

SITE INFORMATION

Report Type: Closure Report (2RP-558 & 2RP-623)

General Site Information:

Site:	Creek AL Federal Battrry					
Company:	EOG Resources					
Section, Township and Range	Unit D	Sec. 25	T 18S	R 30E		
County:	Eddy County, NM					
GPS:	32.72282			-103.91761		
Surface Owner:	State of New Mexico					

Release Data:

Date Discovery:	1/2/2010	2/19/2011
Type Release:	Produced Water	Produced Water
Source of Contamination:	Tank overflowed	Tank overflowed
Fluid Released:	10 bbls. of Produced water	15 bbls. of Produced water
Fluids Recovered:	0 bbls. of Produced water	14 bbls. of Produced water

Official Communication:

Name:	James Kennedy		Clair Gonzales
Company:	EOG Resources		Tetra Tech
Address:	5509 Champions Dr		901 West Wall Street
			Suite 100
City:	Midland, TX 79706		Midland, Texas 79701
Phone number:	432-686-7016		432-687-8634
Fax:			
Email:	James.Kennedy@eogresources.com		clair.gonzales@tetrattech.com

Site Characterization

Depth to Groundwater:	183.99' below ground surface (bgs)
Karst Potential:	Medium

Recommended Remedial Action Levels (RRALs)

Benzene	Total BTEX	TPH (GRO+DRO+MRO)	Chlorides
10 mg/kg	50 mg/kg	2,500 mg/kg	20,000 mg/kg



June 14, 2021

Bradford Billings
Hydrologist
District 2 Artesia
Oil Conservation Division
Santa Fe, NM 87505

**Re: Closure Report
EOG Resources
Creek AL Federal Battery
Unit D, Section 25, Township 18 South, Range 30 East
Eddy County, New Mexico
2RP-558, Incident N°. nKmw1101328629
2RP-623, Incident N°. nKmw1106136997**

Mr. Billings:

Tetra Tech, Inc. (Tetra Tech) was contacted by EOG Resources (EOG) to assess a release at the EOG Creek AL Federal Battery (API No. 30-015-10430). The release footprint is located in the Public Land Survey System (PLSS) Unit D, Section 25, Township 18 South, Range 30 East, Eddy County, New Mexico (Site). The Site coordinates are 32.72282°, -103.91761°. The site location is shown on Figures 1 and 2.

Background

According to the State of New Mexico there are two C-141 Initial Reports, the first release occurred on January 2, 2010 as a result of a load of produced water was scheduled for pick up, but the water hauler did not arrive before the tank filled and ran over. The release consisted of 10 barrels (bbls.) of produced water affecting an area of approximate 20 feet (ft.) by 20 ft within the bermed battery. During immediate response actions, a truck was called to empty the water tank. No free fluids were recovered. The initial C-141 report was submitted to the New Mexico Oil Conservation Division (NMOCD) on February 13, 2010. The release was subsequently assigned the Remediation Permit (RP) number 2RP-558 and Incident No. nKmw1101328629. The C-141 forms are included in Appendix A.

A second C-141 Initial Report was submitted to the NMOCD on March 01, 2011. The release occurred on February 19, 2011 due to the produced water tank ran over. The release consisted of 15 bbls. of produced water affecting an approximate area of 20 ft. by 20 ft. within the bermed area. During immediate response actions, a vacuum truck recovered 14 bbls. of produced water. The release was subsequently assigned the Remediation Permit (RP) number 2RP-623 and Incident No. nKmw1106136997. The C-141 forms are included in Appendix A.

Tetra Tech

901 West Wall Street, Suite 100, Midland, TX 79701

Tel 432.682.4559 Fax 432.682.3946 www.tetrattech.com



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 medium karst potential area. The nearest well is listed in the USGS National Water Information Database website in Section 26, approximately 1.3 miles southwest of the site, and has a reported depth to groundwater of 183.99 feet below ground surface last sample on 1994. In addition, according to the New Mexico Office of the State Engineer, there are no water wells within 800 meters ($\frac{1}{2}$ miles) radius. However, there are six (6) water wells are located within 7,200 meters (approximately 4.5 miles) of the Site. The average depth to groundwater is 92 ft. bgs. Site characterization data is included in Appendix B.

Regulatory

A risk-based evaluation was performed for the site per 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 on the site characterization, the proposed RRAL for TPH is 100 mg/kg (GRO+DRO+MRO). Additionally, based on the site characterization, the proposed RRAL for chlorides is 600 mg/kg.

Soil Assessment and Analytical Results

On March 1, 2021, Tetra Tech personnel were on site to evaluate and sample the release area. The formerly impacted area was identified from the description in the C-141 and the aerial imagery. Soils were field screened for salinity using an Extech EC400 ExStik to determine sampling intervals. A total of two (2) auger holes (AH-1 and AH-2) were advanced to a total depth from surface to 3 ft. bgs. In addition, four (4) horizontal samples (H-1 through H-4) were installed along the perimeter of the release footprint to the north, east, west and south to a total depth of 0.5 ft. bgs. A total of ten (10) 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 locations are shown on Figure 3. Photographic documentation is included.

Referring to Table 1, the sample locations (AH-1 and AH-2) exceeded the Site RRAL for TPH (100 mg/kg) at the upper 3 ft. bgs. Horizontal delineation samples were below the Site RRAL for chloride (600 mg/kg), BTEX (50 mg/kg) and benzene (10 mg/kg).

Remediation Activities

Between April 8th and June 4th, 2021, Tetra Tech personnel were on site to supervise the excavation and remediation activities in order to remove the impacted soil from the release area. The excavated areas are shown on Figure 4. Three (3) areas were excavated to a total depths of



2.5 ft. bgs. and 3.5 ft. bgs. Once the excavations were complete, confirmation samples were collected for every 200 sq. ft. One (1) bottom hole sample (BH-1) was collected at the north excavation area and two (2) bottom hole samples (BH-2 and BH-3) were collected at the south excavation area. In addition, (16) sidewall samples (SW-1 through SW-16) were collected at the three excavated areas. The impacted area was treated with Microblaze to reduce the Site levels of TPH. A total of nineteen (19) 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 2.

Referring to Table 2, all final confirmation samples analyzed were below the Site RRAL for chloride (600 mg/kg), TPH (100 mg/kg), BTEX (50 m/kg) and benzene (10 mg/kg).

The excavation areas were backfilled with clean material to surface grade. Approximately 112 cubic yards of material was transported offsite for proper disposal.

Conclusion

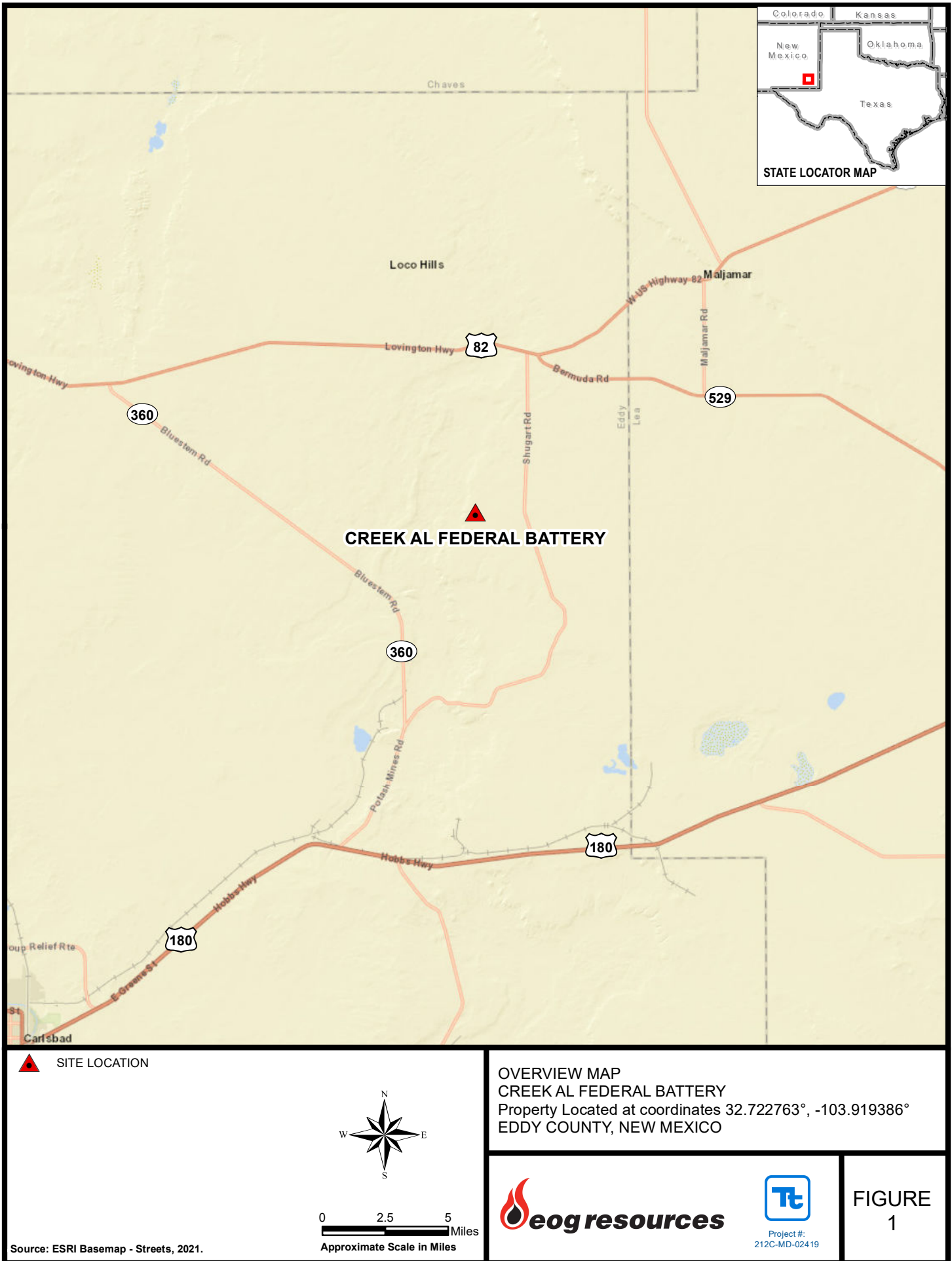
Based on the laboratory results and remediation activities performed, EOG requests closure of this spill issue. The final C-141 initial reports are enclosed in Appendix A. If you have any questions or comments concerning the assessment or remediation activities for this site, please call at (432) 682-4559.

