight

Seq Number: 3139611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.0771	0.00200	mg/kg	10.14.2020 02:01		1
Toluene	108-88-3	2.25	0.200	mg/kg	10.14.2020 22:44	D	100
Ethylbenzene	100-41-4	1.61	0.200	mg/kg	10.14.2020 22:44	D	100
m,p-Xylenes	179601-23-1	5.68	0.401	mg/kg	10.14.2020 22:44	D	100
o-Xylene	95-47-6	2.42	0.200	mg/kg	10.14.2020 22:44	D	100
Total Xylenes	1330-20-7	8.10	0.200	mg/kg	10.14.2020 22:44		100
Total BTEX		12.0	0.00200	mg/kg	10.14.2020 22:44		100

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	430	%	70-130	10.14.2020 02:01	**
1,4-Difluorobenzene	540-36-3	103	%	70-130	10.14.2020 02:01	



Certificate of Analytical Results 674967

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Trench 1 (8')**

Matrix: Soil

Date Received: 10.13.2020 11:56

Lab Sample Id: 674967-006

Date Collected: 10.12.2020 00:00

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.13.2020 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3139656

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.13.2020 22:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.13.2020 22:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.13.2020 22:41	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.13.2020 22:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-130	10.13.2020 22:41	
o-Terphenyl	84-15-1	126	%	70-130	10.13.2020 22:41	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 10.14.2020 14:00

% Moisture:
Basis: Wet Weight

Seq Number: 3139699

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.14.2020 19:39	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.14.2020 19:39	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.14.2020 19:39	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.14.2020 19:39	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.14.2020 19:39	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.14.2020 19:39	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.14.2020 19:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	70-130	10.14.2020 19:39	
1,4-Difluorobenzene	540-36-3	93	%	70-130	10.14.2020 19:39	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Trench 1 (9')**

Matrix: Soil

Date Received: 10.13.2020 11:56

Lab Sample Id: 674967-007

Date Collected: 10.12.2020 00:00

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.13.2020 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3139656

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.13.2020 23:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	121	49.9	mg/kg	10.13.2020 23:01		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.13.2020 23:01	U	1
Total TPH	PHC635	121	49.9	mg/kg	10.13.2020 23:01		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-130	10.13.2020 23:01	
o-Terphenyl	84-15-1	112	%	70-130	10.13.2020 23:01	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 10.13.2020 12:35

% Moisture:
Basis: Wet Weight

Seq Number: 3139611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.14.2020 02:42	U	1
Toluene	108-88-3	0.0214	0.00200	mg/kg	10.14.2020 02:42		1
Ethylbenzene	100-41-4	0.00866	0.00200	mg/kg	10.14.2020 02:42		1
m,p-Xylenes	179601-23-1	0.0289	0.00399	mg/kg	10.14.2020 02:42		1
o-Xylene	95-47-6	0.0140	0.00200	mg/kg	10.14.2020 02:42		1
Total Xylenes	1330-20-7	0.0429	0.00200	mg/kg	10.14.2020 02:42		1
Total BTEX		0.0730	0.00200	mg/kg	10.14.2020 02:42		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	117	%	70-130	10.14.2020 02:42	
1,4-Difluorobenzene	540-36-3	87	%	70-130	10.14.2020 02:42	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Trench 1 (10')**

Matrix: Soil

Date Received: 10.13.2020 11:56

Lab Sample Id: 674967-008

Date Collected: 10.12.2020 00:00

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.13.2020 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3139656

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.13.2020 23:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	63.6	49.8	mg/kg	10.13.2020 23:20		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.13.2020 23:20	U	1
Total TPH	PHC635	63.6	49.8	mg/kg	10.13.2020 23:20		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-130	10.13.2020 23:20	
o-Terphenyl	84-15-1	114	%	70-130	10.13.2020 23:20	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 10.13.2020 12:35

% Moisture:
Basis: Wet Weight

Seq Number: 3139611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00225	0.00202	mg/kg	10.14.2020 03:03		1
Toluene	108-88-3	0.0118	0.00202	mg/kg	10.14.2020 03:03		1
Ethylbenzene	100-41-4	0.00437	0.00202	mg/kg	10.14.2020 03:03		1
m,p-Xylenes	179601-23-1	0.0125	0.00403	mg/kg	10.14.2020 03:03		1
o-Xylene	95-47-6	0.00547	0.00202	mg/kg	10.14.2020 03:03		1
Total Xylenes	1330-20-7	0.0180	0.00202	mg/kg	10.14.2020 03:03		1
Total BTEX		0.0364	0.00202	mg/kg	10.14.2020 03:03		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	116	%	70-130	10.14.2020 03:03	
1,4-Difluorobenzene	540-36-3	96	%	70-130	10.14.2020 03:03	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Trench 1 (11')**

Matrix: Soil

Date Received: 10.13.2020 11:56

Lab Sample Id: 674967-009

Date Collected: 10.12.2020 00:00

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.13.2020 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3139656

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	50.9	49.9	mg/kg	10.13.2020 23:39		1
Diesel Range Organics (DRO)	C10C28DRO	523	49.9	mg/kg	10.13.2020 23:39		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	66.0	49.9	mg/kg	10.13.2020 23:39		1
Total TPH	PHC635	640	49.9	mg/kg	10.13.2020 23:39		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-130	10.13.2020 23:39	
o-Terphenyl	84-15-1	121	%	70-130	10.13.2020 23:39	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 10.13.2020 12:35

% Moisture:
Basis: Wet Weight

Seq Number: 3139611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00340	0.00200	mg/kg	10.14.2020 03:23		1
Toluene	108-88-3	0.0569	0.00200	mg/kg	10.14.2020 03:23		1
Ethylbenzene	100-41-4	0.0427	0.00200	mg/kg	10.14.2020 03:23		1
m,p-Xylenes	179601-23-1	0.154	0.00401	mg/kg	10.14.2020 03:23		1
o-Xylene	95-47-6	0.0789	0.00200	mg/kg	10.14.2020 03:23		1
Total Xylenes	1330-20-7	0.233	0.00200	mg/kg	10.14.2020 03:23		1
Total BTEX		0.336	0.00200	mg/kg	10.14.2020 03:23		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	148	%	70-130	10.14.2020 03:23	**
1,4-Difluorobenzene	540-36-3	90	%	70-130	10.14.2020 03:23	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Trench 1 (12')**

Matrix: Soil

Date Received: 10.13.2020 11:56

Lab Sample Id: 674967-010

Date Collected: 10.12.2020 00:00

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.13.2020 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3139656

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.13.2020 23:58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.13.2020 23:58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.13.2020 23:58	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.13.2020 23:58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-130	10.13.2020 23:58	
o-Terphenyl	84-15-1	108	%	70-130	10.13.2020 23:58	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 10.13.2020 12:35

% Moisture:
Basis: Wet Weight

Seq Number: 3139611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00242	0.00201	mg/kg	10.14.2020 03:44		1
Toluene	108-88-3	0.0122	0.00201	mg/kg	10.14.2020 03:44		1
Ethylbenzene	100-41-4	0.00237	0.00201	mg/kg	10.14.2020 03:44		1
m,p-Xylenes	179601-23-1	0.00734	0.00402	mg/kg	10.14.2020 03:44		1
o-Xylene	95-47-6	0.00315	0.00201	mg/kg	10.14.2020 03:44		1
Total Xylenes	1330-20-7	0.0105	0.00201	mg/kg	10.14.2020 03:44		1
Total BTEX		0.0275	0.00201	mg/kg	10.14.2020 03:44		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	127	%	70-130	10.14.2020 03:44	
1,4-Difluorobenzene	540-36-3	97	%	70-130	10.14.2020 03:44	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Trench 2 (3')**

Matrix: Soil

Date Received: 10.13.2020 11:56

Lab Sample Id: 674967-011

Date Collected: 10.12.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.13.2020 15:50

% Moisture:

Seq Number: 3139647

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.03	5.03	mg/kg	10.13.2020 16:35	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.13.2020 17:00

% Moisture:

Seq Number: 3139656

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	3600	50.0	mg/kg	10.14.2020 00:37		1
Diesel Range Organics (DRO)	C10C28DRO	7280	50.0	mg/kg	10.14.2020 00:37		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	371	50.0	mg/kg	10.14.2020 00:37		1
Total TPH	PHC635	11300	50.0	mg/kg	10.14.2020 00:37		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	126	%	70-130	10.14.2020 00:37		
o-Terphenyl	84-15-1	103	%	70-130	10.14.2020 00:37		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Trench 2 (3')**

Matrix: Soil

Date Received: 10.13.2020 11:56

Lab Sample Id: 674967-011

Date Collected: 10.12.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 10.13.2020 12:35

% Moisture:

Seq Number: 3139611

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	9.83	0.990	mg/kg	10.14.2020 23:05	D	500
Toluene	108-88-3	130	0.990	mg/kg	10.14.2020 23:05	D	500
Ethylbenzene	100-41-4	44.4	0.990	mg/kg	10.14.2020 23:05	D	500
m,p-Xylenes	179601-23-1	133	1.98	mg/kg	10.14.2020 23:05	D	500
o-Xylene	95-47-6	48.4	0.990	mg/kg	10.14.2020 23:05	D	500
Total Xylenes	1330-20-7	181	0.990	mg/kg	10.14.2020 23:05		500
Total BTEX		366	0.990	mg/kg	10.14.2020 23:05		500
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	11567	%	70-130	10.14.2020 05:25	**	
1,4-Difluorobenzene	540-36-3	123	%	70-130	10.14.2020 05:25		



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Trench 2 (4')**

Matrix: Soil

Date Received: 10.13.2020 11:56

Lab Sample Id: 674967-012

Date Collected: 10.12.2020 00:00

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.13.2020 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3139656

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	7450	249	mg/kg	10.14.2020 07:51		5
Diesel Range Organics (DRO)	C10C28DRO	13600	249	mg/kg	10.14.2020 07:51		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	1000	249	mg/kg	10.14.2020 07:51		5
Total TPH	PHC635	22100	249	mg/kg	10.14.2020 07:51		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-130	10.14.2020 07:51	
o-Terphenyl	84-15-1	115	%	70-130	10.14.2020 07:51	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 10.13.2020 12:35

% Moisture:
Basis: Wet Weight

Seq Number: 3139611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	31.4	0.996	mg/kg	10.14.2020 23:26	D	500
Toluene	108-88-3	183	1.99	mg/kg	10.16.2020 03:44	D	1000
Ethylbenzene	100-41-4	93.0	0.996	mg/kg	10.14.2020 23:26	D	500
m,p-Xylenes	179601-23-1	260	1.99	mg/kg	10.14.2020 23:26	D	500
o-Xylene	95-47-6	91.4	0.996	mg/kg	10.14.2020 23:26	D	500
Total Xylenes	1330-20-7	351	0.996	mg/kg	10.14.2020 23:26		500
Total BTEX		659	0.996	mg/kg	10.16.2020 03:44		1000

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	670	%	70-130	10.14.2020 05:45	**
4-Bromofluorobenzene	460-00-4	16733	%	70-130	10.14.2020 05:45	**



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Trench 2 (5')**

Matrix: Soil

Date Received: 10.13.2020 11:56

Lab Sample Id: 674967-013

Date Collected: 10.12.2020 00:00

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.13.2020 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3139656

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	7460	249	mg/kg	10.14.2020 08:11		5
Diesel Range Organics (DRO)	C10C28DRO	12100	249	mg/kg	10.14.2020 08:11		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	847	249	mg/kg	10.14.2020 08:11		5
Total TPH	PHC635	20400	249	mg/kg	10.14.2020 08:11		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-130	10.14.2020 08:11	
o-Terphenyl	84-15-1	104	%	70-130	10.14.2020 08:11	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 10.13.2020 12:35

% Moisture:
Basis: Wet Weight

Seq Number: 3139611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	39.1	0.994	mg/kg	10.14.2020 23:46	D	500
Toluene	108-88-3	256	1.99	mg/kg	10.16.2020 04:05	D	1000
Ethylbenzene	100-41-4	99.1	0.994	mg/kg	10.14.2020 23:46	D	500
m,p-Xylenes	179601-23-1	294	1.99	mg/kg	10.14.2020 23:46	D	500
o-Xylene	95-47-6	95.9	0.994	mg/kg	10.14.2020 23:46	D	500
Total Xylenes	1330-20-7	390	0.994	mg/kg	10.14.2020 23:46		500
Total BTEX		784	0.994	mg/kg	10.16.2020 04:05		1000

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	570	%	70-130	10.14.2020 06:06	**
4-Bromofluorobenzene	460-00-4	16200	%	70-130	10.14.2020 06:06	**



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Trench 2 (6')**

Matrix: Soil

Date Received: 10.13.2020 11:56

Lab Sample Id: 674967-014

Date Collected: 10.12.2020 00:00

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.13.2020 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3139656

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	5090	250	mg/kg	10.14.2020 08:30		5
Diesel Range Organics (DRO)	C10C28DRO	8230	250	mg/kg	10.14.2020 08:30		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	522	250	mg/kg	10.14.2020 08:30		5
Total TPH	PHC635	13800	250	mg/kg	10.14.2020 08:30		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-130	10.14.2020 08:30	
o-Terphenyl	84-15-1	104	%	70-130	10.14.2020 08:30	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 10.13.2020 12:35

% Moisture:
Basis: Wet Weight

Seq Number: 3139611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	15.1	0.198	mg/kg	10.15.2020 00:07	D	100
Toluene	108-88-3	178	0.990	mg/kg	10.16.2020 04:25	D	500
Ethylbenzene	100-41-4	60.0	0.990	mg/kg	10.16.2020 04:25	D	500
m,p-Xylenes	179601-23-1	183	1.98	mg/kg	10.16.2020 04:25	D	500
o-Xylene	95-47-6	59.6	0.990	mg/kg	10.16.2020 04:25	D	500
Total Xylenes	1330-20-7	243	0.990	mg/kg	10.16.2020 04:25		500
Total BTEX		496	0.198	mg/kg	10.16.2020 04:25		500

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	11700	%	70-130	10.14.2020 06:27	**
1,4-Difluorobenzene	540-36-3	407	%	70-130	10.14.2020 06:27	**



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Trench 2 (7')**

Matrix: Soil

Date Received: 10.13.2020 11:56

Lab Sample Id: 674967-015

Date Collected: 10.12.2020 00:00

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.13.2020 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3139656

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	525	50.0	mg/kg	10.14.2020 01:54		1
Diesel Range Organics (DRO)	C10C28DRO	1700	50.0	mg/kg	10.14.2020 01:54		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	126	50.0	mg/kg	10.14.2020 01:54		1
Total TPH	PHC635	2350	50.0	mg/kg	10.14.2020 01:54		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	123	%	70-130	10.14.2020 01:54	
o-Terphenyl	84-15-1	166	%	70-130	10.14.2020 01:54	**

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 10.13.2020 12:35

% Moisture:
Basis: Wet Weight

Seq Number: 3139611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.181	0.00200	mg/kg	10.14.2020 06:47		1
Toluene	108-88-3	8.32	0.200	mg/kg	10.15.2020 00:28	D	100
Ethylbenzene	100-41-4	4.18	0.200	mg/kg	10.15.2020 00:28	D	100
m,p-Xylenes	179601-23-1	13.8	0.399	mg/kg	10.15.2020 00:28	D	100
o-Xylene	95-47-6	5.18	0.200	mg/kg	10.15.2020 00:28	D	100
Total Xylenes	1330-20-7	19.0	0.200	mg/kg	10.15.2020 00:28		100
Total BTEX		31.7	0.00200	mg/kg	10.15.2020 00:28		100

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	500	%	70-130	10.14.2020 06:47	**
1,4-Difluorobenzene	540-36-3	110	%	70-130	10.14.2020 06:47	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Trench 2 (8')**

Matrix: Soil

Date Received: 10.13.2020 11:56

Lab Sample Id: 674967-016

Date Collected: 10.12.2020 00:00

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.13.2020 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3139656

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.14.2020 02:13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.14.2020 02:13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.14.2020 02:13	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.14.2020 02:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-130	10.14.2020 02:13	
o-Terphenyl	84-15-1	110	%	70-130	10.14.2020 02:13	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 10.14.2020 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3139732

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	10.15.2020 06:55	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	10.15.2020 06:55	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	10.15.2020 06:55	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	10.15.2020 06:55	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	10.15.2020 06:55	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	10.15.2020 06:55	U	1
Total BTEX		<0.00201	0.00201	mg/kg	10.15.2020 06:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	121	%	70-130	10.15.2020 06:55	
1,4-Difluorobenzene	540-36-3	98	%	70-130	10.15.2020 06:55	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Trench 3 (3')**

Matrix: Soil

Date Received: 10.13.2020 11:56

Lab Sample Id: 674967-017

Date Collected: 10.12.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 10.13.2020 15:50

% Moisture:

Seq Number: 3139647

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.99	4.99	mg/kg	10.13.2020 16:41	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.13.2020 17:00

% Moisture:

Seq Number: 3139656

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	2250	49.9	mg/kg	10.14.2020 02:32		1
Diesel Range Organics (DRO)	C10C28DRO	6910	49.9	mg/kg	10.14.2020 02:32		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	345	49.9	mg/kg	10.14.2020 02:32		1
Total TPH	PHC635	9510	49.9	mg/kg	10.14.2020 02:32		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	84	%	70-130	10.14.2020 02:32		
o-Terphenyl	84-15-1	97	%	70-130	10.14.2020 02:32		



Certificate of Analytical Results 674967

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Trench 3 (3')**

Matrix: Soil

Date Received: 10.13.2020 11:56

Lab Sample Id: 674967-017

Date Collected: 10.12.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 10.13.2020 12:35

% Moisture:

Seq Number: 3139611

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	1.70	0.992	mg/kg	10.15.2020 15:27	D	500
Toluene	108-88-3	37.6	0.992	mg/kg	10.15.2020 15:27	D	500
Ethylbenzene	100-41-4	25.8	0.992	mg/kg	10.15.2020 15:27	D	500
m,p-Xylenes	179601-23-1	60.6	1.98	mg/kg	10.15.2020 15:27	D	500
o-Xylene	95-47-6	57.4	0.992	mg/kg	10.15.2020 15:27	D	500
Total Xylenes	1330-20-7	118	0.992	mg/kg	10.15.2020 15:27		500
Total BTEX		183	0.992	mg/kg	10.15.2020 15:27		500
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	4567	%	70-130	10.14.2020 07:29	**	
1,4-Difluorobenzene	540-36-3	119	%	70-130	10.14.2020 07:29		



Certificate of Analytical Results 674967

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Trench 3 (4')**

Matrix: Soil

Date Received: 10.13.2020 11:56

Lab Sample Id: 674967-018

Date Collected: 10.12.2020 00:00

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.13.2020 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3139656

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	4740	49.8	mg/kg	10.14.2020 02:51		1
Diesel Range Organics (DRO)	C10C28DRO	7910	49.8	mg/kg	10.14.2020 02:51		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	355	49.8	mg/kg	10.14.2020 02:51		1
Total TPH	PHC635	13000	49.8	mg/kg	10.14.2020 02:51		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-130	10.14.2020 02:51	
o-Terphenyl	84-15-1	121	%	70-130	10.14.2020 02:51	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 10.13.2020 12:35

% Moisture:
Basis: Wet Weight

Seq Number: 3139611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	15.1	1.01	mg/kg	10.15.2020 16:07	D	500
Toluene	108-88-3	134	1.01	mg/kg	10.15.2020 16:07	D	500
Ethylbenzene	100-41-4	41.9	1.01	mg/kg	10.15.2020 16:07	D	500
m,p-Xylenes	179601-23-1	125	2.02	mg/kg	10.15.2020 16:07	D	500
o-Xylene	95-47-6	43.8	1.01	mg/kg	10.15.2020 16:07	D	500
Total Xylenes	1330-20-7	169	1.01	mg/kg	10.15.2020 16:07		500
Total BTEX		360	1.01	mg/kg	10.15.2020 16:07		500

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	7233	%	70-130	10.14.2020 07:50	**
1,4-Difluorobenzene	540-36-3	192	%	70-130	10.14.2020 07:50	**