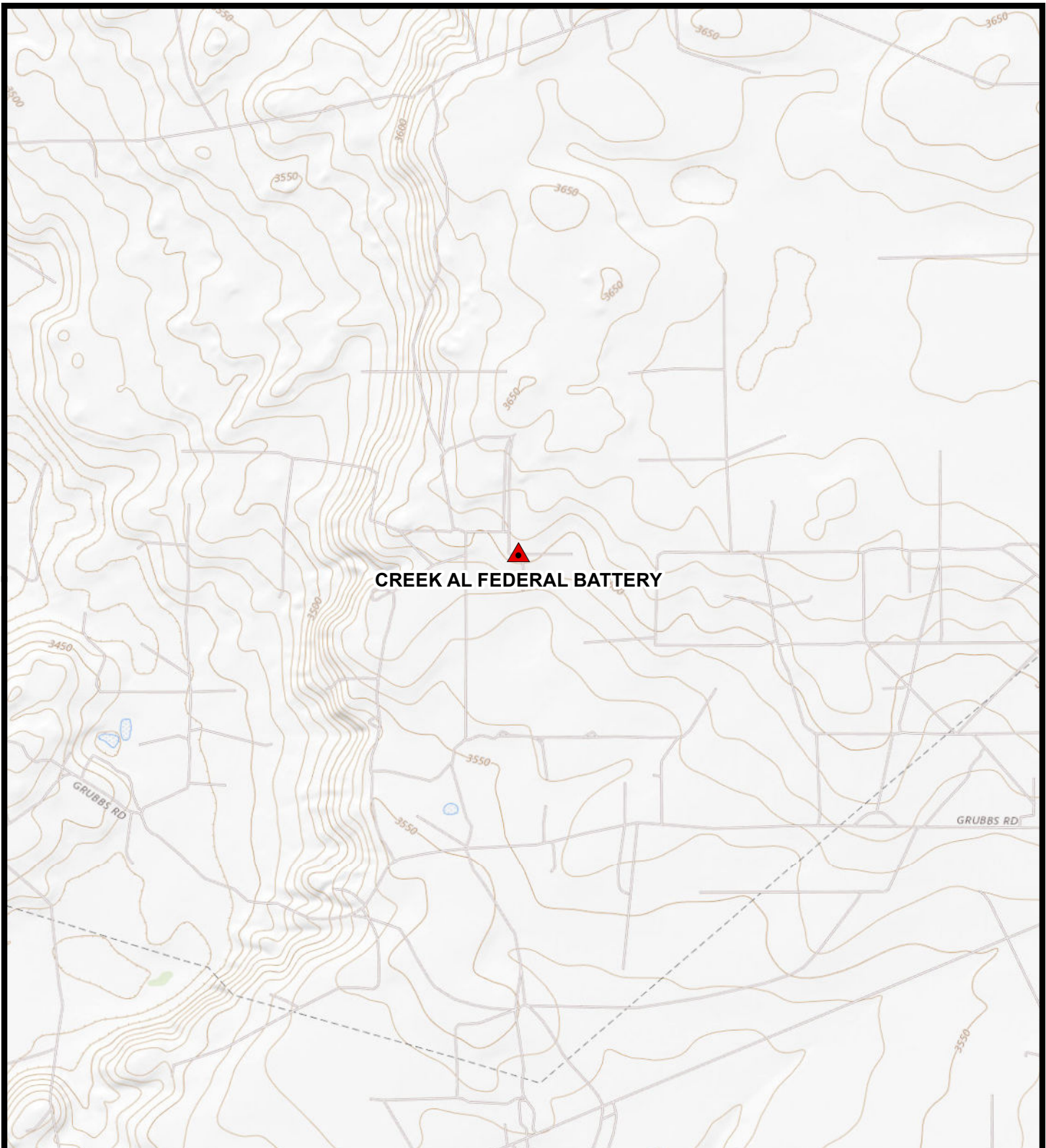
Respectfully submitted,
TETRA TECH

Paula Tocora Alonso

Paula Tocora Alonso
Environmental Engineer I
Tetra Tech, Inc

Figures





 SITE LOCATION



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

TOPOGRAPHIC MAP
CREEK AL FEDERAL BATTERY
Property Located at coordinates 32.722763°, -103.919386°
EDDY COUNTY, NEW MEXICO

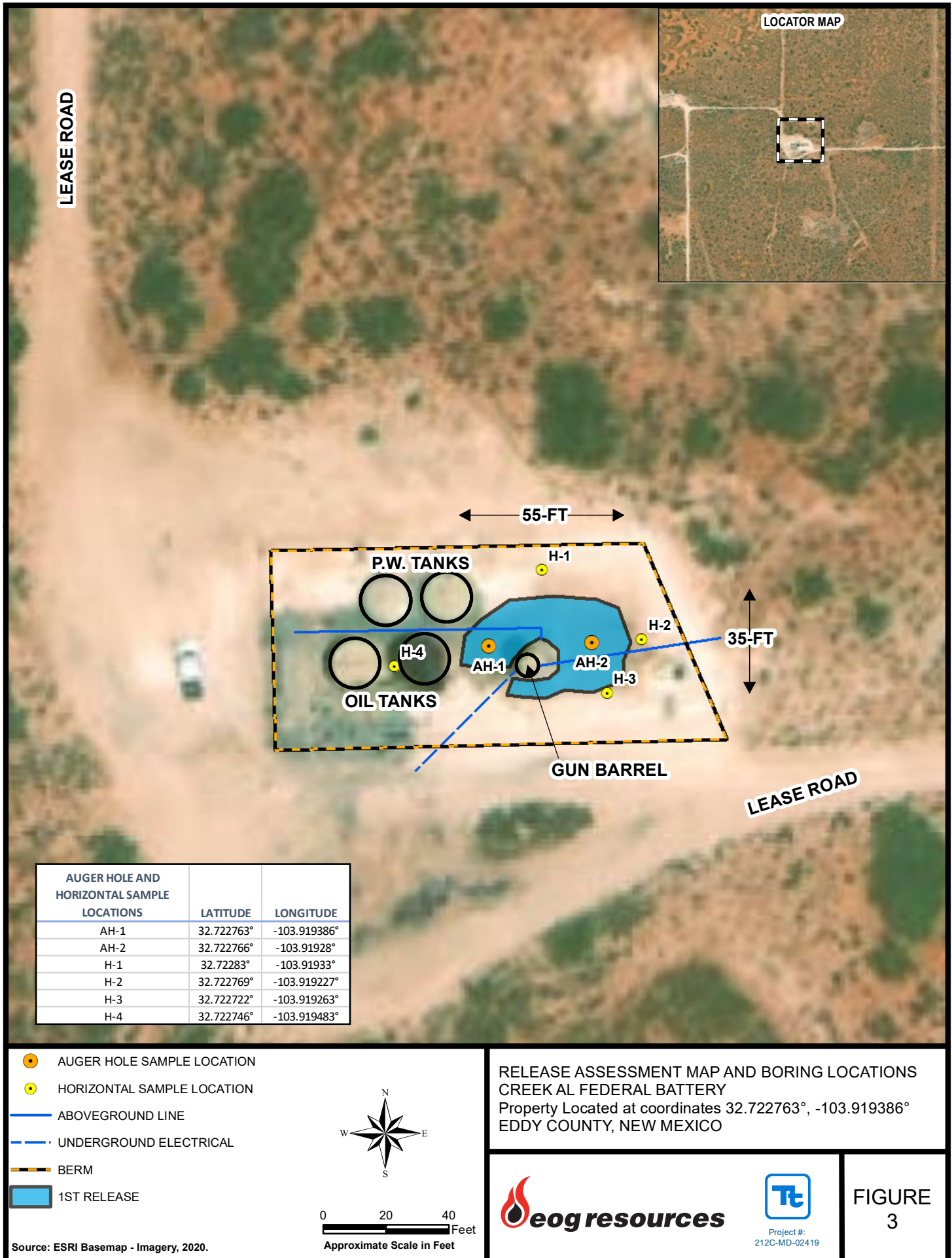


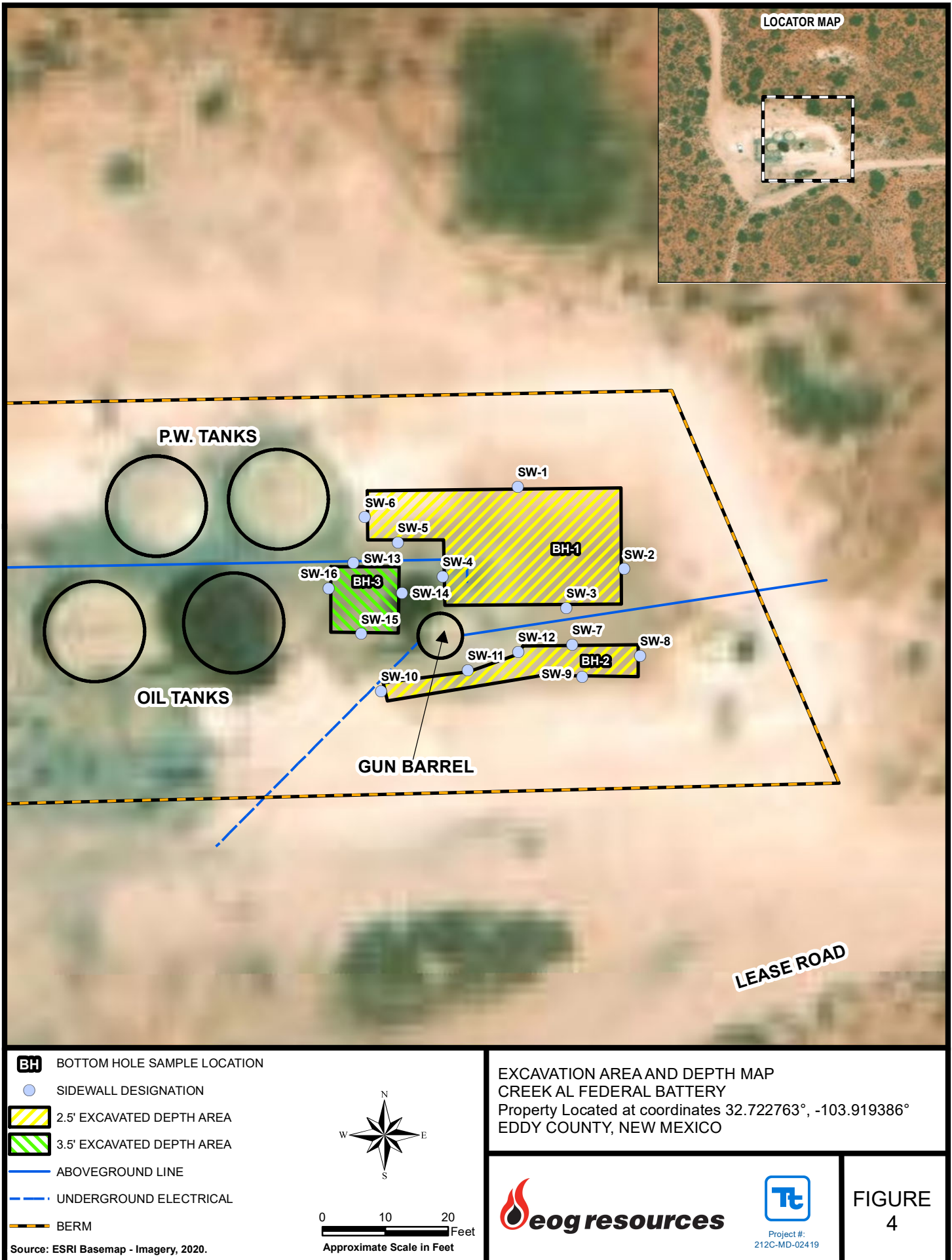
Project #:
212C-MD-02419

FIGURE
2

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

C:\GIS\EOG Resources\212C-MD-02419_CREEK_AL_FB\FIG2.mxd 4/23/2021 1:01:05 PM





Tables

Table 1
EOG
Creek AL Federal Battery
Eddy County, NM

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	3/1/2021	0'-1'	X	-	<50.0	295	111	406	<0.00200	0.00318	<0.00200	0.00778	0.011	11.4
	3/1/2021	1.5'-2'	X	-	<50.0	301	108	409	<0.00200	0.00241	<0.00200	0.00224	0.00465	13.6
	3/1/2021	2.5'-3'	X	-	<49.8	170	55.9	226	<0.00201	0.0023	<0.00201	0.00715	0.00945	20.6
AH-2	3/1/2021	0'-1'	X	-	<49.9	172	<49.9	172	<0.00198	0.00238	0.00198	0.00685	0.0112	8.23
	3/1/2021	1.5'-2'	X	-	<50.0	239	64	303	<0.00199	0.00273	<0.00199	0.00737	0.0101	25.7
	3/1/2021	2.5'-3'	X	-	<50.0	254	67.1	321	<0.00200	<0.00200	0.00245	0.00989	0.0123	31.2
H-1	4/8/2021	0-0.5	-	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401
H-2	4/8/2021	0-0.5	-	X	-	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403
H-3	4/8/2021	0-0.5	-	X	-	<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402
H-4	4/8/2021	0-0.5	-	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399

(-)

Not Analyzed
Exceeded RRALs

Table 2
EOG
Creek AL Federal Battery
Eddy County, NM

Sample ID	Sample Date	Sample Depth (ft)	BEB 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	ORO	Total						
BH-1	4/8/2021	-	2.5	X	-	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	25.2
BH-2	4/8/2021	-	2.5	X	-	<50.0	60.5	<50.0	60.5	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	16.2
BH-3	4/8/2021	-	2.5	X	-	<50.1	297	<50.1	297	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	21
	4/28/2021	-	2.5	X	-	<50.0	88.2	162	250	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	13
	5/5/2021	-	3.5'	X	-	<50.0	149	74.2	223	<0.00000202	<0.00000202	<0.00000202	<0.00000404	<0.00000404	60.4
	6/4/2021	-	3.5'	X	-	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	15.7
SW-1	4/8/2021	-	2.5	X	-	<50.0	337	<50.0	337	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	29.4
	4/28/2021	-	2.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	124
SW-2	4/8/2021	-	2.5	X	-	<50.0	253	<50.0	253	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	40.9
	4/28/2021	-	2.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<5.04
SW-3	4/8/2021	-	2.5	X	-	<50.0	366	<50.0	366	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	18.2
	4/28/2021	-	2.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	<5.05
SW-4	4/8/2021	-	2.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	43.4
SW-5	4/8/2021	-	2.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	44.9
SW-6	4/8/2021	-	2.5	X	-	<50.1	<50.1	<50.1	<50.1	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	7.29
SW-7	4/8/2021	-	2.5	X	-	<50.0	92.9	<50.0	92.9	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	20.1
SW-8	4/8/2021	-	2.5	X	-	<50.0	67.6	<50.0	67.6	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	6.33
SW-9	4/8/2021	-	2.5	X	-	<49.9	643	218	861	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	15.6
	4/28/2021	-	2.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	107
SW-10	4/8/2021	-	2.5	X	-	<49.8	253	111	364	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	21.3
	4/28/2021	-	2.5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	<4.95
SW-11	4/8/2021	-	2.5	X	-	<49.9	162	62.2	224	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	16.4
	4/28/2021	-	2.5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	<4.95
SW-12	4/8/2021	-	2.5	X	-	<49.9	133	50.3	183	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	20
	4/28/2021	-	2.5	X	-	<50.0	79.7	<50.0	79.7	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	<4.96
SW-13	4/8/2021	-	2.5	X	-	<49.8	120	<49.8	120	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	66.8
	4/28/2021	-	2.5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	5.62
SW-14	4/8/2021	-	2.5	X	-	<49.8	78	<49.8	78	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	6.23
SW-15	4/8/2021	-	2.5	X	-	<50.0	443	221	664	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	11.7
	4/28/2021	-	2.5	X	-	<50.0	78.1	147	225	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	6.69
	5/5/2021	-	2.5	X	-	<49.9	266	157	423	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	28.4
	5/21/2021	-	2.5	X	-	<50.0	143	<50.0	143	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	9.04
	6/4/2021	-	2.5	X	-	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	<5.04
SW-16	4/8/2021	-	2.5	X	-	<50.1	313	128	441	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	13
	4/28/2021	-	2.5	X	-	<49.9	<49.9	94.9	94.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<4.98

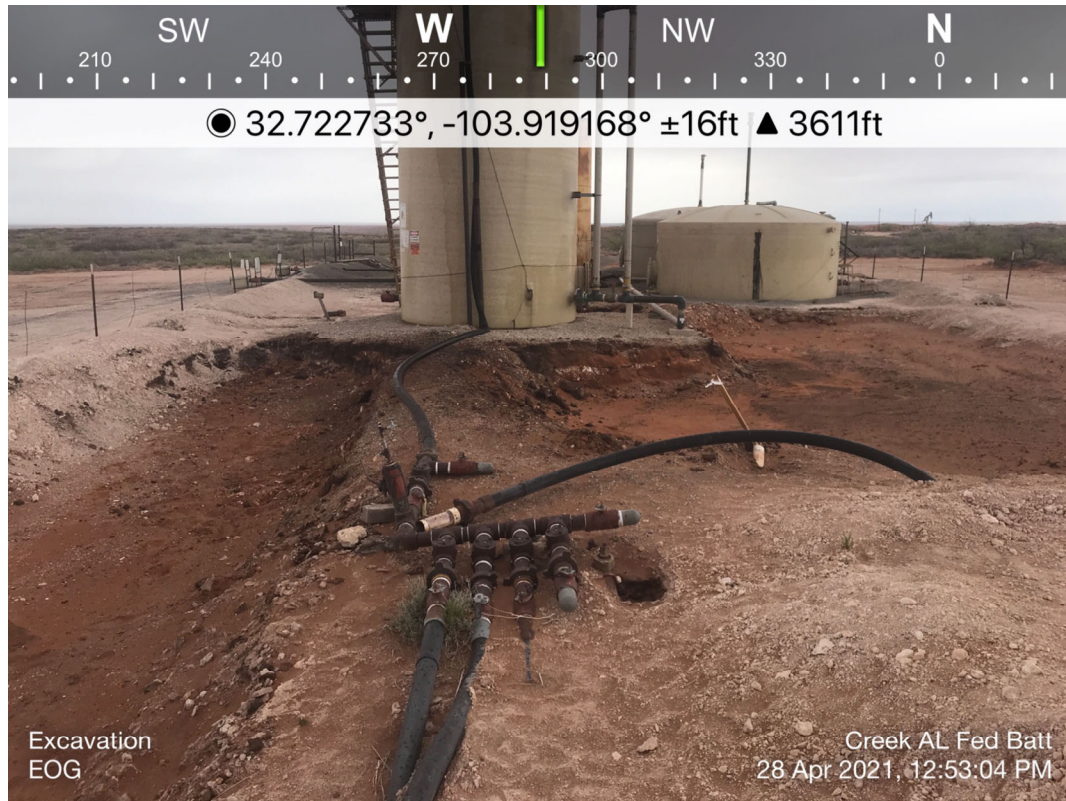
(-) Not Analyzed
 Excavated

Photos

EOG Resources
Creek AL Fed #1
Eddy County, New Mexico



TETRA TECH



View of Remediation Activities – View West



View of Remediation Activities – View Northeast

EOG Resources
Creek AL Fed #1
Eddy County, New Mexico



TETRA TECH



View of Remediation Activities – View Northeast



View of Remediation Activities – View Northwest

Appendix A

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 83210
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
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