Certificate of Analytical Results 674967

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Trench 3 (5')**

Matrix: Soil

Date Received: 10.13.2020 11:56

Lab Sample Id: 674967-019

Date Collected: 10.12.2020 00:00

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.13.2020 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3139656

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	8720	250	mg/kg	10.14.2020 08:50		5
Diesel Range Organics (DRO)	C10C28DRO	13900	250	mg/kg	10.14.2020 08:50		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	824	250	mg/kg	10.14.2020 08:50		5
Total TPH	PHC635	23400	250	mg/kg	10.14.2020 08:50		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-130	10.14.2020 08:50	
o-Terphenyl	84-15-1	125	%	70-130	10.14.2020 08:50	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 10.13.2020 12:35

% Moisture:
Basis: Wet Weight

Seq Number: 3139611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	42.7	1.01	mg/kg	10.15.2020 17:09	D	500
Toluene	108-88-3	268	2.01	mg/kg	10.16.2020 14:20	D	1000
Ethylbenzene	100-41-4	87.9	1.01	mg/kg	10.15.2020 17:09	D	500
m,p-Xylenes	179601-23-1	260	2.01	mg/kg	10.15.2020 17:09	D	500
o-Xylene	95-47-6	81.9	1.01	mg/kg	10.15.2020 17:09	D	500
Total Xylenes	1330-20-7	342	1.01	mg/kg	10.15.2020 17:09		500
Total BTEX		741	1.01	mg/kg	10.16.2020 14:20		1000

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	283	%	70-130	10.14.2020 08:11	**
4-Bromofluorobenzene	460-00-4	9700	%	70-130	10.14.2020 08:11	**



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Trench 3 (6')**

Matrix: Soil

Date Received: 10.13.2020 11:56

Lab Sample Id: 674967-020

Date Collected: 10.12.2020 00:00

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.13.2020 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3139656

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	11400	250	mg/kg	10.14.2020 09:09		5
Diesel Range Organics (DRO)	C10C28DRO	18400	250	mg/kg	10.14.2020 09:09		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	1210	250	mg/kg	10.14.2020 09:09		5
Total TPH	PHC635	31000	250	mg/kg	10.14.2020 09:09		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-130	10.14.2020 09:09	
o-Terphenyl	84-15-1	89	%	70-130	10.14.2020 09:09	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 10.13.2020 12:35

% Moisture:
Basis: Wet Weight

Seq Number: 3139611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	48.2	0.500	mg/kg	10.16.2020 04:46	D	250
Toluene	108-88-3	361	2.00	mg/kg	10.16.2020 14:40	D	1000
Ethylbenzene	100-41-4	92.2	0.500	mg/kg	10.16.2020 04:46	D	250
m,p-Xylenes	179601-23-1	304	4.00	mg/kg	10.16.2020 14:40	D	1000
o-Xylene	95-47-6	88.0	0.500	mg/kg	10.16.2020 04:46	D	250
Total Xylenes	1330-20-7	392	0.500	mg/kg	10.16.2020 14:40		1000
Total BTEX		893	0.500	mg/kg	10.16.2020 14:40		1000

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	28667	%	70-130	10.14.2020 08:53	**
4-Bromofluorobenzene	460-00-4	21633	%	70-130	10.14.2020 08:53	**



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Trench 3 (7')**

Matrix: Soil

Date Received: 10.13.2020 11:56

Lab Sample Id: 674967-021

Date Collected: 10.12.2020 00:00

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.13.2020 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3139655

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	6070	249	mg/kg	10.14.2020 07:13		5
Diesel Range Organics (DRO)	C10C28DRO	10400	249	mg/kg	10.14.2020 07:13	F	5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	1050	249	mg/kg	10.14.2020 07:13		5
Total TPH	PHC635	17500	249	mg/kg	10.14.2020 07:13		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-130	10.14.2020 07:13	
o-Terphenyl	84-15-1	114	%	70-130	10.14.2020 07:13	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 10.13.2020 12:45

% Moisture:
Basis: Wet Weight

Seq Number: 3139613

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	20.1	0.201	mg/kg	10.15.2020 17:49	D	100
Toluene	108-88-3	322	2.01	mg/kg	10.16.2020 15:33	D	1000
Ethylbenzene	100-41-4	119	2.01	mg/kg	10.16.2020 15:33	D	1000
m,p-Xylenes	179601-23-1	275	4.02	mg/kg	10.16.2020 15:33	D	1000
o-Xylene	95-47-6	97.1	2.01	mg/kg	10.16.2020 15:33	D	1000
Total Xylenes	1330-20-7	372	2.01	mg/kg	10.16.2020 15:33		1000
Total BTEX		833	0.201	mg/kg	10.16.2020 15:33		1000

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	2857	%	70-130	10.13.2020 18:27	**
1,4-Difluorobenzene	540-36-3	81	%	70-130	10.13.2020 18:27	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Trench 3 (8')**

Matrix: Soil

Date Received: 10.13.2020 11:56

Lab Sample Id: 674967-022

Date Collected: 10.12.2020 00:00

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.13.2020 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3139655

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	91.4	50.0	mg/kg	10.13.2020 17:53		1
Diesel Range Organics (DRO)	C10C28DRO	316	50.0	mg/kg	10.13.2020 17:53	F	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.13.2020 17:53	U	1
Total TPH	PHC635	407	50.0	mg/kg	10.13.2020 17:53		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-130	10.13.2020 17:53	
o-Terphenyl	84-15-1	113	%	70-130	10.13.2020 17:53	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 10.13.2020 12:45

% Moisture:
Basis: Wet Weight

Seq Number: 3139613

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.0729	0.00199	mg/kg	10.13.2020 18:47		1
Toluene	108-88-3	0.745	0.0996	mg/kg	10.15.2020 18:09	D	50
Ethylbenzene	100-41-4	0.272	0.00199	mg/kg	10.13.2020 18:47		1
m,p-Xylenes	179601-23-1	0.740	0.00398	mg/kg	10.13.2020 18:47		1
o-Xylene	95-47-6	0.288	0.00199	mg/kg	10.13.2020 18:47		1
Total Xylenes	1330-20-7	1.03	0.00199	mg/kg	10.13.2020 18:47		1
Total BTEX		2.12	0.00199	mg/kg	10.15.2020 18:09		50

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	135	%	70-130	10.13.2020 18:47	**
1,4-Difluorobenzene	540-36-3	97	%	70-130	10.13.2020 18:47	



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Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer

Sample Id: **Trench 3 (9')**

Matrix: Soil

Date Received: 10.13.2020 11:56

Lab Sample Id: 674967-023

Date Collected: 10.12.2020 00:00

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.13.2020 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3139655

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.13.2020 18:12	U	1
Diesel Range Organics (DRO)	C10C28DRO	155	50.0	mg/kg	10.13.2020 18:12	F	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.13.2020 18:12	U	1
Total TPH	PHC635	155	50.0	mg/kg	10.13.2020 18:12		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-130	10.13.2020 18:12	
o-Terphenyl	84-15-1	115	%	70-130	10.13.2020 18:12	

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 10.13.2020 12:45

% Moisture:
Basis: Wet Weight

Seq Number: 3139613

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.0204	0.00199	mg/kg	10.13.2020 19:08		1
Toluene	108-88-3	0.143	0.00199	mg/kg	10.13.2020 19:08		1
Ethylbenzene	100-41-4	0.0915	0.00199	mg/kg	10.13.2020 19:08		1
m,p-Xylenes	179601-23-1	0.260	0.00398	mg/kg	10.13.2020 19:08		1
o-Xylene	95-47-6	0.107	0.00199	mg/kg	10.13.2020 19:08		1
Total Xylenes	1330-20-7	0.367	0.00199	mg/kg	10.13.2020 19:08		1
Total BTEX		0.622	0.00199	mg/kg	10.13.2020 19:08		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	120	%	70-130	10.13.2020 19:08	
1,4-Difluorobenzene	540-36-3	88	%	70-130	10.13.2020 19:08	

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

Lomas Rojas 26-2 Oil Transfer

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3139647

Matrix: Solid

Prep Method: E300P

Date Prep: 10.13.2020

MB Sample Id: 7713183-1-BLK

LCS Sample Id: 7713183-1-BKS

LCSD Sample Id: 7713183-1-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	263	105	90-110	0	20	mg/kg	10.13.2020 16:03	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3139647

Matrix: Soil

Prep Method: E300P

Date Prep: 10.13.2020

Parent Sample Id: 674922-007

MS Sample Id: 674922-007 S

MSD Sample Id: 674922-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	4330	1240	5760	115	5740	114	90-110	0	20	mg/kg	10.13.2020 17:51	X

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3139647

Matrix: Soil

Prep Method: E300P

Date Prep: 10.13.2020

Parent Sample Id: 674967-001

MS Sample Id: 674967-001 S

MSD Sample Id: 674967-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	299	120	284	114	90-110	5	20	mg/kg	10.13.2020 16:22	X

Analytical Method: TPH By SW8015 Mod

Seq Number: 3139655

Matrix: Solid

Prep Method: SW8015P

Date Prep: 10.13.2020

MB Sample Id: 7713206-1-BLK

LCS Sample Id: 7713206-1-BKS

LCSD Sample Id: 7713206-1-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	814	81	982	98	70-130	19	20	mg/kg	10.13.2020 14:59	
Diesel Range Organics (DRO)	<50.0	1000	876	88	1080	108	70-130	21	20	mg/kg	10.13.2020 14:59	F

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	91		100		123		70-130	%	10.13.2020 14:59
o-Terphenyl	106		105		130		70-130	%	10.13.2020 14:59

Analytical Method: TPH By SW8015 Mod

Seq Number: 3139656

Matrix: Solid

Prep Method: SW8015P

Date Prep: 10.13.2020

MB Sample Id: 7713211-1-BLK

LCS Sample Id: 7713211-1-BKS

LCSD Sample Id: 7713211-1-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	836	84	870	87	70-130	4	20	mg/kg	10.13.2020 19:49	
Diesel Range Organics (DRO)	<50.0	1000	898	90	928	93	70-130	3	20	mg/kg	10.13.2020 19:49	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	89		101		106		70-130	%	10.13.2020 19:49
o-Terphenyl	105		106		110		70-130	%	10.13.2020 19:49

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

Tetra Tech- Midland

Lomas Rojas 26-2 Oil Transfer

Analytical Method: TPH By SW8015 Mod

Seq Number: 3139655

Matrix: Solid

Prep Method: SW8015P

Date Prep: 10.13.2020

MB Sample Id: 7713206-1-BLK

Parameter

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	10.13.2020 14:40	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3139656

Matrix: Solid

Prep Method: SW8015P

Date Prep: 10.13.2020

MB Sample Id: 7713211-1-BLK

Parameter

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	10.13.2020 19:30	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3139655

Matrix: Soil

Prep Method: SW8015P

Date Prep: 10.13.2020

Parent Sample Id: 674859-001

MS Sample Id: 674859-001 S

MSD Sample Id: 674859-001 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)	<49.8	996	785	79	836	84	70-130	6	20	mg/kg	10.13.2020 16:17	
Diesel Range Organics (DRO)	<49.8	996	881	88	932	93	70-130	6	20	mg/kg	10.13.2020 16:17	

Surrogate

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	99		103		70-130	%	10.13.2020 16:17
o-Terphenyl	98		100		70-130	%	10.13.2020 16:17

Analytical Method: TPH By SW8015 Mod

Seq Number: 3139656

Matrix: Soil

Prep Method: SW8015P

Date Prep: 10.13.2020

Parent Sample Id: 674967-001

MS Sample Id: 674967-001 S

MSD Sample Id: 674967-001 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)	3150	996	4420	128	4380	123	70-130	1	20	mg/kg	10.13.2020 20:46	
Diesel Range Organics (DRO)	7170	996	8650	149	8250	108	70-130	5	20	mg/kg	10.13.2020 20:46	X

Surrogate

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	104		111		70-130	%	10.13.2020 20:46
o-Terphenyl	118		111		70-130	%	10.13.2020 20:46

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

Lomas Rojas 26-2 Oil Transfer

Analytical Method: BTEX by EPA 8021B

Seq Number: 3139613

Matrix: Solid

Prep Method: SW5035A

Date Prep: 10.13.2020

MB Sample Id: 7713153-1-BLK

LCS Sample Id: 7713153-1-BKS

LCSD Sample Id: 7713153-1-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	0.0817	82	0.0873	87	70-130	7	35	mg/kg	10.13.2020 11:17	
Toluene	<0.00200	0.100	0.0837	84	0.0976	98	70-130	15	35	mg/kg	10.13.2020 11:17	
Ethylbenzene	<0.00200	0.100	0.0913	91	0.0982	98	70-130	7	35	mg/kg	10.13.2020 11:17	
m,p-Xylenes	<0.00400	0.200	0.185	93	0.199	100	70-130	7	35	mg/kg	10.13.2020 11:17	
o-Xylene	<0.00200	0.100	0.0930	93	0.100	100	70-130	7	35	mg/kg	10.13.2020 11:17	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		97		98		70-130	%	10.13.2020 11:17
4-Bromofluorobenzene	111		101		100		70-130	%	10.13.2020 11:17

Analytical Method: BTEX by EPA 8021B

Seq Number: 3139611

Matrix: Solid

Prep Method: SW5035A

Date Prep: 10.13.2020

MB Sample Id: 7713152-1-BLK

LCS Sample Id: 7713152-1-BKS

LCSD Sample Id: 7713152-1-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	0.120	120	0.122	122	70-130	2	35	mg/kg	10.13.2020 22:06	
Toluene	<0.00200	0.100	0.116	116	0.119	119	70-130	3	35	mg/kg	10.13.2020 22:06	
Ethylbenzene	<0.00200	0.100	0.109	109	0.111	111	70-130	2	35	mg/kg	10.13.2020 22:06	
m,p-Xylenes	<0.00400	0.200	0.239	120	0.238	119	70-130	0	35	mg/kg	10.13.2020 22:06	
o-Xylene	<0.00200	0.100	0.112	112	0.113	113	70-130	1	35	mg/kg	10.13.2020 22:06	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	88		96		101		70-130	%	10.13.2020 22:06
4-Bromofluorobenzene	89		109		105		70-130	%	10.13.2020 22:06

Analytical Method: BTEX by EPA 8021B

Seq Number: 3139699

Matrix: Solid

Prep Method: SW5035A

Date Prep: 10.14.2020

MB Sample Id: 7713255-1-BLK

LCS Sample Id: 7713255-1-BKS

LCSD Sample Id: 7713255-1-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	0.0865	87	70-130	23	35	mg/kg	10.14.2020 13:35	
Toluene	<0.00200	0.100	0.0921	92	0.0930	93	70-130	1	35	mg/kg	10.14.2020 13:35	
Ethylbenzene	<0.00200	0.100	0.0932	93	0.0922	92	70-130	1	35	mg/kg	10.14.2020 13:35	
m,p-Xylenes	<0.00400	0.200	0.195	98	0.196	98	70-130	1	35	mg/kg	10.14.2020 13:35	
o-Xylene	<0.00200	0.100	0.0954	95	0.0937	94	70-130	2	35	mg/kg	10.14.2020 13:35	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	90		136	**	97		70-130	%	10.14.2020 13:35
4-Bromofluorobenzene	94		116		114		70-130	%	10.14.2020 13:35

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

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

Lomas Rojas 26-2 Oil Transfer

Analytical Method: BTEX by EPA 8021B

Seq Number: 3139732

Matrix: Solid

Prep Method: SW5035A

Date Prep: 10.14.2020

MB Sample Id: 7713289-1-BLK

LCS Sample Id: 7713289-1-BKS

LCSD Sample Id: 7713289-1-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	0.0742	74	0.0776	78	70-130	4	35	mg/kg	10.15.2020 01:39	
Toluene	<0.00200	0.100	0.0824	82	0.0813	81	70-130	1	35	mg/kg	10.15.2020 01:39	
Ethylbenzene	<0.00200	0.100	0.0801	80	0.0815	82	70-130	2	35	mg/kg	10.15.2020 01:39	
m,p-Xylenes	<0.00400	0.200	0.167	84	0.169	85	70-130	1	35	mg/kg	10.15.2020 01:39	
o-Xylene	<0.00200	0.100	0.0870	87	0.0842	84	70-130	3	35	mg/kg	10.15.2020 01:39	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	89		101		100		70-130	%	10.15.2020 01:39
4-Bromofluorobenzene	94		110		109		70-130	%	10.15.2020 01:39

Analytical Method: BTEX by EPA 8021B

Seq Number: 3139613

Matrix: Soil

Prep Method: SW5035A

Date Prep: 10.13.2020

Parent Sample Id: 674949-001

MS Sample Id: 674949-001 S

MSD Sample Id: 674949-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0676	67	0.0680	67	70-130	1	35	mg/kg	10.13.2020 11:57	X
Toluene	<0.00202	0.101	0.0629	62	0.0534	53	70-130	16	35	mg/kg	10.13.2020 11:57	X
Ethylbenzene	<0.00202	0.101	0.0493	49	0.0435	43	70-130	13	35	mg/kg	10.13.2020 11:57	X
m,p-Xylenes	<0.00403	0.202	0.0994	49	0.0875	43	70-130	13	35	mg/kg	10.13.2020 11:57	X
o-Xylene	<0.00202	0.101	0.0490	49	0.0428	42	70-130	14	35	mg/kg	10.13.2020 11:57	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	94		101		70-130	%	10.13.2020 11:57
4-Bromofluorobenzene	107		103		70-130	%	10.13.2020 11:57

Analytical Method: BTEX by EPA 8021B

Seq Number: 3139611

Matrix: Soil

Prep Method: SW5035A

Date Prep: 10.13.2020

Parent Sample Id: 674967-001

MS Sample Id: 674967-001 S

MSD Sample Id: 674967-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	3.37	0.0998	2.68	0	2.82	0	70-130	5	35	mg/kg	10.13.2020 22:47	X
Toluene	40.6	0.0998	32.6	0	33.5	0	70-130	3	35	mg/kg	10.13.2020 22:47	X
Ethylbenzene	18.1	0.0998	15.5	0	15.8	0	70-130	2	35	mg/kg	10.13.2020 22:47	X
m,p-Xylenes	43.7	0.200	35.3	0	36.0	0	70-130	2	35	mg/kg	10.13.2020 22:47	X
o-Xylene	18.4	0.0998	19.2	802	19.3	900	70-130	1	35	mg/kg	10.13.2020 22:47	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	400	**	423	**	70-130	%	10.13.2020 22:47
4-Bromofluorobenzene	8833	**	8733	**	70-130	%	10.13.2020 22:47

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

Lomas Rojas 26-2 Oil Transfer

Analytical Method: BTEX by EPA 8021B

Seq Number: 3139699

Parent Sample Id: 674970-001

Matrix: Soil

MS Sample Id: 674970-001 S

Prep Method: SW5035A

Date Prep: 10.14.2020

MSD Sample Id: 674970-001 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	0.133	134	0.138	138	70-130	4	35	mg/kg	10.14.2020 14:19	X
Toluene	0.00745	0.0990	0.129	123	0.134	127	70-130	4	35	mg/kg	10.14.2020 14:19	
Ethylbenzene	<0.00198	0.0990	0.114	115	0.116	116	70-130	2	35	mg/kg	10.14.2020 14:19	
m,p-Xylenes	<0.00396	0.198	0.247	125	0.250	125	70-130	1	35	mg/kg	10.14.2020 14:19	
o-Xylene	<0.00198	0.0990	0.111	112	0.114	114	70-130	3	35	mg/kg	10.14.2020 14:19	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	106		104		70-130	%	10.14.2020 14:19
4-Bromofluorobenzene	122		128		70-130	%	10.14.2020 14:19

Analytical Method: BTEX by EPA 8021B

Seq Number: 3139732

Parent Sample Id: 675036-001

Matrix: Soil

MS Sample Id: 675036-001 S

Prep Method: SW5035A

Date Prep: 10.14.2020

MSD Sample Id: 675036-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0995	100	0.105	105	70-130	5	35	mg/kg	10.15.2020 02:20	
Toluene	<0.00200	0.0998	0.0899	90	0.0942	94	70-130	5	35	mg/kg	10.15.2020 02:20	
Ethylbenzene	<0.00200	0.0998	0.0771	77	0.0820	82	70-130	6	35	mg/kg	10.15.2020 02:20	
m,p-Xylenes	<0.00399	0.200	0.159	80	0.170	85	70-130	7	35	mg/kg	10.15.2020 02:20	
o-Xylene	<0.00200	0.0998	0.0773	77	0.0815	82	70-130	5	35	mg/kg	10.15.2020 02:20	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		98		70-130	%	10.15.2020 02:20
4-Bromofluorobenzene	104		107		70-130	%	10.15.2020 02:20

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

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

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

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

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

674967 Page 1 of 3

Client Name: EOG		Site Manager: Mike Carmona	
Project Name: Lomas Rojas 26-2 Oil Transfer			
Project Location: Lea Co, NM		Project #: 212C-MD-02319	
Invoice to: EOG - Todd Wells			
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: 2020				
	Trench 1 (3)	10/12/2020		X		X						1 N	X	BTEX 8021B BTEX 8260B
	Trench 1 (4)	10/12/2020		X		X						1 N	X	TPH TX1005 (Ext to C35)
	Trench 1 (5)	10/12/2020		X		X						1 N	X	TPH 8015M (GRO - DRO - ORO - MRO)
	Trench 1 (6)	10/12/2020		X		X						1 N	X	PAH 8270C
	Trench 1 (7)	10/12/2020		X		X						1 N	X	Total Metals Ag As Ba Cd Cr Pb Se Hg
	Trench 1 (8)	10/12/2020		X		X						1 N	X	TCLP Metals Ag As Ba Cd Cr Pb Se Hg
	Trench 1 (9)	10/12/2020		X		X						1 N	X	TCLP Volatiles
	Trench 1 (10)	10/12/2020		X		X						1 N	X	TCLP Semi Volatiles
	Trench 1 (11)	10/12/2020		X		X						1 N	X	RCI
	Trench 1 (12)	10/12/2020		X		X						1 N	X	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

Chain of Custody by: <i>Conner Moehring</i> Date: 10/13/2020 Time: 11:50 Received by: <i>[Signature]</i> Date: 10/13/2020 Time: 11:50 Date: Time:	Received by: Date: Time:
---	--------------------------

LAB USE ONLY Sample Temperature: 26.8/26.3 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 #:
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ORIGINAL COPY

Analysis Request of Custody Record



Tetra Tech, Inc.