MKMW 1101328629

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Yates Petroleum Corporation	OGRID Number 25575	Contact Robert Asher
Address 104 S. 4 TH Street		Telephone No. 575-748-1471
Facility Name Creek AL Federal Battery	API Number (30-015-10430)	Facility Type Battery
Surface Owner Federal	Mineral Owner Federal	Lease No. LC-028990B

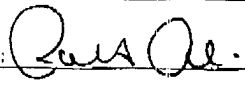
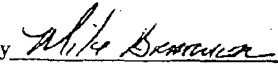
LOCATION OF RELEASE

Unit Letter D	Section 25	Township 18S	Range 30E	Feet from the 990'	North/South Line North	Feet from the 330'	East/West Line West	County Eddy
------------------	---------------	-----------------	--------------	-----------------------	---------------------------	-----------------------	------------------------	----------------

Latitude 32.72282 Longitude 103.91761

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 10 B/PW	Volume Recovered 0 B/PW
Source of Release Water Tank	Date and Hour of Occurrence 1/2/2010; AM	Date and Hour of Discovery 1/2/2010; AM
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? N/A	
By Whom? N/A	Date and Hour N/A	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	
If a Watercourse was Impacted, Describe Fully.* N/A		
Describe Cause of Problem and Remedial Action Taken.* A load of produced water was scheduled for pick up, but the water hauler did not arrive before the tank filled and ran over. No produced water to recover, truck called to empty water tank.		
Describe Area Affected and Cleanup Action Taken.* An approximate area of 20' X 20'. All water remained within bermed battery. Vertical and horizontal delineation samples will be taken and analysis ran for TPH & BTX. Chlorides will be documented. If results are above RRAL's for site ranking of zero (0), a work plan or corrective action plan will be submitted. If results are below RRAL's for site ranking of zero (0), a Final Report C-141 will be submitted requesting closure. Depth to Ground Water: >100' (approximately 184'), Wellhead Protection Area: No, Distance to Surface Water Body: >1000', SITE RANKING IS 0.		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOC 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 NMOC marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOC 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.		

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Robert Asher	Approved by District 	
Title: Environmental Regulatory Agent	Approval Date: 3/31/11	Expiration Date:
E-mail Address: boba@yatespetroleum.com	Conditions of Approval: Remediation per OCD Rules & Guidelines. SUBMIT REMEDIATION PROPOSAL NOT LATER THAN: 4/21/11	
Date: Wednesday, January 13, 2010 Phone: 575-748-4217	* Attached ☐	

* Attach Additional Sheets If Necessary

2 RP 558

Incident ID	nKmw1101328629
District RP	2RP-558
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?	50 _____ (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.

Oil Conservation Division

Incident ID	nKmw1101328629
District RP	2RP-558
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: James Kennedy Title: Environmental Specialist

Signature: James F. Kennedy Date: 6/9/2021

email: James.Kennedy@eogresources.com Telephone: 432-258-4346

OCD Only

Received by: _____ Date: _____

Incident ID	nKmw1101328629
District RP	2RP-558
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: James Kennedy

Title: Environmental Specialist

Signature: _____

James F. Kennedy

Date: 6/9/2021

email: James.Kennedy@eogresources.com

Telephone: 432-258-4346

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: *Bradford Billings*

Date: 11/01/2021

Printed Name: Bradford Billings

Title: Envi.Spec.A

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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

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

Form C-141
Revised October 10, 2003
Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

nk 1106 136 997

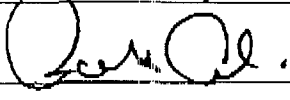
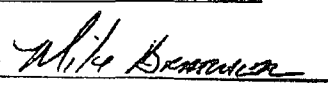
OPERATOR		☒ Initial Report	☐ Final Report
Name of Company Yates Petroleum Corporation	OGRID Number 25575	Contact Robert Asher	
Address 104 S. 4 TH Street		Telephone No. 575-748-1471	
Facility Name Creek AL Federal Battery	API Number 30-015-10430	Facility Type Battery	
Surface Owner Federal	Mineral Owner Federal	Lease No. LC-028990B	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	25	18S	30E	990'	North	330'	West	Eddy

Latitude 32.72282 Longitude 103.91761

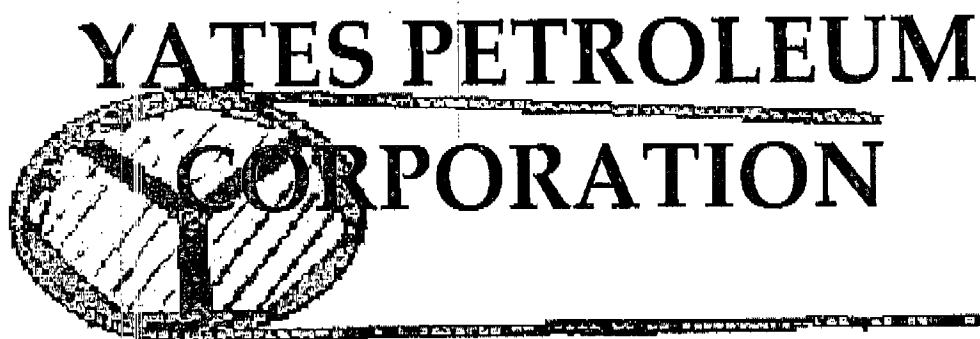
NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 15 B/PW	Volume Recovered 14 B/PW
Source of Release Water Tank	Date and Hour of Occurrence 2/19/2011; AM	Date and Hour of Discovery 2/19/2011; AM
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? N/A	
By Whom? N/A	Date and Hour N/A	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	
If a Watercourse was Impacted, Describe Fully.* N/A		
Describe Cause of Problem and Remedial Action Taken.* Produced water tank ran over. Vacuum truck called.		
Describe Area Affected and Cleanup Action Taken.* An approximate area of 20' X 30'. All water remained within bermed battery. Vacuum truck recovered remaining produced water. Vertical and horizontal delineation samples will be taken and analysis ran for TPH & BTEX (Chlorides will be documented). If results are above RRAL's for site ranking of zero (0), a work plan or corrective action plan will be submitted. If results are below RRAL's for site ranking of zero (0), a Final Report C-141 will be submitted requesting closure. Depth to Ground Water: >100' (approximately 184'), Wellhead Protection Area: No, Distance to Surface Water Body: >1000', SITE RANKING IS 0.		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.		
Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Robert Asher	Approved by District Supervisor: 	
Title: Environmental Regulatory Agent	Approval Date: <u>3/21/11</u>	Expiration Date:
E-mail Address: boba@yatespetroleum.com	Conditions of Approval:	
Date: Tuesday, March 01, 2011 Phone: 575-748-4217	Remediation per OCD Rules & Guidelines. SUBMIT REMEDIATION PROPOSAL NOT LATER THAN: <u>4/21/11</u>	

* Attach Additional Sheets If Necessary

Attached ☐

2 RP 623



FACSIMILE TRANSMITTAL SHEET

TO:	FROM:
Mike Bratcher	Robert Asher
FAX NUMBER:	DATE:
9-748-9720	Tuesday, March 01, 2011
COMPANY:	TOTAL NO. OF PAGES INCLUDING COVER:
NMOCD	2
RE:	NOTES/COMMENTS:
C-141; Creek AL Federal Battery	Initial Report (2/19/2011 Release)

☐ URGENT ☒ FOR REVIEW ☐ PLEASE COMMENT ☐ PLEASE REPLY ☐ PLEASE RECYCLE

ADDITIONAL NOTES & COMMENTS:

Call me if you have any questions, 575-748-4217.

Thank you.

Robert Asher

Environmental Regulatory Department

105 SOUTH FOURTH STREET • ARTESIA, NEW MEXICO 88210-2118
PHONE: 575-748-4217 (DIRECT) • FAX: 575-748-4662

Incident ID	nKmw1106136997
District RP	2RP-623
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?	50 _____ (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.

Oil Conservation Division

Incident ID	nKmw1106136997
District RP	2RP-623
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: James Kennedy Title: Environmental Specialist

Signature: James F. Kennedy Date: 6/9/2021

email: James.Kennedy@eogresources.com Telephone: 432-258-4346

OCD Only

Received by: _____ Date: _____

Incident ID	nKmw1106136997
District RP	2RP-623
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.*

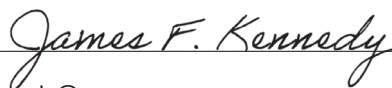
- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling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

Title: Environmental Specialist

Signature: _____



Date: 6/9/2021

email: James.Kennedy@eogresources.com

Telephone: 432-258-4346

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

The map displays a topographic view of the Nimenim Ridge area. A grid of 100 square sections is overlaid on the terrain. The sections are labeled with compass directions and letters in parentheses, such as SWNE (G), SENE (H), and NENE (A). Red numbers 19, 20, 24, 25, 26, and 30 are placed in specific sections. A yellow arrow points to a location in the center-right area, near the intersection of the 18S 31E and 18S 30E lines. The map also shows contour lines and a red grid.

 Override 1
  PLSS Second Division
  PLJV Probable Playas
 OCD District Offices
  PLSS Townships
  OSE Water-bodies
 PLSS First Division
  OSE Streams

The image shows two horizontal number lines. The top number line is labeled with miles (mi) and has major tick marks at 0, 0.13, 0.25, and 0.5. The bottom number line is labeled with kilometers (km) and has major tick marks at 0, 0.2, 0.4, and 0.8. There are also smaller tick marks between the major ones, indicating a more granular scale.

New Mexico Oil Conservation Division

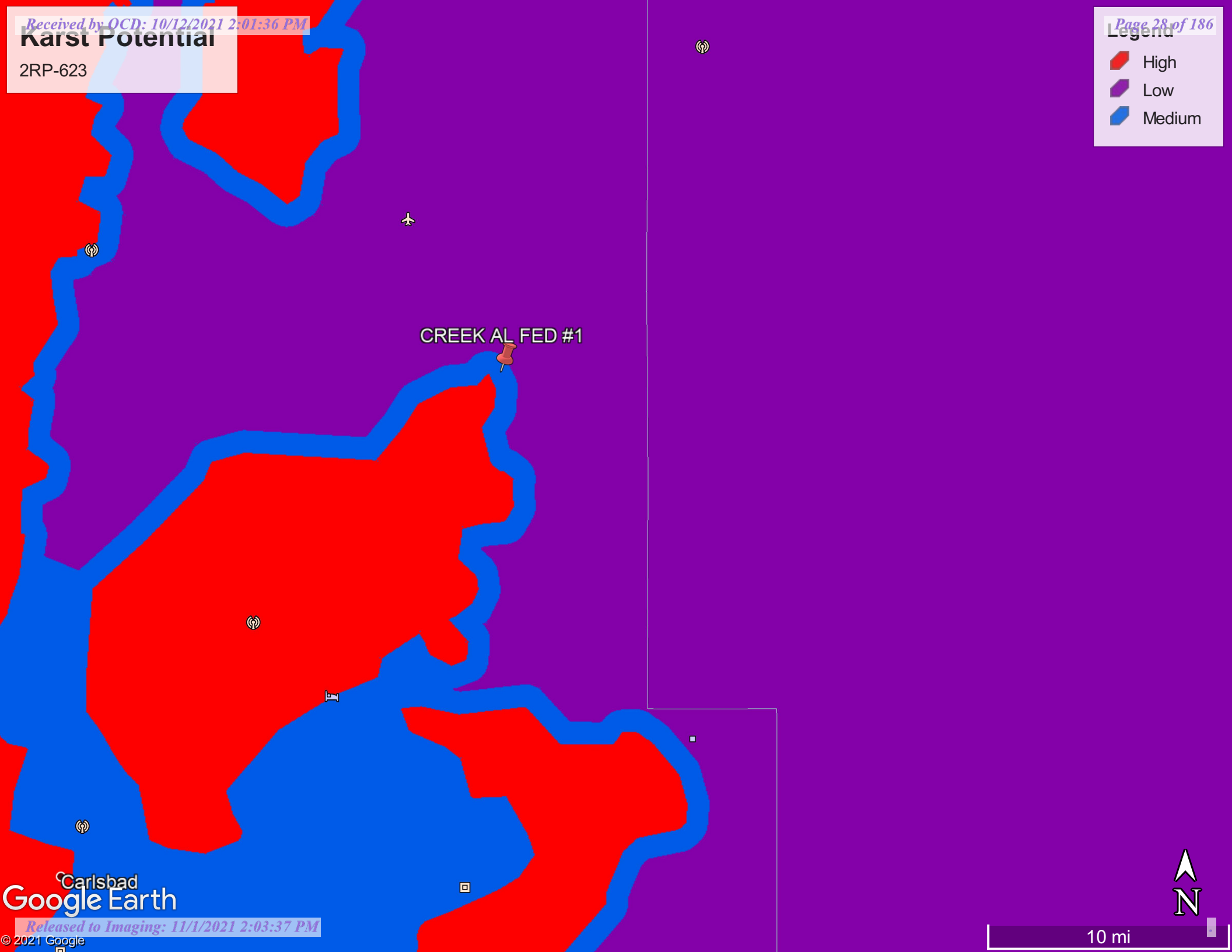
Released to Imaging: 11/1/2021 2:03:37 PM

Karst Potential

2RP-623

Legend

- High
- Low
- Medium



CREEK AL FED #1

Carlsbad

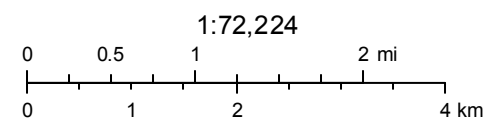
Google Earth



New Mexico NFHL Data



February 18, 2021



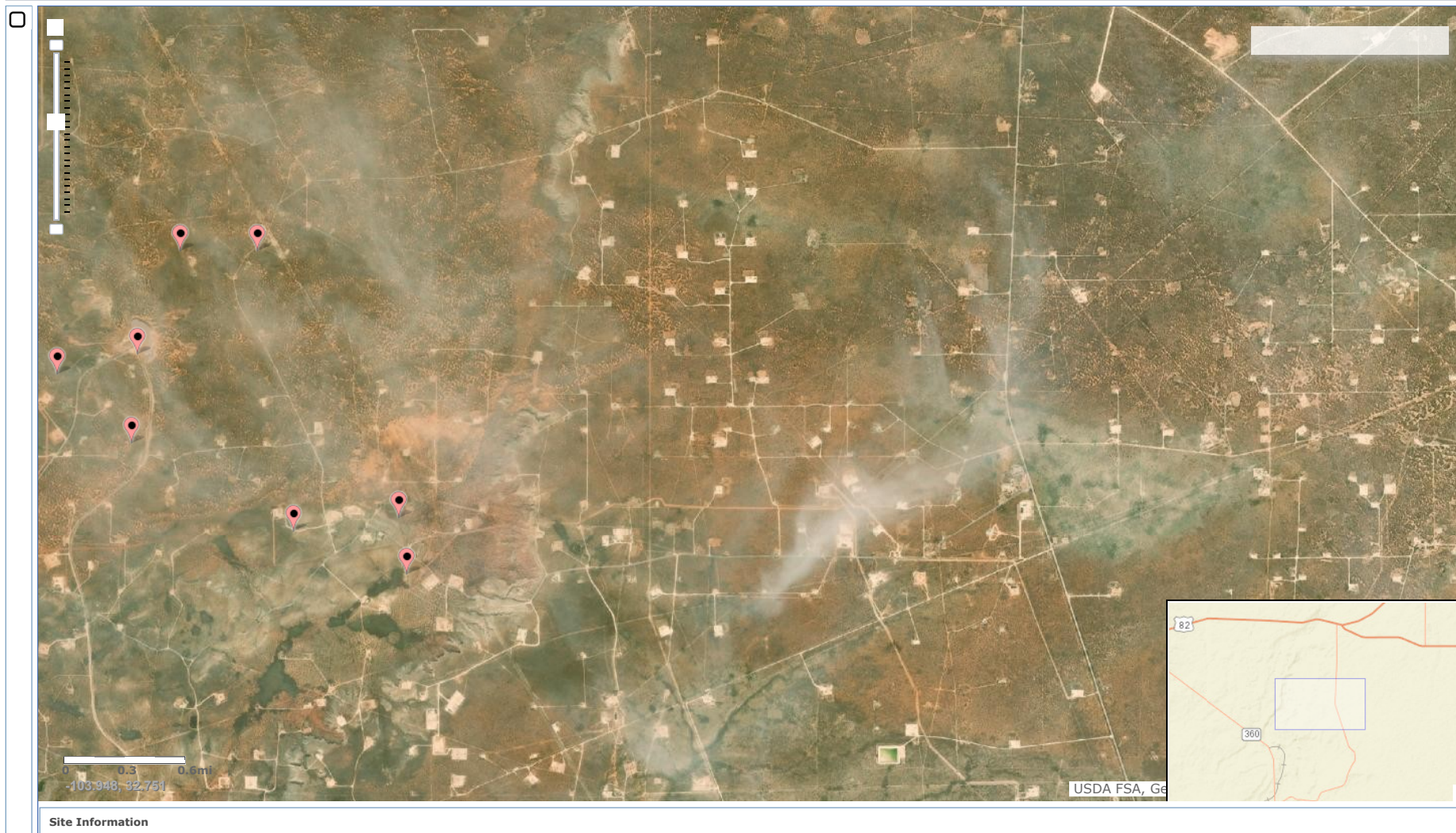
Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



USGS Home
Contact USGS
Search USGS

National Water Information System: Mapper

Help Info



Site Information



(In feet)

Maximum Depth: **92 feet**

WATER COLUMN/ AVERAGE DEPTH TO WATER



National Water Information System: Web Interface

USGS Water Resources

USGS Home
Contact USGS
Search USGS

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

* IMPORTANT: [Next Generation Station Page](#)

Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 324244103561601

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

USGS 324244103561601 18S.30E.26.414144

Eddy County, New Mexico
Latitude 32°42'55.8", Longitude 103°56'16.4" NAD83
Land-surface elevation 3,431 feet above NAVD88
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
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	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water- level approval status
1976-05-28			D	62610	3235.07	NGVD29	1	Z			A
1976-05-28			D	62611	3236.61	NAVD88	1	Z			A
1976-05-28			D	72019	194.39		1	Z			A
1983-04-12			D	62610	3243.42	NGVD29	1	Z			A
1983-04-12			D	62611	3244.96	NAVD88	1	Z			A
1983-04-12			D	72019	186.04		1	Z			A
1990-10-10			D	62610	3246.44	NGVD29	1	S			A
1990-10-10			D	62611	3247.98	NAVD88	1	S			A
1990-10-10			D	72019	183.02		1	S			A
1994-03-16			D	62610	3245.47	NGVD29	1	S			A
1994-03-16			D	62611	3247.01	NAVD88	1	S			A
1994-03-16			D	72019	183.99		1	S			A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	S	Steel-tape measurement.
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

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

Accessibility FOIA Privacy Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey

Title: Groundwater for New Mexico: Water Levels
URL: [https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?](https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?site_no=324244103561601&agency_cd=USGS&format=html)