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

674967 Page

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Client Name: EOG		Site Manager: Mike Carmona						
Project Name: Lomas Rojas 26-2 Oil Transfer								
Project Location: Lea Co. NM		Project #: 212C-MD-02319						
Invoice to: EOG - Todd Wells								
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.)
		YEAR: 2020	DATE					
	Trench 2 (3')	10/12/2020			X	X	1 N	BTEX 8021B BTEX 8260B
	Trench 2 (4')	10/12/2020			X	X	1 N	TPH TX1005 (Ext to C35)
	Trench 2 (5')	10/12/2020			X	X	1 N	TPH 8015M (GRO - DRO - ORO - MRO)
	Trench 2 (6')	10/12/2020			X	X	1 N	PAH 8270C
	Trench 2 (7')	10/12/2020			X	X	1 N	Total Metals Ag As Ba Cd Cr Pb Se Hg
	Trench 2 (8')	10/12/2020			X	X	1 N	TCLP Metals Ag As Ba Cd Cr Pb Se Hg
	Trench 3 (3')	10/12/2020			X	X	1 N	TCLP Volatiles
	Trench 3 (4')	10/12/2020			X	X	1 N	TCLP Semi Volatiles
	Trench 3 (5')	10/12/2020			X	X	1 N	RCI
	Trench 3 (6')	10/12/2020			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
Surrendered by: <i>Conner Moehring</i>		Date: 10/13/2020	Time:	Received by: <i>[Signature]</i>	Date: 10/13/2020	Time: 11:55		
Surrendered by:		Date:	Time:	Received by:	Date:	Time:		
Surrendered by:		Date:	Time:	Received by:	Date:	Time:		

ORIGINAL COPY

LAB USE ONLY

REMARKS:

☐ STANDARD

☒ RUSH: Same Day 24 hr 48 hr (42 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.

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

EOG

Site Manager:

Mike Carmona

Lomas Rojas 26-2 Oil Transfer

Project Location

Lea Co, NM

Project #

212C-MD-02319

Invoice to:

EOG - Todd Wells

Receiving Laboratory:

Xenco

Sampler Signature:

Conner Moehring

Comments:

[illegible]

ANALYSIS REQUEST

(Circle or Specify Method No.)

Page 674967

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ORIGINAL COPY

(Circle)	HAND DELIVERED	FEDEX	UPS	Tracking #
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Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 10.13.2020 11.56.00 AM

Work Order #: 674967

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	-6.3
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	N/A
#18 Water VOC samples have zero headspace?	N/A

TPH/BTEX was in bulk container

* 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: 10.13.2020

Checklist reviewed by:



Jessica Kramer

Date: 10.13.2020

Certificate of Analysis Summary 685477



Tetra Tech- Midland, Midland, TX

Project Name: Lomas Rojas 26-2 Oil Transfer Line

Project Id:

Date Received in Lab: Thu 01.21.2021 09:05

Contact: Brittany Long

Report Date: 01.25.2021 16:02

Project Location: Lea County, New Mexico

Project Manager: Jessica Kramer

Analysis Requested	Lab Id: Field Id: Depth: Matrix: Sampled:	685477-001 Bottomhole-1 (8') SOIL 01.20.2021 00:00	685477-002 Bottomhole-2 (8') SOIL 01.20.2021 00:00				
BTEX by EPA 8021B	Extracted: Analyzed: Units/RL:	01.21.2021 16:00 01.22.2021 01:09 mg/kg RL	01.21.2021 16:00 01.22.2021 01:34 mg/kg RL				
Benzene		0.00484 0.00200	0.00764 0.00201				
Toluene		0.168 D 0.0200	0.300 0.00201				
Ethylbenzene		0.378 0.00200	0.245 0.00201				
m,p-Xylenes		0.829 D 0.0399	0.643 0.00402				
o-Xylene		0.372 D 0.0200	0.335 0.00201				
Total Xylenes		1.20 0.0200	0.978 0.00201				
Total BTEX		1.75 0.00200	1.53 0.00201				
Inorganic Anions by EPA 300/300.1	Extracted: Analyzed: Units/RL:	01.21.2021 12:15 01.21.2021 15:33 mg/kg RL	01.21.2021 12:15 01.21.2021 15:49 mg/kg RL				
Chloride		8.51 X 5.00	7.92 5.03				
TPH By SW8015 Mod	Extracted: Analyzed: Units/RL:	01.21.2021 11:00 01.21.2021 12:57 mg/kg RL	01.21.2021 11:00 01.21.2021 14:03 mg/kg RL				
Gasoline Range Hydrocarbons (GRO)		97.1 50.0	72.9 49.9				
Diesel Range Organics (DRO)		364 50.0	297 49.9				
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9				
Total TPH		461 50.0	370 49.9				

BRL - Below Reporting Limit

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

Analytical Report 685477

for

Tetra Tech- Midland

Project Manager: Brittany Long

Lomas Rojas 26-2 Oil Transfer Line

01.25.2021

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)



01.25.2021

Project Manager: **Brittany Long**

Tetra Tech- Midland

901 West Wall ST

Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **685477**

Lomas Rojas 26-2 Oil Transfer Line

Project Address: Lea County, New Mexico

Brittany Long:

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) 685477. 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. 685477 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 685477

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Bottomhole-1 (8')	S	01.20.2021 00:00		685477-001
Bottomhole-2 (8')	S	01.20.2021 00:00		685477-002

**CASE NARRATIVE****Client Name: Tetra Tech- Midland****Project Name: Lomas Rojas 26-2 Oil Transfer Line**Project ID:
Work Order Number(s): 685477Report Date: 01.25.2021
Date Received: 01.21.2021**Sample receipt non conformances and comments:****Sample receipt non conformances and comments per sample:**

None

Analytical non conformances and comments:

Batch: LBA-3148555 Inorganic Anions by EPA 300/300.1

Lab Sample ID 685477-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 685477-001, -002.

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

Batch: LBA-3148562 BTEX by EPA 8021B

Surrogate 1,4-Difluorobenzene recovered below QC limits. Matrix interferences is suspected; Samples affected are: 685339-002 SD, 685477-002.

Surrogate 4-Bromofluorobenzene recovered below QC limits Samples affected are: 7719745-1-BLK, 685339-002 SD.



Certificate of Analytical Results 685477

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **Bottomhole-1 (8')** Matrix: Soil Date Received: 01.21.2021 09:05
 Lab Sample Id: 685477-001 Date Collected: 01.20.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.21.2021 12:15 % Moisture:
 Seq Number: 3148555 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8.51	5.00	mg/kg	01.21.2021 15:33	X	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: ARM
 Analyst: ARM Date Prep: 01.21.2021 11:00 % Moisture:
 Seq Number: 3148634 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	97.1	50.0	mg/kg	01.21.2021 12:57		1
Diesel Range Organics (DRO)	C10C28DRO	364	50.0	mg/kg	01.21.2021 12:57		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.21.2021 12:57	U	1
Total TPH	PHC635	461	50.0	mg/kg	01.21.2021 12:57		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	106	%	70-130	01.21.2021 12:57		
o-Terphenyl	84-15-1	125	%	70-130	01.21.2021 12:57		



Certificate of Analytical Results 685477

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **Bottomhole-1 (8')**

Matrix: Soil

Date Received: 01.21.2021 09:05

Lab Sample Id: 685477-001

Date Collected: 01.20.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.21.2021 16:00

% Moisture:

Seq Number: 3148562

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00484	0.00200	mg/kg	01.22.2021 01:09		1
Toluene	108-88-3	0.168	0.0200	mg/kg	01.24.2021 05:09	D	10
Ethylbenzene	100-41-4	0.378	0.00200	mg/kg	01.22.2021 01:09		1
m,p-Xylenes	179601-23-1	0.829	0.0399	mg/kg	01.24.2021 05:09	D	10
o-Xylene	95-47-6	0.372	0.0200	mg/kg	01.24.2021 05:09	D	10
Total Xylenes	1330-20-7	1.20	0.0200	mg/kg	01.24.2021 05:09		10
Total BTEX		1.75	0.00200	mg/kg	01.24.2021 05:09		10
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	332	%	70-130	01.22.2021 01:09	**	
1,4-Difluorobenzene	540-36-3	85	%	70-130	01.22.2021 01:09		



Certificate of Analytical Results 685477

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **Bottomhole-2 (8')**

Matrix: Soil

Date Received: 01.21.2021 09:05

Lab Sample Id: 685477-002

Date Collected: 01.20.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.21.2021 12:15

% Moisture:

Seq Number: 3148555

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7.92	5.03	mg/kg	01.21.2021 15:49		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: ARM

Analyst: ARM

Date Prep: 01.21.2021 11:00

% Moisture:

Seq Number: 3148634

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	72.9	49.9	mg/kg	01.21.2021 14:03		1
Diesel Range Organics (DRO)	C10C28DRO	297	49.9	mg/kg	01.21.2021 14:03		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.21.2021 14:03	U	1
Total TPH	PHC635	370	49.9	mg/kg	01.21.2021 14:03		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	105	%	70-130	01.21.2021 14:03		
o-Terphenyl	84-15-1	125	%	70-130	01.21.2021 14:03		



Certificate of Analytical Results 685477

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **Bottomhole-2 (8')**

Matrix: Soil

Date Received: 01.21.2021 09:05

Lab Sample Id: 685477-002

Date Collected: 01.20.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.21.2021 16:00

% Moisture:

Seq Number: 3148562

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00764	0.00201	mg/kg	01.22.2021 01:34		1
Toluene	108-88-3	0.300	0.00201	mg/kg	01.22.2021 01:34		1
Ethylbenzene	100-41-4	0.245	0.00201	mg/kg	01.22.2021 01:34		1
m,p-Xylenes	179601-23-1	0.643	0.00402	mg/kg	01.22.2021 01:34		1
o-Xylene	95-47-6	0.335	0.00201	mg/kg	01.22.2021 01:34		1
Total Xylenes	1330-20-7	0.978	0.00201	mg/kg	01.22.2021 01:34		1
Total BTEX		1.53	0.00201	mg/kg	01.22.2021 01:34		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	51	%	70-130	01.22.2021 01:34	**	
4-Bromofluorobenzene	460-00-4	196	%	70-130	01.22.2021 01:34	**	

Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **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

Lomas Rojas 26-2 Oil Transfer Line

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3148555

Matrix: Solid

Prep Method: E300P

Date Prep: 01.21.2021

MB Sample Id: 7719678-1-BLK

LCS Sample Id: 7719678-1-BKS

LCSD Sample Id: 7719678-1-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	251	100	90-110	0	20	mg/kg	01.21.2021 15:22	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3148555

Matrix: Soil

Prep Method: E300P

Date Prep: 01.21.2021

Parent Sample Id: 685448-021

MS Sample Id: 685448-021 S

MSD Sample Id: 685448-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	9.98	250	300	116	260	100	90-110	14	20	mg/kg	01.21.2021 16:53	X

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3148555

Matrix: Soil

Prep Method: E300P

Date Prep: 01.21.2021

Parent Sample Id: 685477-001

MS Sample Id: 685477-001 S

MSD Sample Id: 685477-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	8.51	250	288	112	291	113	90-110	1	20	mg/kg	01.21.2021 15:38	X

Analytical Method: TPH By SW8015 Mod

Seq Number: 3148634

Matrix: Solid

Prep Method: SW8015P

Date Prep: 01.21.2021

MB Sample Id: 7719782-1-BLK

LCS Sample Id: 7719782-1-BKS

LCSD Sample Id: 7719782-1-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	1120	112	70-130	5	20	mg/kg	01.21.2021 12:14	
Diesel Range Organics (DRO)	<50.0	1000	1150	115	1140	114	70-130	1	20	mg/kg	01.21.2021 12:14	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane	96		111		119		70-130	%	01.21.2021 12:14			
o-Terphenyl	113		124		130		70-130	%	01.21.2021 12:14			

Analytical Method: TPH By SW8015 Mod

Seq Number: 3148634

Matrix: Solid

Prep Method: SW8015P

Date Prep: 01.21.2021

MB Sample Id: 7719782-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.21.2021 11:52	

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

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

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

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



Tetra Tech- Midland

Lomas Rojas 26-2 Oil Transfer Line

Analytical Method: TPH By SW8015 Mod

Seq Number: 3148634

Parent Sample Id: 685477-001

Matrix: Soil

MS Sample Id: 685477-001 S

Prep Method: SW8015P

Date Prep: 01.21.2021

MSD Sample Id: 685477-001 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)	97.1	997	1050	96	1080	99	70-130	3	20	mg/kg	01.21.2021 13:19	
Diesel Range Organics (DRO)	364	997	1350	99	1370	101	70-130	1	20	mg/kg	01.21.2021 13:19	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	111		110		70-130	%	01.21.2021 13:19
o-Terphenyl	116		118		70-130	%	01.21.2021 13:19

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148562

MB Sample Id: 7719745-1-BLK

Matrix: Solid

LCS Sample Id: 7719745-1-BKS

Prep Method: SW5035A

Date Prep: 01.21.2021

LCSD Sample Id: 7719745-1-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	0.0981	98	0.102	102	70-130	4	35	mg/kg	01.21.2021 19:07	
Toluene	<0.00200	0.100	0.0815	82	0.102	102	70-130	22	35	mg/kg	01.21.2021 19:07	
Ethylbenzene	<0.00200	0.100	0.0913	91	0.0993	99	70-130	8	35	mg/kg	01.21.2021 19:07	
m,p-Xylenes	<0.00400	0.200	0.189	95	0.204	102	70-130	8	35	mg/kg	01.21.2021 19:07	
o-Xylene	<0.00200	0.100	0.0921	92	0.0997	100	70-130	8	35	mg/kg	01.21.2021 19:07	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	84		102		99		70-130	%	01.21.2021 19:07
4-Bromofluorobenzene	65	**	94		101		70-130	%	01.21.2021 19:07

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148562

Parent Sample Id: 685339-002

Matrix: Soil

MS Sample Id: 685339-002 S

Prep Method: SW5035A

Date Prep: 01.21.2021

MSD Sample Id: 685339-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0879	88	0.0127	13	70-130	150	35	mg/kg	01.21.2021 19:59	XF
Toluene	<0.00200	0.0998	0.0897	90	0.0105	11	70-130	158	35	mg/kg	01.21.2021 19:59	XF
Ethylbenzene	0.00295	0.0998	0.0797	77	0.0105	8	70-130	153	35	mg/kg	01.21.2021 19:59	XF
m,p-Xylenes	0.00604	0.200	0.157	75	0.0220	8	70-130	151	35	mg/kg	01.21.2021 19:59	XF
o-Xylene	0.00141	0.0998	0.0792	78	0.0113	10	70-130	150	35	mg/kg	01.21.2021 19:59	XF

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	87		13	**	70-130	%	01.21.2021 19:59
4-Bromofluorobenzene	128		18	**	70-130	%	01.21.2021 19:59

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, Inc.