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



Page Last Modified: 2021-02-18 17:05:05 EST
0.37 0.33 nadww02

Appendix C

Certificate of Analysis Summary 690616



Tetra Tech- Midland, Midland, TX

Project Name: Creek AL Fed #1

Project Id: 212C-MD-02419 TASK:1700

Date Received in Lab: Fri 03.05.2021 12:41

Contact: Clair Gonzales

Report Date: 03.15.2021 15:45

Project Location: Eddy County, NM

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	690616-001	690616-002	690616-003	690616-004	690616-005	690616-006
	<i>Field Id:</i>	AH-1 (0-1')	AH-1 (1.5-2')	AH-1 (2.5-3')	AH-2 (0-1')	AH-2 (1.5-2')	AH-2 (2.5-3')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	03.01.2021 00:00	03.01.2021 00:00	03.01.2021 00:00	03.01.2021 00:00	03.01.2021 00:00	03.01.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	03.12.2021 12:00	03.12.2021 12:00	03.12.2021 12:00	03.12.2021 12:00	03.12.2021 12:00	03.09.2021 11:00
	<i>Analyzed:</i>	03.12.2021 18:15	03.12.2021 18:35	03.12.2021 19:58	03.12.2021 20:18	03.12.2021 20:39	03.11.2021 12:54
	<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	<0.00201 0.00201	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200
Toluene		0.00318 0.00200	0.00241 0.00200	0.00230 0.00201	0.00238 0.00198	0.00273 0.00199	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	0.00198 0.00198	<0.00199 0.00199	0.00245 0.00200
m,p-Xylenes		0.00461 0.00399	<0.00399 0.00399	0.00439 0.00402	0.00399 0.00397	0.00464 0.00398	0.00592 0.00401
o-Xylene		0.00317 0.00200	0.00224 0.00200	0.00276 0.00201	0.00286 0.00198	0.00273 0.00199	0.00397 0.00200
Total Xylenes		0.00778 0.00200	0.00224 0.00200	0.00715 0.00201	0.00685 0.00198	0.00737 0.00199	0.00989 0.00200
Total BTEX		0.0110 0.00200	0.00465 0.00200	0.00945 0.00201	0.0112 0.00198	0.0101 0.00199	0.0123 0.00200
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	03.06.2021 14:30	03.06.2021 14:30	03.06.2021 14:30	03.06.2021 14:30	03.06.2021 14:30	03.06.2021 14:30
	<i>Analyzed:</i>	03.06.2021 15:37	03.06.2021 15:42	03.06.2021 15:47	03.06.2021 15:52	03.06.2021 16:07	03.06.2021 16:12
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		11.4 5.05	13.6 5.03	20.6 5.03	8.23 4.99	25.7 4.97	31.2 4.99
TPH By SW8015 Mod	<i>Extracted:</i>	03.05.2021 17:00	03.05.2021 17:00	03.05.2021 17:00	03.05.2021 17:00	03.05.2021 17:00	03.05.2021 17:00
	<i>Analyzed:</i>	03.06.2021 04:09	03.06.2021 04:30	03.06.2021 04:52	03.06.2021 05:14	03.06.2021 05:35	03.06.2021 05:56
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0	<49.8 49.8	<49.9 49.9	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		295 50.0	301 50.0	170 49.8	172 49.9	239 50.0	254 50.0
Motor Oil Range Hydrocarbons (MRO)		111 50.0	108 50.0	55.9 49.8	<49.9 49.9	64.0 50.0	67.1 50.0
Total TPH		406 50.0	409 50.0	226 49.8	172 49.9	303 50.0	321 50.0

BRL - Below Reporting Limit

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

Analytical Report 690616

for

Tetra Tech- Midland

Project Manager: Clair Gonzales

Creek AL Fed #1

212C-MD-02419 TASK:1700

03.15.2021

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)



03.15.2021

Project Manager: **Clair Gonzales**

Tetra Tech- Midland

901 West Wall ST

Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **690616**

Creek AL Fed #1

Project Address: Eddy County, NM

Clair Gonzales:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 690616. 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. 690616 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 690616****Tetra Tech- Midland, Midland, TX**

Creek AL Fed #1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
AH-1 (0-1')	S	03.01.2021 00:00		690616-001
AH-1 (1.5-2')	S	03.01.2021 00:00		690616-002
AH-1 (2.5-3')	S	03.01.2021 00:00		690616-003
AH-2 (0-1')	S	03.01.2021 00:00		690616-004
AH-2 (1.5-2')	S	03.01.2021 00:00		690616-005
AH-2 (2.5-3')	S	03.01.2021 00:00		690616-006



CASE NARRATIVE

Client Name: Tetra Tech- Midland

Project Name: Creek AL Fed #1

Project ID: 212C-MD-02419 TASK:
Work Order Number(s): 690616

Report Date: 03.15.2021
Date Received: 03.05.2021

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 690616

Tetra Tech- Midland, Midland, TX

Creek AL Fed #1

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

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690616-001

Date Collected: 03.01.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 03.06.2021 14:30

% Moisture:

Seq Number: 3152765

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.4	5.05	mg/kg	03.06.2021 15:37		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.05.2021 17:00

% Moisture:

Seq Number: 3152912

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.06.2021 04:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	295	50.0	mg/kg	03.06.2021 04:09		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	111	50.0	mg/kg	03.06.2021 04:09		1
Total TPH	PHC635	406	50.0	mg/kg	03.06.2021 04:09		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	91	%	70-130	03.06.2021 04:09		
o-Terphenyl	84-15-1	84	%	70-130	03.06.2021 04:09		



Certificate of Analytical Results 690616

Tetra Tech- Midland, Midland, TX

Creek AL Fed #1

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

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690616-001

Date Collected: 03.01.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.12.2021 12:00

% Moisture:

Seq Number: 3153519

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.12.2021 18:15	U	1
Toluene	108-88-3	0.00318	0.00200	mg/kg	03.12.2021 18:15		1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.12.2021 18:15	U	1
m,p-Xylenes	179601-23-1	0.00461	0.00399	mg/kg	03.12.2021 18:15		1
o-Xylene	95-47-6	0.00317	0.00200	mg/kg	03.12.2021 18:15		1
Total Xylenes	1330-20-7	0.00778	0.00200	mg/kg	03.12.2021 18:15		1
Total BTEX		0.0110	0.00200	mg/kg	03.12.2021 18:15		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	83	%	70-130	03.12.2021 18:15		
4-Bromofluorobenzene	460-00-4	90	%	70-130	03.12.2021 18:15		



Certificate of Analytical Results 690616

Tetra Tech- Midland, Midland, TX

Creek AL Fed #1

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

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690616-002

Date Collected: 03.01.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 03.06.2021 14:30

% Moisture:

Seq Number: 3152765

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	13.6	5.03	mg/kg	03.06.2021 15:42		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.05.2021 17:00

% Moisture:

Seq Number: 3152912

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.06.2021 04:30	U	1
Diesel Range Organics (DRO)	C10C28DRO	301	50.0	mg/kg	03.06.2021 04:30		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	108	50.0	mg/kg	03.06.2021 04:30		1
Total TPH	PHC635	409	50.0	mg/kg	03.06.2021 04:30		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	83	%	70-130	03.06.2021 04:30		
o-Terphenyl	84-15-1	74	%	70-130	03.06.2021 04:30		



Certificate of Analytical Results 690616

Tetra Tech- Midland, Midland, TX

Creek AL Fed #1

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

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690616-002

Date Collected: 03.01.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.12.2021 12:00

% Moisture:

Seq Number: 3153519

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.12.2021 18:35	U	1
Toluene	108-88-3	0.00241	0.00200	mg/kg	03.12.2021 18:35		1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.12.2021 18:35	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.12.2021 18:35	U	1
o-Xylene	95-47-6	0.00224	0.00200	mg/kg	03.12.2021 18:35		1
Total Xylenes	1330-20-7	0.00224	0.00200	mg/kg	03.12.2021 18:35		1
Total BTEX		0.00465	0.00200	mg/kg	03.12.2021 18:35		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	03.12.2021 18:35	
1,4-Difluorobenzene	540-36-3	97	%	70-130	03.12.2021 18:35	



Certificate of Analytical Results 690616

Tetra Tech- Midland, Midland, TX

Creek AL Fed #1

Sample Id: **AH-1 (2.5-3')**

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690616-003

Date Collected: 03.01.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 03.06.2021 14:30

% Moisture:

Seq Number: 3152765

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	20.6	5.03	mg/kg	03.06.2021 15:47		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.05.2021 17:00

% Moisture:

Seq Number: 3152912

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	03.06.2021 04:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	170	49.8	mg/kg	03.06.2021 04:52		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	55.9	49.8	mg/kg	03.06.2021 04:52		1
Total TPH	PHC635	226	49.8	mg/kg	03.06.2021 04:52		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	89	%	70-130	03.06.2021 04:52		
o-Terphenyl	84-15-1	84	%	70-130	03.06.2021 04:52		



Certificate of Analytical Results 690616

Tetra Tech- Midland, Midland, TX

Creek AL Fed #1

Sample Id: **AH-1 (2.5-3')**

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690616-003

Date Collected: 03.01.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.12.2021 12:00

% Moisture:

Seq Number: 3153519

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.12.2021 19:58	U	1
Toluene	108-88-3	0.00230	0.00201	mg/kg	03.12.2021 19:58		1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.12.2021 19:58	U	1
m,p-Xylenes	179601-23-1	0.00439	0.00402	mg/kg	03.12.2021 19:58		1
o-Xylene	95-47-6	0.00276	0.00201	mg/kg	03.12.2021 19:58		1
Total Xylenes	1330-20-7	0.00715	0.00201	mg/kg	03.12.2021 19:58		1
Total BTEX		0.00945	0.00201	mg/kg	03.12.2021 19:58		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	70-130	03.12.2021 19:58		
1,4-Difluorobenzene	540-36-3	95	%	70-130	03.12.2021 19:58		



Certificate of Analytical Results 690616

Tetra Tech- Midland, Midland, TX

Creek AL Fed #1

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

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690616-004

Date Collected: 03.01.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 03.06.2021 14:30

% Moisture:

Seq Number: 3152765

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8.23	4.99	mg/kg	03.06.2021 15:52		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.05.2021 17:00

% Moisture:

Seq Number: 3152912

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.06.2021 05:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	172	49.9	mg/kg	03.06.2021 05:14		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.06.2021 05:14	U	1
Total TPH	PHC635	172	49.9	mg/kg	03.06.2021 05:14		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-130	03.06.2021 05:14	
o-Terphenyl	84-15-1	72	%	70-130	03.06.2021 05:14	



Certificate of Analytical Results 690616

Tetra Tech- Midland, Midland, TX

Creek AL Fed #1

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

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690616-004

Date Collected: 03.01.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.12.2021 12:00

% Moisture:

Seq Number: 3153519

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	03.12.2021 20:18	U	1
Toluene	108-88-3	0.00238	0.00198	mg/kg	03.12.2021 20:18		1
Ethylbenzene	100-41-4	0.00198	0.00198	mg/kg	03.12.2021 20:18		1
m,p-Xylenes	179601-23-1	0.00399	0.00397	mg/kg	03.12.2021 20:18		1
o-Xylene	95-47-6	0.00286	0.00198	mg/kg	03.12.2021 20:18		1
Total Xylenes	1330-20-7	0.00685	0.00198	mg/kg	03.12.2021 20:18		1
Total BTEX		0.0112	0.00198	mg/kg	03.12.2021 20:18		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	03.12.2021 20:18		
1,4-Difluorobenzene	540-36-3	95	%	70-130	03.12.2021 20:18		



Certificate of Analytical Results 690616

Tetra Tech- Midland, Midland, TX

Creek AL Fed #1

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

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690616-005

Date Collected: 03.01.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 03.06.2021 14:30

% Moisture:

Seq Number: 3152765

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	25.7	4.97	mg/kg	03.06.2021 16:07		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.05.2021 17:00

% Moisture:

Seq Number: 3152912

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.06.2021 05:35	U	1
Diesel Range Organics (DRO)	C10C28DRO	239	50.0	mg/kg	03.06.2021 05:35		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	64.0	50.0	mg/kg	03.06.2021 05:35		1
Total TPH	PHC635	303	50.0	mg/kg	03.06.2021 05:35		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	87	%	70-130	03.06.2021 05:35		
o-Terphenyl	84-15-1	80	%	70-130	03.06.2021 05:35		



Certificate of Analytical Results 690616

Tetra Tech- Midland, Midland, TX

Creek AL Fed #1

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

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690616-005

Date Collected: 03.01.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.12.2021 12:00

% Moisture:

Seq Number: 3153519

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.12.2021 20:39	U	1
Toluene	108-88-3	0.00273	0.00199	mg/kg	03.12.2021 20:39		1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.12.2021 20:39	U	1
m,p-Xylenes	179601-23-1	0.00464	0.00398	mg/kg	03.12.2021 20:39		1
o-Xylene	95-47-6	0.00273	0.00199	mg/kg	03.12.2021 20:39		1
Total Xylenes	1330-20-7	0.00737	0.00199	mg/kg	03.12.2021 20:39		1
Total BTEX		0.0101	0.00199	mg/kg	03.12.2021 20:39		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	70-130	03.12.2021 20:39		
1,4-Difluorobenzene	540-36-3	96	%	70-130	03.12.2021 20:39		



Certificate of Analytical Results 690616

Tetra Tech- Midland, Midland, TX

Creek AL Fed #1

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

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690616-006

Date Collected: 03.01.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 03.06.2021 14:30

% Moisture:

Seq Number: 3152765

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	31.2	4.99	mg/kg	03.06.2021 16:12		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.05.2021 17:00

% Moisture:

Seq Number: 3152912

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.06.2021 05:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	254	50.0	mg/kg	03.06.2021 05:56		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	67.1	50.0	mg/kg	03.06.2021 05:56		1
Total TPH	PHC635	321	50.0	mg/kg	03.06.2021 05:56		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-130	03.06.2021 05:56	
o-Terphenyl	84-15-1	89	%	70-130	03.06.2021 05:56	



Certificate of Analytical Results 690616

Tetra Tech- Midland, Midland, TX

Creek AL Fed #1

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

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690616-006

Date Collected: 03.01.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.09.2021 11:00

% Moisture:

Seq Number: 3153241

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.11.2021 12:54	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.11.2021 12:54	U	1
Ethylbenzene	100-41-4	0.00245	0.00200	mg/kg	03.11.2021 12:54		1
m,p-Xylenes	179601-23-1	0.00592	0.00401	mg/kg	03.11.2021 12:54		1
o-Xylene	95-47-6	0.00397	0.00200	mg/kg	03.11.2021 12:54		1
Total Xylenes	1330-20-7	0.00989	0.00200	mg/kg	03.11.2021 12:54		1
Total BTEX		0.0123	0.00200	mg/kg	03.11.2021 12:54		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	97	%	70-130	03.11.2021 12:54	
4-Bromofluorobenzene	460-00-4	106	%	70-130	03.11.2021 12:54	

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 Creek AL Fed #1

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3152765

Matrix: Solid

Prep Method: E300P

Date Prep: 03.06.2021

MB Sample Id: 7722685-1-BLK

LCS Sample Id: 7722685-1-BKS

LCSD Sample Id: 7722685-1-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	251	100	251	100	90-110	0	20	mg/kg	03.06.2021 14:32	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3152765

Matrix: Soil

Prep Method: E300P

Date Prep: 03.06.2021

Parent Sample Id: 690433-008

MS Sample Id: 690433-008 S

MSD Sample Id: 690433-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	117	248	361	98	361	98	90-110	0	20	mg/kg	03.06.2021 14:47	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3152765

Matrix: Soil

Prep Method: E300P

Date Prep: 03.06.2021

Parent Sample Id: 690616-004

MS Sample Id: 690616-004 S

MSD Sample Id: 690616-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	8.23	250	262	102	262	102	90-110	0	20	mg/kg	03.06.2021 15:57	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3152912

Matrix: Solid

Prep Method: SW8015P

Date Prep: 03.05.2021

MB Sample Id: 7722747-1-BLK

LCS Sample Id: 7722747-1-BKS

LCSD Sample Id: 7722747-1-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	957	96	938	94	70-130	2	20	mg/kg	03.05.2021 21:44	
Diesel Range Organics (DRO)	<50.0	1000	915	92	892	89	70-130	3	20	mg/kg	03.05.2021 21:44	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	93		89		88		70-130	%	03.05.2021 21:44
o-Terphenyl	95		80		79		70-130	%	03.05.2021 21:44

Analytical Method: TPH By SW8015 Mod

Seq Number: 3152912

Matrix: Solid

Prep Method: SW8015P

Date Prep: 03.05.2021

MB Sample Id: 7722747-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	03.05.2021 21:23	

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 Creek AL Fed #1

Analytical Method: TPH By SW8015 Mod

Seq Number: 3152912

Parent Sample Id: 690916-001

Matrix: Soil

MS Sample Id: 690916-001 S

Prep Method: SW8015P

Date Prep: 03.05.2021

MSD Sample Id: 690916-001 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)	899	998	899	0	972	0	70-130	8	20	mg/kg	03.05.2021 22:48	X
Diesel Range Organics (DRO)	864	998	864	0	965	0	70-130	11	20	mg/kg	03.05.2021 22:48	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	83		89		70-130	%	03.05.2021 22:48
o-Terphenyl	71		76		70-130	%	03.05.2021 22:48

Analytical Method: BTEX by EPA 8021B

Seq Number: 3153241

MB Sample Id: 7722977-1-BLK

Matrix: Solid

LCS Sample Id: 7722977-1-BKS

Prep Method: SW5035A

Date Prep: 03.09.2021

LCSD Sample Id: 7722977-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.105	105	0.110	110	70-130	5	35	mg/kg	03.11.2021 03:05	
Toluene	<0.00200	0.100	0.0955	96	0.101	101	70-130	6	35	mg/kg	03.11.2021 03:05	
Ethylbenzene	<0.00200	0.100	0.0947	95	0.100	100	70-130	5	35	mg/kg	03.11.2021 03:05	
m,p-Xylenes	<0.00400	0.200	0.195	98	0.208	104	70-130	6	35	mg/kg	03.11.2021 03:05	
o-Xylene	<0.00200	0.100	0.101	101	0.108	108	70-130	7	35	mg/kg	03.11.2021 03:05	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	87		106		104		70-130	%	03.11.2021 03:05
4-Bromofluorobenzene	95		106		110		70-130	%	03.11.2021 03:05

Analytical Method: BTEX by EPA 8021B

Seq Number: 3153519

MB Sample Id: 7723198-1-BLK

Matrix: Solid

LCS Sample Id: 7723198-1-BKS

Prep Method: SW5035A

Date Prep: 03.12.2021

LCSD Sample Id: 7723198-1-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	0.0924	92	0.0920	92	70-130	0	35	mg/kg	03.12.2021 12:49	
Toluene	<0.00200	0.100	0.0883	88	0.0886	89	70-130	0	35	mg/kg	03.12.2021 12:49	
Ethylbenzene	<0.00200	0.100	0.0882	88	0.0884	88	70-130	0	35	mg/kg	03.12.2021 12:49	
m,p-Xylenes	<0.00400	0.200	0.179	90	0.179	90	70-130	0	35	mg/kg	03.12.2021 12:49	
o-Xylene	<0.00200	0.100	0.0995	100	0.0960	96	70-130	4	35	mg/kg	03.12.2021 12:49	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	93		102		103		70-130	%	03.12.2021 12:49
4-Bromofluorobenzene	92		95		97		70-130	%	03.12.2021 12:49

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 Creek AL Fed #1

Analytical Method: BTEX by EPA 8021B

Seq Number: 3153241

Parent Sample Id: 690834-021

Matrix: Soil

MS Sample Id: 690834-021 S

Prep Method: SW5035A

Date Prep: 03.09.2021

MSD Sample Id: 690834-021 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	0.0161	16	0.0216	22	70-130	29	35	mg/kg	03.11.2021 03:46	X
Toluene	<0.00200	0.0998	0.00798	8	0.0112	11	70-130	34	35	mg/kg	03.11.2021 03:46	X
Ethylbenzene	<0.00200	0.0998	0.0177	18	0.0245	25	70-130	32	35	mg/kg	03.11.2021 03:46	X
m,p-Xylenes	<0.00399	0.200	0.00297	1	0.00147	1	70-130	68	35	mg/kg	03.11.2021 03:46	XF
o-Xylene	<0.00200	0.0998	0.0258	26	0.0314	31	70-130	20	35	mg/kg	03.11.2021 03:46	X