900 West Wall Street, Ste 100
Midland, Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

025477

[illegible]

ORIGINAL COPY

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 01.21.2021 09.05.00 AM

Work Order #: 685477

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)?	5
#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: 01.21.2021

Checklist reviewed by:



Jessica Kramer

Date: 01.22.2021

Certificate of Analysis Summary 685479



Tetra Tech- Midland, Midland, TX

Project Name: Lomas Rojas 26-2 Oil Transfer Line

Project Id:

Date Received in Lab: Thu 01.21.2021 09:05

Contact: Brittany Long

Report Date: 01.22.2021 16:22

Project Location: Lea County, New Mexico

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>	685479-001 Bottomhole-3 (8')	685479-002 Bottomhole-4 (8')	685479-003 SW-1	685479-004 SW-2	685479-005 SW-3	685479-006 SW-4
BTEX by EPA 8021B	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.21.2021 16:00 01.22.2021 06:19 mg/kg RL	01.21.2021 16:00 01.22.2021 06:44 mg/kg RL	01.21.2021 16:00 01.22.2021 07:09 mg/kg RL	01.21.2021 16:00 01.22.2021 07:35 mg/kg RL	01.21.2021 17:00 01.21.2021 20:32 mg/kg RL	01.21.2021 17:00 01.21.2021 20:53 mg/kg RL
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	0.00346 0.00200
Ethylbenzene		0.00230 0.00200	<0.00200 0.00200	0.00534 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		0.0101 0.00401	0.00431 0.00399	0.00456 0.00398	<0.00399 0.00399	<0.00401 0.00401	<0.00399 0.00399
o-Xylene		0.00522 0.00200	0.00359 0.00200	0.0393 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		0.0153 0.00200	0.00790 0.00200	0.0439 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		0.0176 0.00200	0.00790 0.00200	0.0492 0.00199	<0.00200 0.00200	<0.00200 0.00200	0.00346 0.00200
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.21.2021 12:15 01.21.2021 15:54 mg/kg RL	01.21.2021 12:15 01.21.2021 15:59 mg/kg RL	01.21.2021 12:15 01.21.2021 16:05 mg/kg RL	01.21.2021 12:15 01.21.2021 16:21 mg/kg RL	01.21.2021 12:15 01.21.2021 16:26 mg/kg RL	01.21.2021 12:15 01.21.2021 16:31 mg/kg RL
Chloride		8.20 4.96	9.19 4.99	8.37 4.96	8.04 5.03	8.08 5.00	8.86 4.97
TPH By SW8015 Mod	<i>Extracted:</i> <i>Analyzed:</i> <i>Units/RL:</i>	01.21.2021 11:00 01.21.2021 14:25 mg/kg RL	01.21.2021 11:00 01.21.2021 14:46 mg/kg RL	01.21.2021 11:00 01.21.2021 15:08 mg/kg RL	01.21.2021 11:00 01.21.2021 15:30 mg/kg RL	01.21.2021 11:00 01.21.2021 15:52 mg/kg RL	01.21.2021 11:00 01.21.2021 16:14 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	<49.9 49.9
Diesel Range Organics (DRO)		91.0 50.0	157 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9
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	<49.9 49.9
Total TPH		91.0 50.0	157 49.9	<49.9 49.9	<49.8 49.8	<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 685479



Tetra Tech- Midland, Midland, TX

Project Name: Lomas Rojas 26-2 Oil Transfer Line

Project Id:

Date Received in Lab: Thu 01.21.2021 09:05

Contact: Brittany Long

Report Date: 01.22.2021 16:22

Project Location: Lea County, New Mexico

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	685479-007	685479-008				
	Field Id:	SW-5	SW-6				
	Depth:						
	Matrix:	SOIL	SOIL				
	Sampled:	01.20.2021 00:00	01.20.2021 00:00				
BTEX by EPA 8021B	Extracted:	01.21.2021 17:00	01.21.2021 17:00				
	Analyzed:	01.21.2021 21:14	01.21.2021 21:34				
	Units/RL:	mg/kg RL	mg/kg RL				
Benzene		0.00228 0.00200	0.00992 0.00200				
Toluene		0.00658 0.00200	0.0214 0.00200				
Ethylbenzene		<0.00200 0.00200	0.00370 0.00200				
m,p-Xylenes		<0.00399 0.00399	0.00520 0.00401				
o-Xylene		<0.00200 0.00200	0.00239 0.00200				
Total Xylenes		<0.00200 0.00200	0.00759 0.00200				
Total BTEX		0.00886 0.00200	0.0426 0.00200				
Inorganic Anions by EPA 300/300.1	Extracted:	01.21.2021 12:15	01.21.2021 12:15				
	Analyzed:	01.21.2021 16:37	01.21.2021 16:42				
	Units/RL:	mg/kg RL	mg/kg RL				
Chloride		8.41 4.96	9.74 5.03				
TPH By SW8015 Mod	Extracted:	01.21.2021 11:00	01.21.2021 11:00				
	Analyzed:	01.21.2021 16:36	01.21.2021 16:57				
	Units/RL:	mg/kg RL	mg/kg RL				
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<49.8 49.8				
Diesel Range Organics (DRO)		<49.9 49.9	<49.8 49.8				
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<49.8 49.8				
Total TPH		<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

Analytical Report 685479

for

Tetra Tech- Midland

Project Manager: Brittany Long

Lomas Rojas 26-2 Oil Transfer Line

01.22.2021

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)



01.22.2021

Project Manager: **Brittany Long**

Tetra Tech- Midland

901 West Wall ST

Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **685479**

Lomas Rojas 26-2 Oil Transfer Line

Project Address: Lea County, New Mexico

Brittany Long:

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) 685479. 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. 685479 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 685479****Tetra Tech- Midland, Midland, TX**

Lomas Rojas 26-2 Oil Transfer Line

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Bottomhole-3 (8')	S	01.20.2021 00:00		685479-001
Bottomhole-4 (8')	S	01.20.2021 00:00		685479-002
SW-1	S	01.20.2021 00:00		685479-003
SW-2	S	01.20.2021 00:00		685479-004
SW-3	S	01.20.2021 00:00		685479-005
SW-4	S	01.20.2021 00:00		685479-006
SW-5	S	01.20.2021 00:00		685479-007
SW-6	S	01.20.2021 00:00		685479-008

**CASE NARRATIVE****Client Name: Tetra Tech- Midland****Project Name: Lomas Rojas 26-2 Oil Transfer Line**Project ID:
Work Order Number(s): 685479Report Date: 01.22.2021
Date Received: 01.21.2021**Sample receipt non conformances and comments:****Sample receipt non conformances and comments per sample:**

None

Analytical non conformances and comments:

Batch: LBA-3148562 BTEX by EPA 8021B

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

Samples affected are: 685339-002 SD, 685479-002.

Surrogate 4-Bromofluorobenzene recovered below QC limits Samples affected are: 7719745-1-BLK, 685339-002 SD.

Batch: LBA-3148582 BTEX by EPA 8021B

Lab Sample ID 685479-005 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). m,p-Xylenes recovered above QC limits in the Matrix Spike. Benzene, Ethylbenzene, Toluene, o-Xylene recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 685479-005, -006, -007, -008.

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-3148634 TPH By SW8015 Mod

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

Samples affected are: 685479-002.



Certificate of Analytical Results 685479

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **Bottomhole-3 (8')** Matrix: Soil Date Received: 01.21.2021 09:05

Lab Sample Id: 685479-001 Date Collected: 01.20.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.21.2021 12:15

% Moisture:
Basis: Wet Weight

Seq Number: 3148555

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8.20	4.96	mg/kg	01.21.2021 15:54		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: ARM

Analyst: ARM

Date Prep: 01.21.2021 11:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148634

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.21.2021 14:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	91.0	50.0	mg/kg	01.21.2021 14:25		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.21.2021 14:25	U	1
Total TPH	PHC635	91.0	50.0	mg/kg	01.21.2021 14:25		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-130	01.21.2021 14:25	
o-Terphenyl	84-15-1	125	%	70-130	01.21.2021 14:25	



Certificate of Analytical Results 685479

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **Bottomhole-3 (8')**

Matrix: Soil

Date Received: 01.21.2021 09:05

Lab Sample Id: 685479-001

Date Collected: 01.20.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.21.2021 16:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148562

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.22.2021 06:19	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.22.2021 06:19	U	1
Ethylbenzene	100-41-4	0.00230	0.00200	mg/kg	01.22.2021 06:19		1
m,p-Xylenes	179601-23-1	0.0101	0.00401	mg/kg	01.22.2021 06:19		1
o-Xylene	95-47-6	0.00522	0.00200	mg/kg	01.22.2021 06:19		1
Total Xylenes	1330-20-7	0.0153	0.00200	mg/kg	01.22.2021 06:19		1
Total BTEX		0.0176	0.00200	mg/kg	01.22.2021 06:19		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	83	%	70-130	01.22.2021 06:19	
4-Bromofluorobenzene	460-00-4	109	%	70-130	01.22.2021 06:19	



Certificate of Analytical Results 685479

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **Bottomhole-4 (8')** Matrix: Soil Date Received: 01.21.2021 09:05
 Lab Sample Id: 685479-002 Date Collected: 01.20.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.21.2021 12:15 % Moisture:
 Seq Number: 3148555 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9.19	4.99	mg/kg	01.21.2021 15:59		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: ARM
 Analyst: ARM Date Prep: 01.21.2021 11:00 % Moisture:
 Seq Number: 3148634 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.21.2021 14:46	U	1
Diesel Range Organics (DRO)	C10C28DRO	157	49.9	mg/kg	01.21.2021 14:46		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.21.2021 14:46	U	1
Total TPH	PHC635	157	49.9	mg/kg	01.21.2021 14:46		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	105	%	70-130	01.21.2021 14:46		
o-Terphenyl	84-15-1	131	%	70-130	01.21.2021 14:46	**	



Certificate of Analytical Results 685479

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **Bottomhole-4 (8')**

Matrix: Soil

Date Received: 01.21.2021 09:05

Lab Sample Id: 685479-002

Date Collected: 01.20.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.21.2021 16:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148562

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.22.2021 06:44	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.22.2021 06:44	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.22.2021 06:44	U	1
m,p-Xylenes	179601-23-1	0.00431	0.00399	mg/kg	01.22.2021 06:44		1
o-Xylene	95-47-6	0.00359	0.00200	mg/kg	01.22.2021 06:44		1
Total Xylenes	1330-20-7	0.00790	0.00200	mg/kg	01.22.2021 06:44		1
Total BTEX		0.00790	0.00200	mg/kg	01.22.2021 06:44		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	86	%	70-130	01.22.2021 06:44		
1,4-Difluorobenzene	540-36-3	57	%	70-130	01.22.2021 06:44	**	



Certificate of Analytical Results 685479

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **SW-1**
Lab Sample Id: 685479-003

Matrix: Soil
Date Collected: 01.20.2021 00:00

Date Received: 01.21.2021 09:05

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.21.2021 12:15

% Moisture:
Basis: Wet Weight

Seq Number: 3148555

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8.37	4.96	mg/kg	01.21.2021 16:05		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: ARM

Analyst: ARM

Date Prep: 01.21.2021 11:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148634

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.21.2021 15:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.21.2021 15:08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.21.2021 15:08	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.21.2021 15:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-130	01.21.2021 15:08	
o-Terphenyl	84-15-1	124	%	70-130	01.21.2021 15:08	



Certificate of Analytical Results 685479

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **SW-1**
Lab Sample Id: 685479-003

Matrix: Soil
Date Collected: 01.20.2021 00:00

Date Received: 01.21.2021 09:05

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.21.2021 16:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148562

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.22.2021 07:09	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.22.2021 07:09	U	1
Ethylbenzene	100-41-4	0.00534	0.00199	mg/kg	01.22.2021 07:09		1
m,p-Xylenes	179601-23-1	0.00456	0.00398	mg/kg	01.22.2021 07:09		1
o-Xylene	95-47-6	0.0393	0.00199	mg/kg	01.22.2021 07:09		1
Total Xylenes	1330-20-7	0.0439	0.00199	mg/kg	01.22.2021 07:09		1
Total BTEX		0.0492	0.00199	mg/kg	01.22.2021 07:09		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	01.22.2021 07:09		
1,4-Difluorobenzene	540-36-3	80	%	70-130	01.22.2021 07:09		



Certificate of Analytical Results 685479

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **SW-2**
Lab Sample Id: 685479-004

Matrix: Soil
Date Collected: 01.20.2021 00:00

Date Received: 01.21.2021 09:05

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.21.2021 12:15

% Moisture:
Basis: Wet Weight

Seq Number: 3148555

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8.04	5.03	mg/kg	01.21.2021 16:21		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: ARM

Analyst: ARM

Date Prep: 01.21.2021 11:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148634

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.21.2021 15:30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.21.2021 15:30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.21.2021 15:30	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.21.2021 15:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-130	01.21.2021 15:30	
o-Terphenyl	84-15-1	128	%	70-130	01.21.2021 15:30	



Certificate of Analytical Results 685479

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **SW-2**
Lab Sample Id: 685479-004

Matrix: Soil
Date Collected: 01.20.2021 00:00

Date Received: 01.21.2021 09:05

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.21.2021 16:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148562

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.22.2021 07:35	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.22.2021 07:35	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.22.2021 07:35	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.22.2021 07:35	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.22.2021 07:35	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.22.2021 07:35	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.22.2021 07:35	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	01.22.2021 07:35		
1,4-Difluorobenzene	540-36-3	90	%	70-130	01.22.2021 07:35		



Certificate of Analytical Results 685479

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **SW-3**
Lab Sample Id: 685479-005

Matrix: Soil
Date Collected: 01.20.2021 00:00

Date Received: 01.21.2021 09:05

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.21.2021 12:15

% Moisture:
Basis: Wet Weight

Seq Number: 3148555

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8.08	5.00	mg/kg	01.21.2021 16:26		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: ARM

Analyst: ARM

Date Prep: 01.21.2021 11:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148634

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.21.2021 15:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.21.2021 15:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.21.2021 15:52	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.21.2021 15:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-130	01.21.2021 15:52	
o-Terphenyl	84-15-1	122	%	70-130	01.21.2021 15:52	



Certificate of Analytical Results 685479

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **SW-3**
Lab Sample Id: 685479-005

Matrix: Soil
Date Collected: 01.20.2021 00:00

Date Received: 01.21.2021 09:05

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.21.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148582

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.21.2021 20:32	UX	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.21.2021 20:32	UX	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.21.2021 20:32	UX	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.21.2021 20:32	UX	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.21.2021 20:32	UX	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.21.2021 20:32	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.21.2021 20:32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	110	%	70-130	01.21.2021 20:32		
1,4-Difluorobenzene	540-36-3	110	%	70-130	01.21.2021 20:32		



Certificate of Analytical Results 685479

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **SW-4**
Lab Sample Id: 685479-006

Matrix: Soil
Date Collected: 01.20.2021 00:00

Date Received: 01.21.2021 09:05

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.21.2021 12:15

% Moisture:
Basis: Wet Weight

Seq Number: 3148555

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8.86	4.97	mg/kg	01.21.2021 16:31		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: ARM

Analyst: ARM

Date Prep: 01.21.2021 11:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148634

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.21.2021 16:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.21.2021 16:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.21.2021 16:14	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.21.2021 16:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-130	01.21.2021 16:14	
o-Terphenyl	84-15-1	123	%	70-130	01.21.2021 16:14	



Certificate of Analytical Results 685479

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **SW-4**
Lab Sample Id: 685479-006

Matrix: Soil
Date Collected: 01.20.2021 00:00

Date Received: 01.21.2021 09:05

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.21.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148582

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.21.2021 20:53	U	1
Toluene	108-88-3	0.00346	0.00200	mg/kg	01.21.2021 20:53		1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.21.2021 20:53	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.21.2021 20:53	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.21.2021 20:53	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.21.2021 20:53	U	1
Total BTEX		0.00346	0.00200	mg/kg	01.21.2021 20:53		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	01.21.2021 20:53		
4-Bromofluorobenzene	460-00-4	118	%	70-130	01.21.2021 20:53		



Certificate of Analytical Results 685479

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **SW-5** Matrix: Soil Date Received: 01.21.2021 09:05
 Lab Sample Id: 685479-007 Date Collected: 01.20.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.21.2021 12:15 % Moisture:
 Seq Number: 3148555 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8.41	4.96	mg/kg	01.21.2021 16:37		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: ARM
 Analyst: ARM Date Prep: 01.21.2021 11:00 % Moisture:
 Seq Number: 3148634 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.21.2021 16:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.21.2021 16:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.21.2021 16:36	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.21.2021 16:36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	103	%	70-130	01.21.2021 16:36		
o-Terphenyl	84-15-1	129	%	70-130	01.21.2021 16:36		



Certificate of Analytical Results 685479

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **SW-5**
Lab Sample Id: 685479-007

Matrix: Soil
Date Collected: 01.20.2021 00:00

Date Received: 01.21.2021 09:05

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.21.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148582

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00228	0.00200	mg/kg	01.21.2021 21:14		1
Toluene	108-88-3	0.00658	0.00200	mg/kg	01.21.2021 21:14		1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.21.2021 21:14	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.21.2021 21:14	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.21.2021 21:14	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.21.2021 21:14	U	1
Total BTEX		0.00886	0.00200	mg/kg	01.21.2021 21:14		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	114	%	70-130	01.21.2021 21:14		
4-Bromofluorobenzene	460-00-4	114	%	70-130	01.21.2021 21:14		



Certificate of Analytical Results 685479

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **SW-6**
Lab Sample Id: 685479-008

Matrix: Soil
Date Collected: 01.20.2021 00:00

Date Received: 01.21.2021 09:05

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.21.2021 12:15

% Moisture:
Basis: Wet Weight

Seq Number: 3148555

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9.74	5.03	mg/kg	01.21.2021 16:42		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: ARM

Analyst: ARM

Date Prep: 01.21.2021 11:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148634

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.21.2021 16:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.21.2021 16:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.21.2021 16:57	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.21.2021 16:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-130	01.21.2021 16:57	
o-Terphenyl	84-15-1	124	%	70-130	01.21.2021 16:57	



Certificate of Analytical Results 685479

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26-2 Oil Transfer Line

Sample Id: **SW-6**
Lab Sample Id: 685479-008

Matrix: Soil
Date Collected: 01.20.2021 00:00

Date Received: 01.21.2021 09:05

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.21.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148582

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00992	0.00200	mg/kg	01.21.2021 21:34		1
Toluene	108-88-3	0.0214	0.00200	mg/kg	01.21.2021 21:34		1
Ethylbenzene	100-41-4	0.00370	0.00200	mg/kg	01.21.2021 21:34		1
m,p-Xylenes	179601-23-1	0.00520	0.00401	mg/kg	01.21.2021 21:34		1
o-Xylene	95-47-6	0.00239	0.00200	mg/kg	01.21.2021 21:34		1
Total Xylenes	1330-20-7	0.00759	0.00200	mg/kg	01.21.2021 21:34		1
Total BTEX		0.0426	0.00200	mg/kg	01.21.2021 21:34		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	111	%	70-130	01.21.2021 21:34		
1,4-Difluorobenzene	540-36-3	120	%	70-130	01.21.2021 21:34		

Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **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

Lomas Rojas 26-2 Oil Transfer Line

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3148555

Matrix: Solid

Prep Method: E300P

Date Prep: 01.21.2021

MB Sample Id: 7719678-1-BLK

LCS Sample Id: 7719678-1-BKS

LCSD Sample Id: 7719678-1-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	251	100	90-110	0	20	mg/kg	01.21.2021 15:22	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3148555

Matrix: Soil

Prep Method: E300P

Date Prep: 01.21.2021

Parent Sample Id: 685448-021

MS Sample Id: 685448-021 S

MSD Sample Id: 685448-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	9.98	250	300	116	260	100	90-110	14	20	mg/kg	01.21.2021 16:53	X

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3148555

Matrix: Soil

Prep Method: E300P

Date Prep: 01.21.2021

Parent Sample Id: 685477-001

MS Sample Id: 685477-001 S

MSD Sample Id: 685477-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	8.51	250	288	112	291	113	90-110	1	20	mg/kg	01.21.2021 15:38	X

Analytical Method: TPH By SW8015 Mod

Seq Number: 3148634

Matrix: Solid

Prep Method: SW8015P

Date Prep: 01.21.2021

MB Sample Id: 7719782-1-BLK

LCS Sample Id: 7719782-1-BKS

LCSD Sample Id: 7719782-1-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	1120	112	70-130	5	20	mg/kg	01.21.2021 12:14	
Diesel Range Organics (DRO)	<50.0	1000	1150	115	1140	114	70-130	1	20	mg/kg	01.21.2021 12:14	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane	96		111		119		70-130	%	01.21.2021 12:14			
o-Terphenyl	113		124		130		70-130	%	01.21.2021 12:14			

Analytical Method: TPH By SW8015 Mod

Seq Number: 3148634

Matrix: Solid

Prep Method: SW8015P

Date Prep: 01.21.2021

MB Sample Id: 7719782-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.21.2021 11:52	

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

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

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

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



Tetra Tech- Midland

Lomas Rojas 26-2 Oil Transfer Line

Analytical Method: TPH By SW8015 Mod

Seq Number: 3148634

Parent Sample Id: 685477-001

Matrix: Soil

MS Sample Id: 685477-001 S

Prep Method: SW8015P

Date Prep: 01.21.2021

MSD Sample Id: 685477-001 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)	97.1	997	1050	96	1080	99	70-130	3	20	mg/kg	01.21.2021 13:19	
Diesel Range Organics (DRO)	364	997	1350	99	1370	101	70-130	1	20	mg/kg	01.21.2021 13:19	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	111		110		70-130	%	01.21.2021 13:19
o-Terphenyl	116		118		70-130	%	01.21.2021 13:19

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148562

MB Sample Id: 7719745-1-BLK

Matrix: Solid

LCS Sample Id: 7719745-1-BKS

Prep Method: SW5035A

Date Prep: 01.21.2021

LCSD Sample Id: 7719745-1-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	0.0981	98	0.102	102	70-130	4	35	mg/kg	01.21.2021 19:07	
Toluene	<0.00200	0.100	0.0815	82	0.102	102	70-130	22	35	mg/kg	01.21.2021 19:07	
Ethylbenzene	<0.00200	0.100	0.0913	91	0.0993	99	70-130	8	35	mg/kg	01.21.2021 19:07	
m,p-Xylenes	<0.00400	0.200	0.189	95	0.204	102	70-130	8	35	mg/kg	01.21.2021 19:07	
o-Xylene	<0.00200	0.100	0.0921	92	0.0997	100	70-130	8	35	mg/kg	01.21.2021 19:07	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	84		102		99		70-130	%	01.21.2021 19:07
4-Bromofluorobenzene	65	**	94		101		70-130	%	01.21.2021 19:07

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148582

MB Sample Id: 7719758-1-BLK

Matrix: Solid

LCS Sample Id: 7719758-1-BKS

Prep Method: SW5035A

Date Prep: 01.21.2021

LCSD Sample Id: 7719758-1-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	0.102	102	0.0957	96	70-130	6	35	mg/kg	01.21.2021 18:08	
Toluene	<0.00200	0.100	0.0975	98	0.0926	93	70-130	5	35	mg/kg	01.21.2021 18:08	
Ethylbenzene	<0.00200	0.100	0.0974	97	0.0931	93	70-130	5	35	mg/kg	01.21.2021 18:08	
m,p-Xylenes	<0.00400	0.200	0.184	92	0.176	88	70-130	4	35	mg/kg	01.21.2021 18:08	
o-Xylene	<0.00200	0.100	0.0981	98	0.0936	94	70-130	5	35	mg/kg	01.21.2021 18:08	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		103		99		70-130	%	01.21.2021 18:08
4-Bromofluorobenzene	124		103		100		70-130	%	01.21.2021 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
Lomas Rojas 26-2 Oil Transfer Line

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148562

Parent Sample Id: 685339-002

Matrix: Soil

MS Sample Id: 685339-002 S

Prep Method: SW5035A

Date Prep: 01.21.2021

MSD Sample Id: 685339-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0879	88	0.0127	13	70-130	150	35	mg/kg	01.21.2021 19:59	XF
Toluene	<0.00200	0.0998	0.0897	90	0.0105	11	70-130	158	35	mg/kg	01.21.2021 19:59	XF
Ethylbenzene	0.00295	0.0998	0.0797	77	0.0105	8	70-130	153	35	mg/kg	01.21.2021 19:59	XF
m,p-Xylenes	0.00604	0.200	0.157	75	0.0220	8	70-130	151	35	mg/kg	01.21.2021 19:59	XF
o-Xylene	0.00141	0.0998	0.0792	78	0.0113	10	70-130	150	35	mg/kg	01.21.2021 19:59	XF

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	87		13	**	70-130	%	01.21.2021 19:59
4-Bromofluorobenzene	128		18	**	70-130	%	01.21.2021 19:59

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148582

Parent Sample Id: 685479-005

Matrix: Soil

MS Sample Id: 685479-005 S

Prep Method: SW5035A

Date Prep: 01.21.2021

MSD Sample Id: 685479-005 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	0.155	153	0.156	157	70-130	1	35	mg/kg	01.21.2021 18:50	X
Toluene	<0.00201	0.101	0.143	142	0.140	141	70-130	2	35	mg/kg	01.21.2021 18:50	X
Ethylbenzene	<0.00201	0.101	0.144	143	0.131	132	70-130	9	35	mg/kg	01.21.2021 18:50	X
m,p-Xylenes	<0.00402	0.201	0.268	133	0.257	130	70-130	4	35	mg/kg	01.21.2021 18:50	X
o-Xylene	<0.00201	0.101	0.144	143	0.147	148	70-130	2	35	mg/kg	01.21.2021 18:50	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	106		109		70-130	%	01.21.2021 18:50
4-Bromofluorobenzene	114		112		70-130	%	01.21.2021 18:50

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

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

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

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

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

900 West Wall Street, Ste 100
Midland, Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

Page 1 of 1

Client Name:		EOG		Site Manager:		Brittany Long							
Project Name:		Lomas Rojas 26-2 Oil Transfer Line											
Project Location: (county, state)		Lea County, New Mexico				Project #:							
Invoice to:		Todd Wells											
Receiving Laboratory:		Xenco		Sampler Signature: Devin Dominguez									
Comments:													
LAB # (LAB USE ONLY)		SAMPLE IDENTIFICATION		SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS		FILTERED (Y/N)	
				YEAR: 2021									
		Bottomhole-3 (B)		DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	None		
		Bottomhole-4 (B)		1/20/2021		X	X		X			1	N
		SW-1		1/20/2021		X	X		X			1	N
		SW-2		1/20/2021		X	X		X			1	N
		SW-3		1/20/2021		X	X		X			1	N
		SW-4		1/20/2021		X	X		X			1	N
		SW-5		1/20/2021		X	X		X			1	N
		SW-6		1/20/2021		X	X		X			1	N
Relinquished by:		Date: 1/21/2021		Time:		Received by:		Date: 1-27-27		Time: 9:05			
Relinquished by:		Date:		Time:		Received by:		Date:		Time:			
Relinquished by:		Date:		Time:		Received by:		Date:		Time:			

[illegible]

ORIGINAL COPY

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 01.21.2021 09.05.00 AM

Work Order #: 685479

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)?	5
#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: 01.21.2021

Checklist reviewed by:



Jessica Kramer

Date: 01.22.2021

Certificate of Analysis Summary 686305



Tetra Tech- Midland, Midland, TX

Project Name: EOG-Lomas Rojas 28-2 Oil Transfer Line

Project Id:

Date Received in Lab: Wed 01.27.2021 15:24

Contact: Brittany Long

Report Date: 02.02.2021 12:23

Project Location: Lea County, New Mexico

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	686305-001	686305-002	686305-003	686305-004	686305-005	686305-006
	<i>Field Id:</i>	Bottomhole-5 (8')	Bottomhole-5 (7')	Bottomhole-7 (7')	Bottomhole-8 (7')	Bottomhole-9 (7')	Bottomhole-10 (7')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	01.26.2021 00:00	01.26.2021 00:00	01.26.2021 00:00	01.26.2021 00:00	01.26.2021 00:00	01.26.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	01.29.2021 08:00	01.29.2021 08:00	01.29.2021 08:00	01.29.2021 08:00	01.29.2021 08:00	01.29.2021 08:00
	<i>Analyzed:</i>	01.29.2021 23:39	01.30.2021 00:05	01.30.2021 00:32	01.30.2021 00:58	01.30.2021 01:24	01.30.2021 01:50
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200
Toluene		<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200
Ethylbenzene		<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200
m,p-Xylenes		<0.00403 0.00403	0.00493 0.00399	<0.00398 0.00398	<0.00398 0.00398	<0.00397 0.00397	<0.00399 0.00399
o-Xylene		<0.00202 0.00202	0.00349 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200
Total Xylenes		<0.00202 0.00202	0.00842 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200
Total BTEX		<0.00202 0.00202	0.00842 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	01.28.2021 14:35	01.28.2021 14:35	01.28.2021 14:35	01.28.2021 14:35	01.28.2021 14:35	01.28.2021 14:35
	<i>Analyzed:</i>	01.28.2021 21:15	01.28.2021 21:32	01.28.2021 21:37	01.28.2021 21:53	01.28.2021 21:58	01.28.2021 22:04
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		9.48 4.98	8.75 5.04	8.27 4.98	7.96 5.00	8.01 5.00	9.07 5.00
TPH By SW8015 Mod	<i>Extracted:</i>	01.28.2021 12:00	01.28.2021 12:00	01.28.2021 12:00	01.28.2021 12:00	01.28.2021 12:00	01.28.2021 12:00
	<i>Analyzed:</i>	01.28.2021 13:28	01.28.2021 14:31	01.28.2021 14:52	01.28.2021 15:14	01.28.2021 15:35	01.28.2021 15:56
	<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	<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 686305



Tetra Tech- Midland, Midland, TX

Project Name: EOG-Lomas Rojas 28-2 Oil Transfer Line

Project Id:

Date Received in Lab: Wed 01.27.2021 15:24

Contact: Brittany Long

Report Date: 02.02.2021 12:23

Project Location: Lea County, New Mexico

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	686305-007	686305-008	686305-009	686305-010	686305-011	686305-012
	<i>Field Id:</i>	Bottomhole-11 (7')	Bottomhole-12 (7')	Bottomhole-13 (3.5')	Bottomhole-14 (3.5')	Bottomhole-15 (3.5')	Bottomhole-16 (3.5')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	01.26.2021 00:00	01.26.2021 00:00	01.26.2021 00:00	01.26.2021 00:00	01.26.2021 00:00	01.26.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	01.29.2021 08:00	01.29.2021 08:00	01.29.2021 08:00	01.29.2021 08:00	01.29.2021 17:15	01.29.2021 17:15
	<i>Analyzed:</i>	01.30.2021 02:16	01.30.2021 02:42	01.30.2021 03:08	01.30.2021 03:34	01.30.2021 22:07	01.30.2021 22:34
	<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	<0.00200 0.00200	<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200
m,p-Xylenes		<0.00399 0.00399	<0.00398 0.00398	<0.00401 0.00401	<0.00402 0.00402	<0.00397 0.00397	<0.00400 0.00400
o-Xylene		<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200
Total BTEX		<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	01.28.2021 14:35	01.28.2021 14:35	01.28.2021 14:35	01.28.2021 14:35	01.28.2021 14:45	01.28.2021 14:45
	<i>Analyzed:</i>	01.28.2021 22:09	01.28.2021 22:14	01.28.2021 22:19	01.28.2021 22:26	01.28.2021 22:58	01.28.2021 23:14
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		8.75 5.04	9.01 4.98	18.1 5.05	18.3 4.96	16.5 5.05	16.5 4.97
TPH By SW8015 Mod	<i>Extracted:</i>	01.28.2021 12:00	01.28.2021 12:00	01.28.2021 12:00	01.28.2021 12:00	01.28.2021 12:00	01.28.2021 12:00
	<i>Analyzed:</i>	01.28.2021 16:17	01.28.2021 16:38	01.28.2021 17:00	01.28.2021 17:21	01.28.2021 18:04	01.28.2021 18:25
	<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	<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

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Certificate of Analysis Summary 686305



Tetra Tech- Midland, Midland, TX

Project Name: EOG-Lomas Rojas 28-2 Oil Transfer Line

Project Id:

Date Received in Lab: Wed 01.27.2021 15:24

Contact: Brittany Long

Report Date: 02.02.2021 12:23

Project Location: Lea County, New Mexico

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	686305-013	686305-014	686305-015	686305-016	686305-017	686305-018
	<i>Field Id:</i>	Bottomhole-17 (3.5')	Bottomhole-18 (5')	Bottomhole-19 (5')	Bottomhole-20 (5')	Bottomhole-21 (5')	Bottomhole-22 (5')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	01.26.2021 00:00	01.26.2021 00:00	01.26.2021 00:00	01.26.2021 00:00	01.26.2021 00:00	01.26.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	01.29.2021 17:15	01.29.2021 17:15	01.29.2021 17:15	01.29.2021 17:15	01.29.2021 17:15	01.29.2021 17:15
	<i>Analyzed:</i>	01.30.2021 23:00	01.30.2021 21:41	01.30.2021 23:25	01.30.2021 23:50	01.31.2021 00:15	01.31.2021 00:40
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199
Toluene		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199
Ethylbenzene		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199
m,p-Xylenes		<0.00399 0.00399	<0.00398 0.00398	<0.00398 0.00398	<0.00398 0.00398	<0.00397 0.00397	<0.00398 0.00398
o-Xylene		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199
Total Xylenes		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199
Total BTEX		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	01.28.2021 14:45	01.28.2021 14:45	01.28.2021 14:45	01.28.2021 14:45	01.28.2021 14:45	01.28.2021 14:45
	<i>Analyzed:</i>	01.28.2021 23:19	01.28.2021 23:24	01.28.2021 23:29	01.28.2021 23:45	01.28.2021 23:51	01.28.2021 23:56
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		18.5 5.00	7.90 5.02	8.96 4.98	9.70 5.05	8.03 4.99	9.41 4.96
TPH By SW8015 Mod	<i>Extracted:</i>	01.28.2021 12:00	01.28.2021 12:00	01.28.2021 12:00	01.28.2021 12:00	01.28.2021 12:00	01.28.2021 12:00
	<i>Analyzed:</i>	01.28.2021 18:46	01.28.2021 19:07	01.28.2021 19:29	01.28.2021 19:50	01.28.2021 20:11	01.28.2021 20:33
	<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 686305



Tetra Tech- Midland, Midland, TX

Project Name: EOG-Lomas Rojas 28-2 Oil Transfer Line

Project Id:

Date Received in Lab: Wed 01.27.2021 15:24

Contact: Brittany Long

Report Date: 02.02.2021 12:23

Project Location: Lea County, New Mexico

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	686305-019	686305-020	686305-021	686305-022	686305-023	686305-024
	<i>Field Id:</i>	SW-7	SW-8	SW-9	SW-10	SW-11	SW-12
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	01.26.2021 00:00	01.26.2021 00:00	01.26.2021 00:00	01.26.2021 00:00	01.26.2021 00:00	01.26.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	01.29.2021 17:15	01.29.2021 17:15	01.29.2021 18:00	01.29.2021 18:00	01.29.2021 18:00	01.29.2021 18:00
	<i>Analyzed:</i>	01.31.2021 01:05	01.31.2021 01:30	01.31.2021 19:30	01.31.2021 19:51	01.31.2021 20:11	01.31.2021 20:32
	<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	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200
Toluene		<0.00201 0.00201	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200
Ethylbenzene		<0.00201 0.00201	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200
m,p-Xylenes		<0.00402 0.00402	<0.00398 0.00398	<0.00396 0.00396	<0.00398 0.00398	<0.00402 0.00402	<0.00401 0.00401
o-Xylene		<0.00201 0.00201	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200
Total Xylenes		<0.00201 0.00201	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200
Total BTEX		<0.00201 0.00201	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	01.28.2021 14:45	01.28.2021 14:45	01.28.2021 14:45	01.28.2021 14:45	01.28.2021 14:45	01.28.2021 14:45
	<i>Analyzed:</i>	01.29.2021 00:01	01.29.2021 00:07	01.29.2021 00:12	01.29.2021 00:28	01.29.2021 00:33	01.29.2021 00:49
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		45.1 5.04	54.0 4.97	53.6 4.96	51.8 4.98	50.6 4.97	58.3 5.03
TPH By SW8015 Mod	<i>Extracted:</i>	01.28.2021 12:00	01.28.2021 12:00	01.28.2021 12:00	01.28.2021 12:00	01.28.2021 12:00	01.28.2021 12:00
	<i>Analyzed:</i>	01.28.2021 20:54	01.28.2021 21:15	01.28.2021 13:28	01.28.2021 14:31	01.28.2021 14:52	01.28.2021 15:14
	<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)		<49.8 49.8	<50.0 50.0	<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		<49.8 49.8	<50.0 50.0	<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	<50.0 50.0	<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0
Total TPH		<49.8 49.8	<50.0 50.0	<49.9 49.9	<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 686305



Tetra Tech- Midland, Midland, TX

Project Name: EOG-Lomas Rojas 28-2 Oil Transfer Line

Project Id:

Date Received in Lab: Wed 01.27.2021 15:24

Contact: Brittany Long

Report Date: 02.02.2021 12:23

Project Location: Lea County, New Mexico

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	686305-025	686305-026	686305-027	686305-028	686305-029	686305-030
	<i>Field Id:</i>	SW-13	SW-14	SW-15	SW-16	SW-17	SW-18
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	01.26.2021 00:00	01.26.2021 00:00	01.26.2021 00:00	01.26.2021 00:00	01.26.2021 00:00	01.26.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	01.29.2021 18:00	01.29.2021 18:00	01.29.2021 18:00	01.29.2021 18:00	01.29.2021 18:00	01.29.2021 18:00
	<i>Analyzed:</i>	01.31.2021 20:53	01.31.2021 21:13	01.31.2021 21:34	01.31.2021 21:55	01.31.2021 22:15	01.31.2021 22:36
	<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	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200
Toluene		<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200
Ethylbenzene		<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200
m,p-Xylenes		<0.00403 0.00403	<0.00398 0.00398	<0.00400 0.00400	<0.00397 0.00397	<0.00398 0.00398	<0.00399 0.00399
o-Xylene		<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200
Total Xylenes		<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200
Total BTEX		<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	01.28.2021 14:45	01.28.2021 14:45	01.28.2021 14:45	01.28.2021 14:45	01.28.2021 14:45	01.28.2021 14:45
	<i>Analyzed:</i>	01.29.2021 00:55	01.29.2021 01:00	01.29.2021 01:05	01.29.2021 01:10	01.29.2021 01:16	01.29.2021 01:21
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		58.9 5.00	59.6 4.99	50.8 4.97	58.4 5.03	16.0 4.98	15.9 5.00
TPH By SW8015 Mod	<i>Extracted:</i>	01.28.2021 12:00	01.28.2021 12:00	01.28.2021 12:00	01.28.2021 12:00	01.28.2021 12:00	01.28.2021 12:00
	<i>Analyzed:</i>	01.28.2021 15:35	01.28.2021 15:56	01.28.2021 16:17	01.28.2021 16:38	01.28.2021 17:00	01.28.2021 17:21
	<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	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.9 49.9
Diesel Range Organics (DRO)		<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<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	<49.9 49.9	<49.9 49.9
Total TPH		<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<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 686305



Tetra Tech- Midland, Midland, TX

Project Name: EOG-Lomas Rojas 28-2 Oil Transfer Line

Project Id:

Date Received in Lab: Wed 01.27.2021 15:24

Contact: Brittany Long

Report Date: 02.02.2021 12:23

Project Location: Lea County, New Mexico

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	686305-031	686305-032	686305-033	686305-034	686305-035	686305-036
	<i>Field Id:</i>	SW-19	SW-20	SW-21	SW-22	SW-23	SW-24
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	01.26.2021 00:00	01.26.2021 00:00	01.26.2021 00:00	01.26.2021 00:00	01.26.2021 00:00	01.26.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	01.29.2021 17:00	01.29.2021 17:00	01.29.2021 17:00	01.29.2021 17:00	01.29.2021 17:00	01.29.2021 17:00
	<i>Analyzed:</i>	01.30.2021 08:22	01.30.2021 08:48	01.30.2021 07:55	01.30.2021 09:14	01.30.2021 09:41	01.30.2021 10:07
	<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	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00400 0.00400	<0.00400 0.00400	<0.00400 0.00400	<0.00400 0.00400	<0.00400 0.00400	<0.00400 0.00400
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	01.28.2021 15:10	01.28.2021 15:10	01.28.2021 15:10	01.28.2021 15:10	01.28.2021 15:10	01.28.2021 15:10
	<i>Analyzed:</i>	01.28.2021 17:07	01.28.2021 17:23	01.28.2021 17:28	01.28.2021 17:33	01.28.2021 17:39	01.28.2021 17:54
	<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 X 4.96	9.19 4.99	44.1 5.04	47.1 4.96	44.9 5.00	42.0 4.98
TPH By SW8015 Mod	<i>Extracted:</i>	01.28.2021 12:00	01.28.2021 12:00	01.28.2021 12:00	01.28.2021 12:00	01.28.2021 12:00	01.28.2021 12:00
	<i>Analyzed:</i>	01.28.2021 18:04	01.28.2021 18:25	01.28.2021 18:46	01.28.2021 19:07	01.28.2021 19:29	01.28.2021 19:50
	<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)		<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Diesel Range Organics (DRO)		<49.8 49.8	<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)		<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Total TPH		<49.8 49.8	<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

Analytical Report 686305

for

Tetra Tech- Midland

Project Manager: Brittany Long

EOG-Lomas Rojas 28-2 Oil Transfer Line

02.02.2021

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)



02.02.2021

Project Manager: **Brittany Long**

Tetra Tech- Midland

901 West Wall ST

Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **686305**

EOG-Lomas Rojas 28-2 Oil Transfer Line

Project Address: Lea County, New Mexico

Brittany Long:

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) 686305. 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. 686305 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 686305

Tetra Tech- Midland, Midland, TX

EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Bottomhole-5 (8')	S	01.26.2021 00:00		686305-001
Bottomhole-5 (7')	S	01.26.2021 00:00		686305-002
Bottomhole-7 (7')	S	01.26.2021 00:00		686305-003
Bottomhole-8 (7')	S	01.26.2021 00:00		686305-004
Bottomhole-9 (7')	S	01.26.2021 00:00		686305-005
Bottomhole-10 (7')	S	01.26.2021 00:00		686305-006
Bottomhole-11 (7')	S	01.26.2021 00:00		686305-007
Bottomhole-12 (7')	S	01.26.2021 00:00		686305-008
Bottomhole-13 (3.5')	S	01.26.2021 00:00		686305-009
Bottomhole-14 (3.5')	S	01.26.2021 00:00		686305-010
Bottomhole-15 (3.5')	S	01.26.2021 00:00		686305-011
Bottomhole-16 (3.5')	S	01.26.2021 00:00		686305-012
Bottomhole-17 (3.5')	S	01.26.2021 00:00		686305-013
Bottomhole-18 (5')	S	01.26.2021 00:00		686305-014
Bottomhole-19 (5')	S	01.26.2021 00:00		686305-015
Bottomhole-20 (5')	S	01.26.2021 00:00		686305-016
Bottomhole-21 (5')	S	01.26.2021 00:00		686305-017
Bottomhole-22 (5')	S	01.26.2021 00:00		686305-018
SW-7	S	01.26.2021 00:00		686305-019
SW-8	S	01.26.2021 00:00		686305-020
SW-9	S	01.26.2021 00:00		686305-021
SW-10	S	01.26.2021 00:00		686305-022
SW-11	S	01.26.2021 00:00		686305-023
SW-12	S	01.26.2021 00:00		686305-024
SW-13	S	01.26.2021 00:00		686305-025
SW-14	S	01.26.2021 00:00		686305-026
SW-15	S	01.26.2021 00:00		686305-027
SW-16	S	01.26.2021 00:00		686305-028
SW-17	S	01.26.2021 00:00		686305-029
SW-18	S	01.26.2021 00:00		686305-030
SW-19	S	01.26.2021 00:00		686305-031
SW-20	S	01.26.2021 00:00		686305-032
SW-21	S	01.26.2021 00:00		686305-033
SW-22	S	01.26.2021 00:00		686305-034
SW-23	S	01.26.2021 00:00		686305-035
SW-24	S	01.26.2021 00:00		686305-036

**CASE NARRATIVE****Client Name: Tetra Tech- Midland****Project Name: EOG-Lomas Rojas 28-2 Oil Transfer Line**Project ID:
Work Order Number(s): 686305Report Date: 02.02.2021
Date Received: 01.27.2021**Sample receipt non conformances and comments:****Sample receipt non conformances and comments per sample:**

None

Analytical non conformances and comments:

Batch: LBA-3149324 Inorganic Anions by EPA 300/300.1

Lab Sample ID 686305-031 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: 686305-031, -032, -033, -034, -035, -036.

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

Batch: LBA-3149477 BTEX by EPA 8021B

Lab Sample ID 686305-033 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. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 686305-031, -032, -033, -034, -035, -036.

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

Batch: LBA-3149582 TPH By SW8015 Mod

Surrogate o-Terphenyl recovered above QC limits Data confirmed by re-analysis. Samples affected are: 7720312-1-BLK, 686305-025, 686305-022.

Batch: LBA-3149650 TPH By SW8015 Mod

Surrogate o-Terphenyl recovered above QC limits Data confirmed by re-analysis. Samples affected are: 7720307-1-BLK, 686305-004, 686305-005, 686305-007, 686305-019, 686305-013, 686305-014, 686305-015, 686305-016, 686305-018, 686305-003, 686305-008.



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-5 (8')** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-001 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 14:35 % Moisture:
 Seq Number: 3149316 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9.48	4.98	mg/kg	01.28.2021 21:15		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149650 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.28.2021 13:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.28.2021 13:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.28.2021 13:28	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.28.2021 13:28	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	89	%	70-130	01.28.2021 13:28		
o-Terphenyl	84-15-1	123	%	70-130	01.28.2021 13:28		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-5 (8')** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-001 Date Collected: 01.26.2021 00:00
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MNR
 Analyst: MNR Date Prep: 01.29.2021 08:00 % Moisture:
 Seq Number: 3149445 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.29.2021 23:39	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.29.2021 23:39	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.29.2021 23:39	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.29.2021 23:39	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.29.2021 23:39	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.29.2021 23:39	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.29.2021 23:39	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	120	%	70-130	01.29.2021 23:39		
1,4-Difluorobenzene	540-36-3	88	%	70-130	01.29.2021 23:39		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-5 (7')** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-002 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 14:35 % Moisture:
 Seq Number: 3149316 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8.75	5.04	mg/kg	01.28.2021 21:32		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149650 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.28.2021 14:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.28.2021 14:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.28.2021 14:31	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.28.2021 14:31	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	99	%	70-130	01.28.2021 14:31		
o-Terphenyl	84-15-1	121	%	70-130	01.28.2021 14:31		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX

EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-5 (7')**

Matrix: Soil

Date Received: 01.27.2021 15:24

Lab Sample Id: 686305-002

Date Collected: 01.26.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.29.2021 08:00

% Moisture:

Seq Number: 3149445

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.2021 00:05	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.2021 00:05	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.2021 00:05	U	1
m,p-Xylenes	179601-23-1	0.00493	0.00399	mg/kg	01.30.2021 00:05		1
o-Xylene	95-47-6	0.00349	0.00200	mg/kg	01.30.2021 00:05		1
Total Xylenes	1330-20-7	0.00842	0.00200	mg/kg	01.30.2021 00:05		1
Total BTEX		0.00842	0.00200	mg/kg	01.30.2021 00:05		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	89	%	70-130	01.30.2021 00:05		
4-Bromofluorobenzene	460-00-4	109	%	70-130	01.30.2021 00:05		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-7 (7')** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-003 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 14:35 % Moisture:
 Seq Number: 3149316 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8.27	4.98	mg/kg	01.28.2021 21:37		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149650 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.28.2021 14:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.28.2021 14:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.28.2021 14:52	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.28.2021 14:52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	97	%	70-130	01.28.2021 14:52		
o-Terphenyl	84-15-1	135	%	70-130	01.28.2021 14:52	**	



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-7 (7')** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-003 Date Collected: 01.26.2021 00:00
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MNR
 Analyst: MNR Date Prep: 01.29.2021 08:00 % Moisture:
 Seq Number: 3149445 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.30.2021 00:32	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.30.2021 00:32	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.30.2021 00:32	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.30.2021 00:32	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.30.2021 00:32	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.30.2021 00:32	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.30.2021 00:32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	95	%	70-130	01.30.2021 00:32		
1,4-Difluorobenzene	540-36-3	95	%	70-130	01.30.2021 00:32		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-8 (7')** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-004 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 14:35 % Moisture:
 Seq Number: 3149316 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7.96	5.00	mg/kg	01.28.2021 21:53		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149650 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.28.2021 15:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.28.2021 15:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.28.2021 15:14	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.28.2021 15:14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	90	%	70-130	01.28.2021 15:14		
o-Terphenyl	84-15-1	132	%	70-130	01.28.2021 15:14	**	



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-8 (7')** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-004 Date Collected: 01.26.2021 00:00
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MNR
 Analyst: MNR Date Prep: 01.29.2021 08:00 % Moisture:
 Seq Number: 3149445 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.30.2021 00:58	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.30.2021 00:58	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.30.2021 00:58	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.30.2021 00:58	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.30.2021 00:58	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.30.2021 00:58	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.30.2021 00:58	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	119	%	70-130	01.30.2021 00:58		
1,4-Difluorobenzene	540-36-3	98	%	70-130	01.30.2021 00:58		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-9 (7')** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-005 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 14:35 % Moisture:
 Seq Number: 3149316 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8.01	5.00	mg/kg	01.28.2021 21:58		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149650 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.28.2021 15:35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.28.2021 15:35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.28.2021 15:35	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.28.2021 15:35	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	112	%	70-130	01.28.2021 15:35		
o-Terphenyl	84-15-1	151	%	70-130	01.28.2021 15:35	**	



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Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-9 (7')** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-005 Date Collected: 01.26.2021 00:00
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MNR
 Analyst: MNR Date Prep: 01.29.2021 08:00 % Moisture:
 Seq Number: 3149445 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.30.2021 01:24	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.30.2021 01:24	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.30.2021 01:24	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.30.2021 01:24	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.30.2021 01:24	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.30.2021 01:24	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.30.2021 01:24	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	99	%	70-130	01.30.2021 01:24		
4-Bromofluorobenzene	460-00-4	121	%	70-130	01.30.2021 01:24		



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Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-10 (7')** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-006 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 14:35 % Moisture:
 Seq Number: 3149316 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9.07	5.00	mg/kg	01.28.2021 22:04		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149650 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.28.2021 15:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.28.2021 15:56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.28.2021 15:56	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.28.2021 15:56	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	90	%	70-130	01.28.2021 15:56		
o-Terphenyl	84-15-1	125	%	70-130	01.28.2021 15:56		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-10 (7')** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-006 Date Collected: 01.26.2021 00:00
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MNR
 Analyst: MNR Date Prep: 01.29.2021 08:00 % Moisture:
 Seq Number: 3149445 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.2021 01:50	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.2021 01:50	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.2021 01:50	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.30.2021 01:50	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.2021 01:50	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.2021 01:50	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.30.2021 01:50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	01.30.2021 01:50		
1,4-Difluorobenzene	540-36-3	93	%	70-130	01.30.2021 01:50		



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Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-11 (7')** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-007 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 14:35 % Moisture:
 Seq Number: 3149316 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8.75	5.04	mg/kg	01.28.2021 22:09		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149650 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.28.2021 16:17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.28.2021 16:17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.28.2021 16:17	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.28.2021 16:17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	94	%	70-130	01.28.2021 16:17		
o-Terphenyl	84-15-1	137	%	70-130	01.28.2021 16:17	**	



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-11 (7')** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-007 Date Collected: 01.26.2021 00:00
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MNR
 Analyst: MNR Date Prep: 01.29.2021 08:00 % Moisture:
 Seq Number: 3149445 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.2021 02:16	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.2021 02:16	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.2021 02:16	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.30.2021 02:16	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.2021 02:16	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.2021 02:16	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.30.2021 02:16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	124	%	70-130	01.30.2021 02:16		
1,4-Difluorobenzene	540-36-3	105	%	70-130	01.30.2021 02:16		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-12 (7')** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-008 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 14:35 % Moisture:
 Seq Number: 3149316 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9.01	4.98	mg/kg	01.28.2021 22:14		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149650 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.28.2021 16:38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.28.2021 16:38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.28.2021 16:38	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.28.2021 16:38	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	96	%	70-130	01.28.2021 16:38		
o-Terphenyl	84-15-1	141	%	70-130	01.28.2021 16:38	**	



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-12 (7')** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-008 Date Collected: 01.26.2021 00:00
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MNR
 Analyst: MNR Date Prep: 01.29.2021 08:00 % Moisture:
 Seq Number: 3149445 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.30.2021 02:42	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.30.2021 02:42	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.30.2021 02:42	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.30.2021 02:42	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.30.2021 02:42	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.30.2021 02:42	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.30.2021 02:42	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.30.2021 02:42		
4-Bromofluorobenzene	460-00-4	113	%	70-130	01.30.2021 02:42		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-13 (3.5')** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-009 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 14:35 % Moisture:
 Seq Number: 3149316 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	18.1	5.05	mg/kg	01.28.2021 22:19		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149650 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.28.2021 17:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.28.2021 17:00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.28.2021 17:00	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.28.2021 17:00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	89	%	70-130	01.28.2021 17:00		
o-Terphenyl	84-15-1	127	%	70-130	01.28.2021 17:00		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX

EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-13 (3.5')**

Matrix: Soil

Date Received: 01.27.2021 15:24

Lab Sample Id: 686305-009

Date Collected: 01.26.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.29.2021 08:00

% Moisture:

Seq Number: 3149445

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.2021 03:08	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.2021 03:08	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.2021 03:08	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.30.2021 03:08	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.2021 03:08	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.2021 03:08	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.30.2021 03:08	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	01.30.2021 03:08		
4-Bromofluorobenzene	460-00-4	119	%	70-130	01.30.2021 03:08		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-14 (3.5')** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-010 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 14:35 % Moisture:
 Seq Number: 3149316 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	18.3	4.96	mg/kg	01.28.2021 22:26		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149650 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.28.2021 17:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.28.2021 17:21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.28.2021 17:21	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.28.2021 17:21	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	90	%	70-130	01.28.2021 17:21		
o-Terphenyl	84-15-1	121	%	70-130	01.28.2021 17:21		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-14 (3.5')**

Matrix: Soil

Date Received: 01.27.2021 15:24

Lab Sample Id: 686305-010

Date Collected: 01.26.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.29.2021 08:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149445

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.30.2021 03:34	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.30.2021 03:34	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.30.2021 03:34	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.30.2021 03:34	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.30.2021 03:34	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.30.2021 03:34	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.30.2021 03:34	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	117	%	70-130	01.30.2021 03:34		
1,4-Difluorobenzene	540-36-3	105	%	70-130	01.30.2021 03:34		



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Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-15 (3.5')** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-011 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 14:45 % Moisture:
 Seq Number: 3149318 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16.5	5.05	mg/kg	01.28.2021 22:58		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149650 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.28.2021 18:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.28.2021 18:04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.28.2021 18:04	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.28.2021 18:04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	91	%	70-130	01.28.2021 18:04		
o-Terphenyl	84-15-1	125	%	70-130	01.28.2021 18:04		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX

EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-15 (3.5')**

Matrix: Soil

Date Received: 01.27.2021 15:24

Lab Sample Id: 686305-011

Date Collected: 01.26.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.29.2021 17:15

% Moisture:

Seq Number: 3149478

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.30.2021 22:07	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.30.2021 22:07	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.30.2021 22:07	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.30.2021 22:07	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.30.2021 22:07	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.30.2021 22:07	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.30.2021 22:07	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	95	%	70-130	01.30.2021 22:07		
4-Bromofluorobenzene	460-00-4	100	%	70-130	01.30.2021 22:07		



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Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-16 (3.5')** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-012 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 14:45 % Moisture:
 Seq Number: 3149318 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16.5	4.97	mg/kg	01.28.2021 23:14		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149650 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.28.2021 18:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.28.2021 18:25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.28.2021 18:25	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.28.2021 18:25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	103	%	70-130	01.28.2021 18:25		
o-Terphenyl	84-15-1	125	%	70-130	01.28.2021 18:25		



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Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-16 (3.5')**

Matrix: Soil

Date Received: 01.27.2021 15:24

Lab Sample Id: 686305-012

Date Collected: 01.26.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.29.2021 17:15

% Moisture:

Seq Number: 3149478

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.2021 22:34	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.2021 22:34	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.2021 22:34	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.30.2021 22:34	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.2021 22:34	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.2021 22:34	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.30.2021 22:34	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	93	%	70-130	01.30.2021 22:34		
4-Bromofluorobenzene	460-00-4	108	%	70-130	01.30.2021 22:34		



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Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-17 (3.5')** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-013 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 14:45 % Moisture:
 Seq Number: 3149318 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	18.5	5.00	mg/kg	01.28.2021 23:19		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149650 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.28.2021 18:46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.28.2021 18:46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.28.2021 18:46	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.28.2021 18:46	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	105	%	70-130	01.28.2021 18:46		
o-Terphenyl	84-15-1	133	%	70-130	01.28.2021 18:46	**	



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Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-17 (3.5')**

Matrix: Soil

Date Received: 01.27.2021 15:24

Lab Sample Id: 686305-013

Date Collected: 01.26.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.29.2021 17:15

% Moisture:

Seq Number: 3149478

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.2021 23:00	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.2021 23:00	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.2021 23:00	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.30.2021 23:00	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.2021 23:00	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.2021 23:00	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.30.2021 23:00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	117	%	70-130	01.30.2021 23:00		
1,4-Difluorobenzene	540-36-3	109	%	70-130	01.30.2021 23:00		



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Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-18 (5')** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-014 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 14:45 % Moisture:
 Seq Number: 3149318 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7.90	5.02	mg/kg	01.28.2021 23:24		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149650 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.28.2021 19:07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.28.2021 19:07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.28.2021 19:07	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.28.2021 19:07	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	106	%	70-130	01.28.2021 19:07		
o-Terphenyl	84-15-1	144	%	70-130	01.28.2021 19:07	**	



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Tetra Tech- Midland, Midland, TX

EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-18 (5')**

Matrix: Soil

Date Received: 01.27.2021 15:24

Lab Sample Id: 686305-014

Date Collected: 01.26.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.29.2021 17:15

% Moisture:

Seq Number: 3149478

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.30.2021 21:41	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.30.2021 21:41	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.30.2021 21:41	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.30.2021 21:41	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.30.2021 21:41	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.30.2021 21:41	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.30.2021 21:41	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	110	%	70-130	01.30.2021 21:41		
1,4-Difluorobenzene	540-36-3	85	%	70-130	01.30.2021 21:41		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-19 (5')** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-015 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 14:45 % Moisture:
 Seq Number: 3149318 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8.96	4.98	mg/kg	01.28.2021 23:29		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149650 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.28.2021 19:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.28.2021 19:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.28.2021 19:29	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.28.2021 19:29	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	106	%	70-130	01.28.2021 19:29		
o-Terphenyl	84-15-1	148	%	70-130	01.28.2021 19:29	**	



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-19 (5')** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-015 Date Collected: 01.26.2021 00:00
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: KTL
 Analyst: KTL Date Prep: 01.29.2021 17:15 % Moisture:
 Seq Number: 3149478 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.30.2021 23:25	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.30.2021 23:25	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.30.2021 23:25	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.30.2021 23:25	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.30.2021 23:25	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.30.2021 23:25	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.30.2021 23:25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	112	%	70-130	01.30.2021 23:25		
1,4-Difluorobenzene	540-36-3	104	%	70-130	01.30.2021 23:25		



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Tetra Tech- Midland, Midland, TX

EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-20 (5')** Matrix: Soil Date Received: 01.27.2021 15:24

Lab Sample Id: 686305-016 Date Collected: 01.26.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.28.2021 14:45

% Moisture:

Seq Number: 3149318

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9.70	5.05	mg/kg	01.28.2021 23:45		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.28.2021 12:00

% Moisture:

Seq Number: 3149650

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.28.2021 19:50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.28.2021 19:50	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.28.2021 19:50	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.28.2021 19:50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-130	01.28.2021 19:50	
o-Terphenyl	84-15-1	134	%	70-130	01.28.2021 19:50	**



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX

EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-20 (5')**

Matrix: Soil

Date Received: 01.27.2021 15:24

Lab Sample Id: 686305-016

Date Collected: 01.26.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.29.2021 17:15

% Moisture:

Seq Number: 3149478

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.30.2021 23:50	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.30.2021 23:50	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.30.2021 23:50	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.30.2021 23:50	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.30.2021 23:50	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.30.2021 23:50	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.30.2021 23:50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	109	%	70-130	01.30.2021 23:50		
4-Bromofluorobenzene	460-00-4	121	%	70-130	01.30.2021 23:50		



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Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-21 (5')** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-017 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 14:45 % Moisture:
 Seq Number: 3149318 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8.03	4.99	mg/kg	01.28.2021 23:51		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149650 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.28.2021 20:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.28.2021 20:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.28.2021 20:11	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.28.2021 20:11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	90	%	70-130	01.28.2021 20:11		
o-Terphenyl	84-15-1	127	%	70-130	01.28.2021 20:11		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-21 (5')** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-017 Date Collected: 01.26.2021 00:00
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: KTL
 Analyst: KTL Date Prep: 01.29.2021 17:15 % Moisture:
 Seq Number: 3149478 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.31.2021 00:15	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.31.2021 00:15	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.31.2021 00:15	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.31.2021 00:15	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.31.2021 00:15	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.31.2021 00:15	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.31.2021 00:15	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	108	%	70-130	01.31.2021 00:15		
1,4-Difluorobenzene	540-36-3	109	%	70-130	01.31.2021 00:15		



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Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-22 (5')** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-018 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 14:45 % Moisture:
 Seq Number: 3149318 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9.41	4.96	mg/kg	01.28.2021 23:56		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149650 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.28.2021 20:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.28.2021 20:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.28.2021 20:33	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.28.2021 20:33	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	107	%	70-130	01.28.2021 20:33		
o-Terphenyl	84-15-1	149	%	70-130	01.28.2021 20:33	**	



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **Bottomhole-22 (5')** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-018 Date Collected: 01.26.2021 00:00
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: KTL
 Analyst: KTL Date Prep: 01.29.2021 17:15 % Moisture:
 Seq Number: 3149478 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.31.2021 00:40	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.31.2021 00:40	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.31.2021 00:40	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.31.2021 00:40	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.31.2021 00:40	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.31.2021 00:40	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.31.2021 00:40	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	107	%	70-130	01.31.2021 00:40		
4-Bromofluorobenzene	460-00-4	105	%	70-130	01.31.2021 00:40		



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Tetra Tech- Midland, Midland, TX

EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-7** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-019 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 14:45 % Moisture:
 Seq Number: 3149318 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	45.1	5.04	mg/kg	01.29.2021 00:01		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149650 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.28.2021 20:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.28.2021 20:54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.28.2021 20:54	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.28.2021 20:54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	94	%	70-130	01.28.2021 20:54		
o-Terphenyl	84-15-1	135	%	70-130	01.28.2021 20:54	**	



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Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-7**
Lab Sample Id: 686305-019

Matrix: Soil
Date Collected: 01.26.2021 00:00

Date Received: 01.27.2021 15:24

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.29.2021 17:15

% Moisture:
Basis: Wet Weight

Seq Number: 3149478

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.31.2021 01:05	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.31.2021 01:05	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.31.2021 01:05	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.31.2021 01:05	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.31.2021 01:05	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.31.2021 01:05	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.31.2021 01:05	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	116	%	70-130	01.31.2021 01:05		
1,4-Difluorobenzene	540-36-3	111	%	70-130	01.31.2021 01:05		



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Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-8** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-020 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 14:45 % Moisture:
 Seq Number: 3149318 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	54.0	4.97	mg/kg	01.29.2021 00:07		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149650 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.28.2021 21:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.28.2021 21:15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.28.2021 21:15	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.28.2021 21:15	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	90	%	70-130	01.28.2021 21:15		
o-Terphenyl	84-15-1	121	%	70-130	01.28.2021 21:15		



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Tetra Tech- Midland, Midland, TX

EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-8**
Lab Sample Id: 686305-020

Matrix: Soil
Date Collected: 01.26.2021 00:00

Date Received: 01.27.2021 15:24

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.29.2021 17:15

% Moisture:
Basis: Wet Weight

Seq Number: 3149478

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.31.2021 01:30	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.31.2021 01:30	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.31.2021 01:30	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.31.2021 01:30	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.31.2021 01:30	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.31.2021 01:30	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.31.2021 01:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	113	%	70-130	01.31.2021 01:30	
1,4-Difluorobenzene	540-36-3	109	%	70-130	01.31.2021 01:30	



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Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-9** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-021 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 14:45 % Moisture:
 Seq Number: 3149318 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	53.6	4.96	mg/kg	01.29.2021 00:12		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149582 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.28.2021 13:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.28.2021 13:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.28.2021 13:28	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.28.2021 13:28	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	95	%	70-130	01.28.2021 13:28		
o-Terphenyl	84-15-1	106	%	70-130	01.28.2021 13:28		



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Tetra Tech- Midland, Midland, TX

EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-9**
Lab Sample Id: 686305-021

Matrix: Soil
Date Collected: 01.26.2021 00:00

Date Received: 01.27.2021 15:24

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.29.2021 18:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149517

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.31.2021 19:30	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.31.2021 19:30	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.31.2021 19:30	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	01.31.2021 19:30	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.31.2021 19:30	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.31.2021 19:30	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.31.2021 19:30	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	116	%	70-130	01.31.2021 19:30		
4-Bromofluorobenzene	460-00-4	109	%	70-130	01.31.2021 19:30		



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Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-10** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-022 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 14:45 % Moisture:
 Seq Number: 3149318 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	51.8	4.98	mg/kg	01.29.2021 00:28		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149582 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.28.2021 14:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.28.2021 14:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.28.2021 14:31	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.28.2021 14:31	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	122	%	70-130	01.28.2021 14:31		
o-Terphenyl	84-15-1	135	%	70-130	01.28.2021 14:31	**	



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Tetra Tech- Midland, Midland, TX

EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-10**
Lab Sample Id: 686305-022

Matrix: Soil
Date Collected: 01.26.2021 00:00

Date Received: 01.27.2021 15:24

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.29.2021 18:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149517

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.31.2021 19:51	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.31.2021 19:51	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.31.2021 19:51	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.31.2021 19:51	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.31.2021 19:51	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.31.2021 19:51	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.31.2021 19:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	113	%	70-130	01.31.2021 19:51	
1,4-Difluorobenzene	540-36-3	122	%	70-130	01.31.2021 19:51	



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Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-11** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-023 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 14:45 % Moisture:
 Seq Number: 3149318 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	50.6	4.97	mg/kg	01.29.2021 00:33		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149582 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.28.2021 14:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.28.2021 14:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.28.2021 14:52	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.28.2021 14:52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	113	%	70-130	01.28.2021 14:52		
o-Terphenyl	84-15-1	130	%	70-130	01.28.2021 14:52		



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Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-11**
Lab Sample Id: 686305-023

Matrix: Soil
Date Collected: 01.26.2021 00:00

Date Received: 01.27.2021 15:24

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.29.2021 18:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149517

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.31.2021 20:11	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.31.2021 20:11	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.31.2021 20:11	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.31.2021 20:11	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.31.2021 20:11	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.31.2021 20:11	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.31.2021 20:11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	110	%	70-130	01.31.2021 20:11		
1,4-Difluorobenzene	540-36-3	116	%	70-130	01.31.2021 20:11		



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Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-12** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-024 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 14:45 % Moisture:
 Seq Number: 3149318 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	58.3	5.03	mg/kg	01.29.2021 00:49		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149582 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.28.2021 15:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.28.2021 15:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.28.2021 15:14	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.28.2021 15:14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	98	%	70-130	01.28.2021 15:14		
o-Terphenyl	84-15-1	112	%	70-130	01.28.2021 15:14		



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Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-12**
Lab Sample Id: 686305-024

Matrix: Soil
Date Collected: 01.26.2021 00:00

Date Received: 01.27.2021 15:24

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.29.2021 18:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149517

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.31.2021 20:32	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.31.2021 20:32	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.31.2021 20:32	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.31.2021 20:32	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.31.2021 20:32	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.31.2021 20:32	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.31.2021 20:32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	117	%	70-130	01.31.2021 20:32		
4-Bromofluorobenzene	460-00-4	110	%	70-130	01.31.2021 20:32		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-13** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-025 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 14:45 % Moisture:
 Seq Number: 3149318 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	58.9	5.00	mg/kg	01.29.2021 00:55		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149582 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.28.2021 15:35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.28.2021 15:35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.28.2021 15:35	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.28.2021 15:35	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	114	%	70-130	01.28.2021 15:35		
o-Terphenyl	84-15-1	135	%	70-130	01.28.2021 15:35	**	



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX

EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-13**
Lab Sample Id: 686305-025

Matrix: Soil
Date Collected: 01.26.2021 00:00

Date Received: 01.27.2021 15:24

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.29.2021 18:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149517

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.31.2021 20:53	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.31.2021 20:53	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.31.2021 20:53	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.31.2021 20:53	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.31.2021 20:53	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.31.2021 20:53	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.31.2021 20:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	120	%	70-130	01.31.2021 20:53	
4-Bromofluorobenzene	460-00-4	128	%	70-130	01.31.2021 20:53	



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Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-14** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-026 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 14:45 % Moisture:
 Seq Number: 3149318 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	59.6	4.99	mg/kg	01.29.2021 01:00		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149582 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.28.2021 15:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.28.2021 15:56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.28.2021 15:56	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.28.2021 15:56	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	110	%	70-130	01.28.2021 15:56		
o-Terphenyl	84-15-1	125	%	70-130	01.28.2021 15:56		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX

EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-14**
Lab Sample Id: 686305-026

Matrix: Soil
Date Collected: 01.26.2021 00:00

Date Received: 01.27.2021 15:24

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.29.2021 18:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149517

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.31.2021 21:13	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.31.2021 21:13	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.31.2021 21:13	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.31.2021 21:13	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.31.2021 21:13	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.31.2021 21:13	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.31.2021 21:13	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	107	%	70-130	01.31.2021 21:13		
1,4-Difluorobenzene	540-36-3	116	%	70-130	01.31.2021 21:13		



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Tetra Tech- Midland, Midland, TX

EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-15** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-027 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 14:45 % Moisture:
 Seq Number: 3149318 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	50.8	4.97	mg/kg	01.29.2021 01:05		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149582 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.28.2021 16:17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.28.2021 16:17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.28.2021 16:17	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.28.2021 16:17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	101	%	70-130	01.28.2021 16:17		
o-Terphenyl	84-15-1	118	%	70-130	01.28.2021 16:17		



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Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-15**
Lab Sample Id: 686305-027

Matrix: Soil
Date Collected: 01.26.2021 00:00

Date Received: 01.27.2021 15:24

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.29.2021 18:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149517

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.31.2021 21:34	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.31.2021 21:34	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.31.2021 21:34	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.31.2021 21:34	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.31.2021 21:34	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.31.2021 21:34	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.31.2021 21:34	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	108	%	70-130	01.31.2021 21:34		
4-Bromofluorobenzene	460-00-4	120	%	70-130	01.31.2021 21:34		



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Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-16** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-028 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 14:45 % Moisture:
 Seq Number: 3149318 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	58.4	5.03	mg/kg	01.29.2021 01:10		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149582 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.28.2021 16:38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.28.2021 16:38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.28.2021 16:38	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.28.2021 16:38	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	93	%	70-130	01.28.2021 16:38		
o-Terphenyl	84-15-1	105	%	70-130	01.28.2021 16:38		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-16**
Lab Sample Id: 686305-028

Matrix: Soil
Date Collected: 01.26.2021 00:00

Date Received: 01.27.2021 15:24

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.29.2021 18:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149517

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.31.2021 21:55	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.31.2021 21:55	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.31.2021 21:55	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.31.2021 21:55	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.31.2021 21:55	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.31.2021 21:55	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.31.2021 21:55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	114	%	70-130	01.31.2021 21:55		
4-Bromofluorobenzene	460-00-4	114	%	70-130	01.31.2021 21:55		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-17** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-029 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 14:45 % Moisture:
 Seq Number: 3149318 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16.0	4.98	mg/kg	01.29.2021 01:16		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149582 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.28.2021 17:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.28.2021 17:00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.28.2021 17:00	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.28.2021 17:00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	107	%	70-130	01.28.2021 17:00		
o-Terphenyl	84-15-1	114	%	70-130	01.28.2021 17:00		



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Tetra Tech- Midland, Midland, TX

EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-17**
Lab Sample Id: 686305-029

Matrix: Soil
Date Collected: 01.26.2021 00:00

Date Received: 01.27.2021 15:24

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.29.2021 18:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149517

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.31.2021 22:15	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.31.2021 22:15	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.31.2021 22:15	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.31.2021 22:15	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.31.2021 22:15	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.31.2021 22:15	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.31.2021 22:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	126	%	70-130	01.31.2021 22:15	
4-Bromofluorobenzene	460-00-4	127	%	70-130	01.31.2021 22:15	



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-18** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-030 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 14:45 % Moisture:
 Seq Number: 3149318 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	15.9	5.00	mg/kg	01.29.2021 01:21		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149582 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.28.2021 17:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.28.2021 17:21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.28.2021 17:21	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.28.2021 17:21	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	105	%	70-130	01.28.2021 17:21		
o-Terphenyl	84-15-1	114	%	70-130	01.28.2021 17:21		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-18**
Lab Sample Id: 686305-030

Matrix: Soil
Date Collected: 01.26.2021 00:00

Date Received: 01.27.2021 15:24

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.29.2021 18:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149517

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.31.2021 22:36	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.31.2021 22:36	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.31.2021 22:36	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.31.2021 22:36	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.31.2021 22:36	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.31.2021 22:36	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.31.2021 22:36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	117	%	70-130	01.31.2021 22:36		
1,4-Difluorobenzene	540-36-3	120	%	70-130	01.31.2021 22:36		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-19** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-031 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 15:10 % Moisture:
 Seq Number: 3149324 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.5	4.96	mg/kg	01.28.2021 17:07	X	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149582 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.28.2021 18:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.28.2021 18:04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.28.2021 18:04	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.28.2021 18:04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	89	%	70-130	01.28.2021 18:04		
o-Terphenyl	84-15-1	99	%	70-130	01.28.2021 18:04		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX

EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-19**
Lab Sample Id: 686305-031

Matrix: Soil
Date Collected: 01.26.2021 00:00

Date Received: 01.27.2021 15:24

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.29.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149477

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.2021 08:22	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.2021 08:22	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.2021 08:22	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.30.2021 08:22	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.2021 08:22	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.2021 08:22	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.30.2021 08:22	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	01.30.2021 08:22		
4-Bromofluorobenzene	460-00-4	99	%	70-130	01.30.2021 08:22		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-20** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-032 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 15:10 % Moisture:
 Seq Number: 3149324 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9.19	4.99	mg/kg	01.28.2021 17:23		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149582 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.28.2021 18:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.28.2021 18:25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.28.2021 18:25	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.28.2021 18:25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	91	%	70-130	01.28.2021 18:25		
o-Terphenyl	84-15-1	98	%	70-130	01.28.2021 18:25		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-20**
Lab Sample Id: 686305-032

Matrix: Soil
Date Collected: 01.26.2021 00:00

Date Received: 01.27.2021 15:24

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.29.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149477

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.2021 08:48	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.2021 08:48	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.2021 08:48	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.30.2021 08:48	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.2021 08:48	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.2021 08:48	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.30.2021 08:48	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	112	%	70-130	01.30.2021 08:48		
1,4-Difluorobenzene	540-36-3	102	%	70-130	01.30.2021 08:48		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-21** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-033 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 15:10 % Moisture:
 Seq Number: 3149324 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	44.1	5.04	mg/kg	01.28.2021 17:28		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149582 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.28.2021 18:46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.28.2021 18:46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.28.2021 18:46	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.28.2021 18:46	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	90	%	70-130	01.28.2021 18:46		
o-Terphenyl	84-15-1	99	%	70-130	01.28.2021 18:46		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX

EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-21**
Lab Sample Id: 686305-033

Matrix: Soil
Date Collected: 01.26.2021 00:00

Date Received: 01.27.2021 15:24

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.29.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149477

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.2021 07:55	UX	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.2021 07:55	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.2021 07:55	UX	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.30.2021 07:55	UX	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.2021 07:55	UX	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.2021 07:55	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.30.2021 07:55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	93	%	70-130	01.30.2021 07:55		
1,4-Difluorobenzene	540-36-3	81	%	70-130	01.30.2021 07:55		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-22** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-034 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 15:10 % Moisture:
 Seq Number: 3149324 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	47.1	4.96	mg/kg	01.28.2021 17:33		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149582 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.28.2021 19:07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.28.2021 19:07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.28.2021 19:07	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.28.2021 19:07	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	104	%	70-130	01.28.2021 19:07		
o-Terphenyl	84-15-1	111	%	70-130	01.28.2021 19:07		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX

EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-22**
Lab Sample Id: 686305-034

Matrix: Soil
Date Collected: 01.26.2021 00:00

Date Received: 01.27.2021 15:24

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.29.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149477

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.2021 09:14	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.2021 09:14	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.2021 09:14	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.30.2021 09:14	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.2021 09:14	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.2021 09:14	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.30.2021 09:14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	91	%	70-130	01.30.2021 09:14		
1,4-Difluorobenzene	540-36-3	89	%	70-130	01.30.2021 09:14		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-23** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-035 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 15:10 % Moisture:
 Seq Number: 3149324 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	44.9	5.00	mg/kg	01.28.2021 17:39		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149582 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.28.2021 19:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.28.2021 19:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.28.2021 19:29	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.28.2021 19:29	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	89	%	70-130	01.28.2021 19:29		
o-Terphenyl	84-15-1	98	%	70-130	01.28.2021 19:29		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-23**
Lab Sample Id: 686305-035

Matrix: Soil
Date Collected: 01.26.2021 00:00

Date Received: 01.27.2021 15:24

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.29.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149477

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.2021 09:41	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.2021 09:41	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.2021 09:41	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.30.2021 09:41	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.2021 09:41	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.2021 09:41	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.30.2021 09:41	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	108	%	70-130	01.30.2021 09:41		
4-Bromofluorobenzene	460-00-4	112	%	70-130	01.30.2021 09:41		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-24** Matrix: Soil Date Received: 01.27.2021 15:24
 Lab Sample Id: 686305-036 Date Collected: 01.26.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.28.2021 15:10 % Moisture:
 Seq Number: 3149324 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	42.0	4.98	mg/kg	01.28.2021 17:54		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 12:00 % Moisture:
 Seq Number: 3149582 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.28.2021 19:50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.28.2021 19:50	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.28.2021 19:50	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.28.2021 19:50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	87	%	70-130	01.28.2021 19:50		
o-Terphenyl	84-15-1	96	%	70-130	01.28.2021 19:50		



Certificate of Analytical Results 686305

Tetra Tech- Midland, Midland, TX EOG-Lomas Rojas 28-2 Oil Transfer Line

Sample Id: **SW-24**
Lab Sample Id: 686305-036

Matrix: Soil
Date Collected: 01.26.2021 00:00

Date Received: 01.27.2021 15:24

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.29.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149477

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.2021 10:07	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.2021 10:07	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.2021 10:07	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.30.2021 10:07	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.2021 10:07	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.2021 10:07	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.30.2021 10:07	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	110	%	70-130	01.30.2021 10:07		
1,4-Difluorobenzene	540-36-3	105	%	70-130	01.30.2021 10:07		

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
EOG-Lomas Rojas 28-2 Oil Transfer Line

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3149316

Matrix: Solid

Prep Method: E300P

Date Prep: 01.28.2021

MB Sample Id: 7720241-1-BLK

LCS Sample Id: 7720241-1-BKS

LCSD Sample Id: 7720241-1-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	01.28.2021 19:50	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3149318

Matrix: Solid

Prep Method: E300P

Date Prep: 01.28.2021

MB Sample Id: 7720242-1-BLK

LCS Sample Id: 7720242-1-BKS

LCSD Sample Id: 7720242-1-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	256	102	90-110	1	20	mg/kg	01.28.2021 22:47	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3149324

Matrix: Solid

Prep Method: E300P

Date Prep: 01.28.2021

MB Sample Id: 7720245-1-BLK

LCS Sample Id: 7720245-1-BKS

LCSD Sample Id: 7720245-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	255	102	255	102	90-110	0	20	mg/kg	01.28.2021 16:57	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3149316

Matrix: Soil

Prep Method: E300P

Date Prep: 01.28.2021

Parent Sample Id: 686301-001

MS Sample Id: 686301-001 S

MSD Sample Id: 686301-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	313	252	540	90	541	90	90-110	0	20	mg/kg	01.28.2021 20:06	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3149316

Matrix: Soil

Prep Method: E300P

Date Prep: 01.28.2021

Parent Sample Id: 686305-001

MS Sample Id: 686305-001 S

MSD Sample Id: 686305-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	9.48	249	261	101	261	101	90-110	0	20	mg/kg	01.28.2021 21:20	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3149318

Matrix: Soil

Prep Method: E300P

Date Prep: 01.28.2021

Parent Sample Id: 686305-011

MS Sample Id: 686305-011 S

MSD Sample Id: 686305-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	16.5	253	272	101	274	102	90-110	1	20	mg/kg	01.28.2021 23:03	

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
EOG-Lomas Rojas 28-2 Oil Transfer Line

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3149318

Matrix: Soil

Prep Method: E300P

Date Prep: 01.28.2021

Parent Sample Id: 686305-021

MS Sample Id: 686305-021 S

MSD Sample Id: 686305-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	53.6	248	306	102	307	102	90-110	0	20	mg/kg	01.29.2021 00:17	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3149324

Matrix: Soil

Prep Method: E300P

Date Prep: 01.28.2021

Parent Sample Id: 686200-005

MS Sample Id: 686200-005 S

MSD Sample Id: 686200-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	619	250	857	95	849	92	90-110	1	20	mg/kg	01.28.2021 18:25	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3149324

Matrix: Soil

Prep Method: E300P

Date Prep: 01.28.2021

Parent Sample Id: 686305-031

MS Sample Id: 686305-031 S

MSD Sample Id: 686305-031 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	248	299	116	282	109	90-110	6	20	mg/kg	01.28.2021 17:13	X

Analytical Method: TPH By SW8015 Mod

Seq Number: 3149582

Matrix: Solid

Prep Method: SW8015P

Date Prep: 01.28.2021

MB Sample Id: 7720312-1-BLK

LCS Sample Id: 7720312-1-BKS

LCSD Sample Id: 7720312-1-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	1040	104	1120	112	70-130	7	20	mg/kg	01.28.2021 12:36	
Diesel Range Organics (DRO)	<50.0	1000	935	94	1000	100	70-130	7	20	mg/kg	01.28.2021 12:36	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	112		109		108		70-130	%	01.28.2021 12:36
o-Terphenyl	131	**	102		110		70-130	%	01.28.2021 12:36

Analytical Method: TPH By SW8015 Mod

Seq Number: 3149650

Matrix: Solid

Prep Method: SW8015P

Date Prep: 01.28.2021

MB Sample Id: 7720307-1-BLK

LCS Sample Id: 7720307-1-BKS

LCSD Sample Id: 7720307-1-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	984	98	70-130	5	20	mg/kg	01.28.2021 12:36	
Diesel Range Organics (DRO)	<50.0	1000	868	87	913	91	70-130	5	20	mg/kg	01.28.2021 12:36	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	97		100		108		70-130	%	01.28.2021 12:36
o-Terphenyl	144	**	118		125		70-130	%	01.28.2021 12:36

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

EOG-Lomas Rojas 28-2 Oil Transfer Line

Analytical Method: TPH By SW8015 Mod

Seq Number: 3149582

Matrix: Solid

Prep Method: SW8015P

Date Prep: 01.28.2021

MB Sample Id: 7720312-1-BLK

Parameter

Motor Oil Range Hydrocarbons (MRO)

**MB
Result**

<50.0

Units

mg/kg

**Analysis
Date**

01.28.2021 12:15

Flag**Analytical Method:** TPH By SW8015 Mod

Seq Number: 3149650

Matrix: Solid

Prep Method: SW8015P

Date Prep: 01.28.2021

MB Sample Id: 7720307-1-BLK

Parameter

Motor Oil Range Hydrocarbons (MRO)

**MB
Result**

<50.0

Units

mg/kg

**Analysis
Date**

01.28.2021 12:15

Flag**Analytical Method:** TPH By SW8015 Mod

Seq Number: 3149582

Matrix: Soil

Prep Method: SW8015P

Date Prep: 01.28.2021

Parent Sample Id: 686305-021

MS Sample Id: 686305-021 S

MSD Sample Id: 686305-021 SD

Parameter

Gasoline Range Hydrocarbons (GRO)

**Parent
Result**

<50.0

**Spike
Amount**

999

**MS
Result**

1140

**MS
%Rec**

114

**MSD
Result**

1180

**MSD
%Rec**

118

Limits

70-130

%RPD

3

**RPD
Limit**

20

Units

mg/kg

**Analysis
Date**

01.28.2021 13:49

Flag

Diesel Range Organics (DRO)

<50.0

999

1060

106

1100

110

70-130

4

20

mg/kg

01.28.2021 13:49

Surrogate

1-Chlorooctane

**MS
%Rec**

100

**MS
Flag****MSD
%Rec**

104

**MSD
Flag****Limits**

70-130

Units

%

**Analysis
Date**

01.28.2021 13:49

o-Terphenyl

96

100

70-130

%

01.28.2021 13:49

Analytical Method: TPH By SW8015 Mod

Seq Number: 3149650

Matrix: Soil

Prep Method: SW8015P

Date Prep: 01.28.2021

Parent Sample Id: 686305-001

MS Sample Id: 686305-001 S

MSD Sample Id: 686305-001 SD

Parameter

Gasoline Range Hydrocarbons (GRO)

**Parent
Result**

<50.0

**Spike
Amount**

999

**MS
Result**

1000

**MS
%Rec**

100

**MSD
Result**

989

**MSD
%Rec**

99

Limits

70-130

%RPD

1

**RPD
Limit**

20

Units

mg/kg

**Analysis
Date**

01.28.2021 13:49

Flag

Diesel Range Organics (DRO)

<50.0

999

956

96

954

96

70-130

0

20

mg/kg

01.28.2021 13:49

Surrogate

1-Chlorooctane

**MS
%Rec**

102

**MS
Flag****MSD
%Rec**

99

**MSD
Flag****Limits**

70-130

Units

%

**Analysis
Date**

01.28.2021 13:49

o-Terphenyl

114

112

70-130

%

01.28.2021 13:49

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



Tetra Tech- Midland
EOG-Lomas Rojas 28-2 Oil Transfer Line

Analytical Method: BTEX by EPA 8021B

Seq Number: 3149445

Matrix: Solid

Prep Method: SW5035A

Date Prep: 01.29.2021

MB Sample Id: 7720374-1-BLK

LCS Sample Id: 7720374-1-BKS

LCSD Sample Id: 7720374-1-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	0.0954	95	0.120	120	70-130	23	35	mg/kg	01.29.2021 15:04	
Toluene	<0.00200	0.100	0.0989	99	0.119	119	70-130	18	35	mg/kg	01.29.2021 15:04	
Ethylbenzene	<0.00200	0.100	0.0996	100	0.118	118	70-130	17	35	mg/kg	01.29.2021 15:04	
m,p-Xylenes	<0.00400	0.200	0.205	103	0.244	122	70-130	17	35	mg/kg	01.29.2021 15:04	
o-Xylene	<0.00200	0.100	0.0983	98	0.118	118	70-130	18	35	mg/kg	01.29.2021 15:04	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	89		96		108		70-130	%	01.29.2021 15:04
4-Bromofluorobenzene	70		87		113		70-130	%	01.29.2021 15:04

Analytical Method: BTEX by EPA 8021B

Seq Number: 3149477

Matrix: Solid

Prep Method: SW5035A

Date Prep: 01.29.2021

MB Sample Id: 7720415-1-BLK

LCS Sample Id: 7720415-1-BKS

LCSD Sample Id: 7720415-1-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	0.0926	93	0.0809	81	70-130	13	35	mg/kg	01.30.2021 04:52	
Toluene	<0.00200	0.100	0.0915	92	0.0823	82	70-130	11	35	mg/kg	01.30.2021 04:52	
Ethylbenzene	<0.00200	0.100	0.0889	89	0.0801	80	70-130	10	35	mg/kg	01.30.2021 04:52	
m,p-Xylenes	<0.00400	0.200	0.183	92	0.167	84	70-130	9	35	mg/kg	01.30.2021 04:52	
o-Xylene	<0.00200	0.100	0.0904	90	0.0854	85	70-130	6	35	mg/kg	01.30.2021 04:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	86		98		101		70-130	%	01.30.2021 04:52
4-Bromofluorobenzene	72		95		102		70-130	%	01.30.2021 04:52

Analytical Method: BTEX by EPA 8021B

Seq Number: 3149478

Matrix: Solid

Prep Method: SW5035A

Date Prep: 01.29.2021

MB Sample Id: 7720416-1-BLK

LCS Sample Id: 7720416-1-BKS

LCSD Sample Id: 7720416-1-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	0.0711	71	0.0745	75	70-130	5	35	mg/kg	01.30.2021 18:40	
Toluene	<0.00200	0.100	0.0719	72	0.0738	74	70-130	3	35	mg/kg	01.30.2021 18:40	
Ethylbenzene	<0.00200	0.100	0.0730	73	0.0709	71	70-130	3	35	mg/kg	01.30.2021 18:40	
m,p-Xylenes	<0.00400	0.200	0.144	72	0.147	74	70-130	2	35	mg/kg	01.30.2021 18:40	
o-Xylene	<0.00200	0.100	0.0718	72	0.0758	76	70-130	5	35	mg/kg	01.30.2021 18:40	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	86		91		104		70-130	%	01.30.2021 18:40
4-Bromofluorobenzene	76		86		88		70-130	%	01.30.2021 18:40

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

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

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

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



Tetra Tech- Midland

EOG-Lomas Rojas 28-2 Oil Transfer Line

Analytical Method: BTEX by EPA 8021B

Seq Number: 3149517

Matrix: Solid

Prep Method: SW5035A

Date Prep: 01.29.2021

MB Sample Id: 7720440-1-BLK

LCS Sample Id: 7720440-1-BKS

LCSD Sample Id: 7720440-1-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	0.0925	93	0.0913	91	70-130	1	35	mg/kg	01.31.2021 17:08	
Toluene	<0.00200	0.100	0.0932	93	0.0916	92	70-130	2	35	mg/kg	01.31.2021 17:08	
Ethylbenzene	<0.00200	0.100	0.0865	87	0.0894	89	70-130	3	35	mg/kg	01.31.2021 17:08	
m,p-Xylenes	<0.00400	0.200	0.178	89	0.177	89	70-130	1	35	mg/kg	01.31.2021 17:08	
o-Xylene	<0.00200	0.100	0.0896	90	0.0892	89	70-130	0	35	mg/kg	01.31.2021 17:08	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		112		106		70-130	%	01.31.2021 17:08
4-Bromofluorobenzene	126		114		111		70-130	%	01.31.2021 17:08

Analytical Method: BTEX by EPA 8021B

Seq Number: 3149445

Matrix: Soil

Prep Method: SW5035A

Date Prep: 01.29.2021

Parent Sample Id: 685827-040

MS Sample Id: 685827-040 S

MSD Sample Id: 685827-040 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.0874	87	0.0646	65	70-130	30	35	mg/kg	01.29.2021 15:55	X
Toluene	<0.00201	0.100	0.0880	88	0.0679	68	70-130	26	35	mg/kg	01.29.2021 15:55	X
Ethylbenzene	<0.00201	0.100	0.0803	80	0.0665	67	70-130	19	35	mg/kg	01.29.2021 15:55	X
m,p-Xylenes	<0.00402	0.201	0.163	81	0.134	67	70-130	20	35	mg/kg	01.29.2021 15:55	X
o-Xylene	<0.00201	0.100	0.0800	80	0.0669	67	70-130	18	35	mg/kg	01.29.2021 15:55	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	106		98		70-130	%	01.29.2021 15:55
4-Bromofluorobenzene	102		98		70-130	%	01.29.2021 15:55

Analytical Method: BTEX by EPA 8021B

Seq Number: 3149477

Matrix: Soil

Prep Method: SW5035A

Date Prep: 01.29.2021

Parent Sample Id: 686305-033

MS Sample Id: 686305-033 S

MSD Sample Id: 686305-033 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	0.0686	69	0.0896	90	70-130	27	35	mg/kg	01.30.2021 05:45	X
Toluene	<0.00200	0.100	0.0699	70	0.0912	91	70-130	26	35	mg/kg	01.30.2021 05:45	
Ethylbenzene	<0.00200	0.100	0.0671	67	0.0881	88	70-130	27	35	mg/kg	01.30.2021 05:45	X
m,p-Xylenes	<0.00400	0.200	0.138	69	0.181	91	70-130	27	35	mg/kg	01.30.2021 05:45	X
o-Xylene	<0.00200	0.100	0.0687	69	0.0888	89	70-130	26	35	mg/kg	01.30.2021 05:45	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		108		70-130	%	01.30.2021 05:45
4-Bromofluorobenzene	101		113		70-130	%	01.30.2021 05:45

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 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
EOG-Lomas Rojas 28-2 Oil Transfer Line

Analytical Method: BTEX by EPA 8021B

Seq Number: 3149478

Parent Sample Id: 686305-014

Matrix: Soil

MS Sample Id: 686305-014 S

Prep Method: SW5035A

Date Prep: 01.29.2021

MSD Sample Id: 686305-014 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	0.0948	95	0.0883	87	70-130	7	35	mg/kg	01.30.2021 19:31	
Toluene	<0.00200	0.0998	0.0985	99	0.0882	87	70-130	11	35	mg/kg	01.30.2021 19:31	
Ethylbenzene	<0.00200	0.0998	0.0898	90	0.0791	78	70-130	13	35	mg/kg	01.30.2021 19:31	
m,p-Xylenes	<0.00399	0.200	0.192	96	0.169	84	70-130	13	35	mg/kg	01.30.2021 19:31	
o-Xylene	<0.00200	0.0998	0.0952	95	0.0847	84	70-130	12	35	mg/kg	01.30.2021 19:31	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		105		70-130	%	01.30.2021 19:31
4-Bromofluorobenzene	112		107		70-130	%	01.30.2021 19:31

Analytical Method: BTEX by EPA 8021B

Seq Number: 3149517

Parent Sample Id: 686305-021

Matrix: Soil

MS Sample Id: 686305-021 S

Prep Method: SW5035A

Date Prep: 01.29.2021

MSD Sample Id: 686305-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0700	70	0.0969	97	70-130	32	35	mg/kg	01.31.2021 17:49	
Toluene	<0.00200	0.0998	0.0775	78	0.0972	97	70-130	23	35	mg/kg	01.31.2021 17:49	
Ethylbenzene	<0.00200	0.0998	0.0734	74	0.0897	90	70-130	20	35	mg/kg	01.31.2021 17:49	
m,p-Xylenes	<0.00399	0.200	0.148	74	0.181	91	70-130	20	35	mg/kg	01.31.2021 17:49	
o-Xylene	<0.00200	0.0998	0.0742	74	0.0912	91	70-130	21	35	mg/kg	01.31.2021 17:49	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	113		112		70-130	%	01.31.2021 17:49
4-Bromofluorobenzene	120		112		70-130	%	01.31.2021 17:49

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

Page 1 of 4



Tetra Tech, Inc.

 900 West Wall Street, Ste 100
 Midland, Texas 79701
 Tel (432) 682-4559
 Fax (432) 682-3946

Client Name:

Site Manager:

Brittany Long

Project Name:

Lomas Rojas 26-2 Oil Transfer Line

Project Location:
(county, state)

Lea County, New Mexico

Project #:

Invoice to:

Todd Wells

Receiving Laboratory:

Xenco

Sampler Signature:

Devin Dominguez

Comments:

SAMPLE IDENTIFICATION

LAB # (LAB USE ONLY)	SAMPLING		MATRIX		PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)	LAB USE ONLY	REMARKS:
	DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	None					
									YEAR: 2021				
	Bottomhole-5 (8)	1/26/2021		X						1	N	X	
	Bottomhole-6 (7)	1/26/2021		X						1	N	X	
	Bottomhole-7 (7)	1/26/2021		X						1	N	X	
	Bottomhole-8 (7)	1/26/2021		X						1	N	X	
	Bottomhole-9 (7)	1/26/2021		X						1	N	X	
	Bottomhole-10 (7)	1/26/2021		X						1	N	X	
	Bottomhole-11 (7)	1/26/2021		X						1	N	X	
	Bottomhole-12 (7)	1/26/2021		X						1	N	X	
	Bottomhole-13 (3.5)	1/26/2021		X						1	N	X	
	Bottomhole-14 (3.5)	1/26/2021		X						1	N	X	

(Circle or Specify Method No.)

ANALYSIS REQUEST

1080305

Relinquished by: *Devin Dominguez* Date: 1/27/21 Time: 1523Relinquished by: *Devin Dominguez* Date: 1/27/21 Time: 1524

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

3.5

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

ORIGINAL COPY

Analysis Request of Chain of Custody Record

Page 2 of 4



Tetra Tech, Inc.

 900 West Wall Street, Ste 100
 Midland, Texas 79701
 Tel (432) 682-4559
 Fax (432) 682-3946

Client Name:

Site Manager:

Brittany Long

Project Name:

Lomas Rojas 26-2 Oil Transfer Line

Project Location:

Lea County, New Mexico

Project #:

Invoice to:

Todd Wells

Receiving Laboratory:

Xenco

Sampler Signature:

Devin Dominguez

Comments:

SAMPLE IDENTIFICATION

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

 Released by: *[Signature]* Date: 1/27/21 Time:
Received by: *[Signature]* Date: 1/27/21 Time: 1524

Relinquished by: Date: Time:

Received by: Date: Time:

 ANALYSIS REQUEST
 (Circle or Specify Method No.)

480305

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	
TPH 8015R	
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

3.8

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

ORIGINAL COPY

Analysis Request of Custody Record

Page 3 of 4



Tetra Tech, Inc.

 900 West Wall Street, Ste 100
 Midland, Texas 79701
 Tel (432) 682-4559
 Fax (432) 682-3946

Client Name:

EOG

Site Manager:

Brittany Long

Project Name:

Lomas Rojas 26-2 Oil Transfer Line

Project Location:

Lea County, New Mexico

Project #:

Invoice to:

Todd Wells

Receiving Laboratory:

Xenco

Sampler Signature:

Devin Dominguez

Comments:

SAMPLE IDENTIFICATION

LAB # (LAB USE ONLY)	SAMPLING		MATRIX		PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)
	DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	None			
									YEAR: 2021		
SW-9	1/26/2021		X				X			1	N
SW-10	1/26/2021		X				X			1	N
SW-11	1/26/2021		X				X			1	N
SW-12	1/26/2021		X				X			1	N
SW-13	1/26/2021		X				X			1	N
SW-14	1/26/2021		X				X			1	N
SW-15	1/26/2021		X				X			1	N
SW-16	1/26/2021		X				X			1	N
SW-17	1/26/2021		X				X			1	N
SW-18	1/26/2021		X				X			1	N

Relinquished by:

Date: 1/27/21 Time: 1524

Relinquished by:

Date: 1/27/21 Time: 1524

Received by:

Date: 1/27/21 Time: 1524

Received by:

Date: 1/27/21 Time: 1524

LAB USE ONLY

Sample Temperature

3.8

REMARKS:

STANDARD

☒ RUSH: Same Day 24 hr 48 hr 72 hr

☐ Push Charges Authorized

☐ Special Report Limits or TRRP Report

(Circle or Specify Method No.)

ANALYSIS REQUEST

1086305

Hold

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900 West Wall Street, Ste 100
Midland, Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

686305

ANALYSIS REQUEST

(Circle or Specify Method No.)

Client Name:						EOG								
Site Manager:						Brittany Long								
Project Name:						Lomas Rojas 26-2 Oil Transfer Line								
Project Location: (county, state)						Lea County, New Mexico							Project #:	
Invoice to:						Todd Wells								
Receiving Laboratory:						Xenco	Sampler Signature: Devin Dominguez							
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				
		SW-19	1/26/2021		X		X				1	N	X	
		SW-20	1/26/2021		X		X				1	N	X	
		SW-21	1/26/2021		X		X				1	N	X	
		SW-22	1/26/2021		X		X				1	N	X	
		SW-23	1/26/2021		X		X				1	N	X	
		SW-24	1/26/2021		X		X				1	N	X	
							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								
						TPH 8015R								
						Hold								
Relinquished by:						Date:	Time:	Received by:	Date:	Time:	LAB USE ONLY			
Relinquished by: [Signature]						Date: 1/27/21	Time:	Received by: [Signature]	Date: 1/27/21	Time: 1524	REMARKS:			
Relinquished by:						Date:	Time:	Received by:	Date:	Time:	STANDARD			
Relinquished by:						Date:	Time:	Received by:	Date:	Time:	☒ RUSH: Same Day 24 hr 48 hr 72 hr			
											☐ Push Charges Authorized			
											☐ Special Report Limits or TRRP Report			

ORIGINAL COPY

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 01.27.2021 03.24.00 PM

Work Order #: 686305

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)?	3.8
#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: 01.27.2021

Checklist reviewed by:



Jessica Kramer

Date: 01.27.2021

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 25291

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 25291
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	None	7/28/2021