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	95		95		70-130	%	03.11.2021 03:46
4-Bromofluorobenzene	116		117		70-130	%	03.11.2021 03:46

Analytical Method: BTEX by EPA 8021B

Seq Number: 3153519

Parent Sample Id: 690614-001

Matrix: Soil

MS Sample Id: 690614-001 S

Prep Method: SW5035A

Date Prep: 03.12.2021

MSD Sample Id: 690614-001 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	0.0774	78	0.0827	83	70-130	7	35	mg/kg	03.12.2021 13:30	
Toluene	<0.00199	0.0996	0.0742	74	0.0789	79	70-130	6	35	mg/kg	03.12.2021 13:30	
Ethylbenzene	<0.00199	0.0996	0.0739	74	0.0792	80	70-130	7	35	mg/kg	03.12.2021 13:30	
m,p-Xylenes	<0.00398	0.199	0.149	75	0.160	80	70-130	7	35	mg/kg	03.12.2021 13:30	
o-Xylene	<0.00199	0.0996	0.0790	79	0.0845	85	70-130	7	35	mg/kg	03.12.2021 13:30	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		104		70-130	%	03.12.2021 13:30
4-Bromofluorobenzene	98		97		70-130	%	03.12.2021 13:30

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

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 03.05.2021 12.41.00 PM

Work Order #: 690616

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

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Brianna Teel

Date: 03.05.2021

Checklist reviewed by:



Jessica Kramer

Date: 03.08.2021



Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-1334-1

Laboratory Sample Delivery Group: Eddy County New Mexico
Client Project/Site: Creek AL Fed #1 212C-MD-02419 Task
1700

For:

Tetra Tech, Inc.
901 W Wall
Ste 100
Midland, Texas 79701

Attn: Clair Gonzales

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

Authorized for release by:
4/22/2021 11:38:01 AM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Tetra Tech, Inc.
Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

Laboratory Job ID: 880-1334-1
SDG: Eddy County New Mexico

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	21
QC Sample Results	23
QC Association Summary	31
Lab Chronicle	36
Certification Summary	42
Method Summary	43
Sample Summary	44
Chain of Custody	45
Receipt Checklists	48

1
2
3
4
5
6
7
8
9
10
11
12
13
14

Definitions/Glossary

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Eurofins Xenco, Midland

Case Narrative

Client: Tetra Tech, Inc.
Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

Job ID: 880-1334-1
SDG: Eddy County New Mexico

Job ID: 880-1334-1**Laboratory: Eurofins Xenco, Midland****Narrative****Job Narrative
880-1334-1****Receipt**

The samples were received on 4/15/2021 4:03 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 6.0°C

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: H-1 (880-1334-1), H-3 (880-1334-3), H-4 (880-1334-4), SW-2 (880-1334-6), SW-5 (880-1334-9), SW-10 (880-1334-14), SW-11 (880-1334-15), SW-13 (880-1334-17), SW-15 (880-1334-19) and BH-1 (880-1334-21). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Internal standard responses were outside of acceptance limits for the following samples: SW-1 (880-1334-5), SW-3 (880-1334-7), SW-4 (880-1334-8), SW-7 (880-1334-11), SW-9 (880-1334-13), SW-13 (880-1334-17), SW-15 (880-1334-19), BH-2 (880-1334-22) and BH-3 (880-1334-23). The sample(s) shows evidence of matrix interference.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-1872 and analytical batch 880-1897 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: SW-14 (880-1334-18). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Client Sample ID: H-1

Lab Sample ID: 880-1334-1

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/16/21 16:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/16/21 16:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/16/21 16:11	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		04/16/21 10:07	04/16/21 16:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/16/21 16:11	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		04/16/21 10:07	04/16/21 16:11	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		04/16/21 10:07	04/16/21 16:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	137	S1+	70 - 130	04/16/21 10:07	04/16/21 16:11	1
1,4-Difluorobenzene (Surr)	87		70 - 130	04/16/21 10:07	04/16/21 16:11	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		04/15/21 16:33	04/22/21 02:26	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/15/21 16:33	04/22/21 02:26	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/15/21 16:33	04/22/21 02:26	1
Total TPH	<49.9	U	49.9		mg/Kg		04/15/21 16:33	04/22/21 02:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130	04/15/21 16:33	04/22/21 02:26	1
o-Terphenyl	124		70 - 130	04/15/21 16:33	04/22/21 02:26	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	59.2		5.04		mg/Kg			04/17/21 04:30	1

Client Sample ID: H-2

Lab Sample ID: 880-1334-2

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		04/16/21 10:07	04/16/21 16:57	1
Toluene	<0.00202	U	0.00202		mg/Kg		04/16/21 10:07	04/16/21 16:57	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		04/16/21 10:07	04/16/21 16:57	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		04/16/21 10:07	04/16/21 16:57	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		04/16/21 10:07	04/16/21 16:57	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		04/16/21 10:07	04/16/21 16:57	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		04/16/21 10:07	04/16/21 16:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130	04/16/21 10:07	04/16/21 16:57	1
1,4-Difluorobenzene (Surr)	96		70 - 130	04/16/21 10:07	04/16/21 16:57	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		04/15/21 16:33	04/22/21 03:27	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Client Sample ID: H-2

Lab Sample ID: 880-1334-2

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/15/21 16:33	04/22/21 03:27	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/15/21 16:33	04/22/21 03:27	1
Total TPH	<49.9	U	49.9		mg/Kg		04/15/21 16:33	04/22/21 03:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130				04/15/21 16:33	04/22/21 03:27	1
o-Terphenyl	131	S1+	70 - 130				04/15/21 16:33	04/22/21 03:27	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.1		4.98		mg/Kg			04/17/21 04:38	1

Client Sample ID: H-3

Lab Sample ID: 880-1334-3

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		04/16/21 10:07	04/16/21 17:22	1
Toluene	<0.00201	U	0.00201		mg/Kg		04/16/21 10:07	04/16/21 17:22	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		04/16/21 10:07	04/16/21 17:22	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		04/16/21 10:07	04/16/21 17:22	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		04/16/21 10:07	04/16/21 17:22	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		04/16/21 10:07	04/16/21 17:22	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		04/16/21 10:07	04/16/21 17:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130				04/16/21 10:07	04/16/21 17:22	1
1,4-Difluorobenzene (Surr)	105		70 - 130				04/16/21 10:07	04/16/21 17:22	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		04/15/21 16:33	04/22/21 03:48	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		04/15/21 16:33	04/22/21 03:48	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		04/15/21 16:33	04/22/21 03:48	1
Total TPH	<49.8	U	49.8		mg/Kg		04/15/21 16:33	04/22/21 03:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130				04/15/21 16:33	04/22/21 03:48	1
o-Terphenyl	136	S1+	70 - 130				04/15/21 16:33	04/22/21 03:48	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20.0		4.97		mg/Kg			04/17/21 04:43	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Client Sample ID: H-4

Lab Sample ID: 880-1334-4

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/16/21 17:48	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/16/21 17:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/16/21 17:48	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/16/21 10:07	04/16/21 17:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/16/21 17:48	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/16/21 10:07	04/16/21 17:48	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		04/16/21 10:07	04/16/21 17:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130	04/16/21 10:07	04/16/21 17:48	1
1,4-Difluorobenzene (Surr)	100		70 - 130	04/16/21 10:07	04/16/21 17:48	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		04/15/21 16:33	04/22/21 04:09	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/15/21 16:33	04/22/21 04:09	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/15/21 16:33	04/22/21 04:09	1
Total TPH	<49.9	U	49.9		mg/Kg		04/15/21 16:33	04/22/21 04:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130	04/15/21 16:33	04/22/21 04:09	1
o-Terphenyl	132	S1+	70 - 130	04/15/21 16:33	04/22/21 04:09	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23.0		5.00		mg/Kg			04/17/21 04:48	1

Client Sample ID: SW-1

Lab Sample ID: 880-1334-5

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/16/21 10:07	04/16/21 18:13	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/16/21 10:07	04/16/21 18:13	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/16/21 10:07	04/16/21 18:13	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/16/21 10:07	04/16/21 18:13	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/16/21 10:07	04/16/21 18:13	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/16/21 10:07	04/16/21 18:13	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		04/16/21 10:07	04/16/21 18:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	04/16/21 10:07	04/16/21 18:13	1
1,4-Difluorobenzene (Surr)	88		70 - 130	04/16/21 10:07	04/16/21 18:13	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/15/21 16:33	04/22/21 04:30	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Client Sample ID: SW-1

Lab Sample ID: 880-1334-5

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	337		50.0		mg/Kg		04/15/21 16:33	04/22/21 04:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/15/21 16:33	04/22/21 04:30	1
Total TPH	337		50.0		mg/Kg		04/15/21 16:33	04/22/21 04:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130				04/15/21 16:33	04/22/21 04:30	1
o-Terphenyl	117		70 - 130				04/15/21 16:33	04/22/21 04:30	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29.4		4.99		mg/Kg			04/17/21 04:53	1

Client Sample ID: SW-2

Lab Sample ID: 880-1334-6

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		04/16/21 10:07	04/16/21 18:38	1
Toluene	<0.00198	U	0.00198		mg/Kg		04/16/21 10:07	04/16/21 18:38	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		04/16/21 10:07	04/16/21 18:38	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		04/16/21 10:07	04/16/21 18:38	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		04/16/21 10:07	04/16/21 18:38	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		04/16/21 10:07	04/16/21 18:38	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		04/16/21 10:07	04/16/21 18:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	144	S1+	70 - 130				04/16/21 10:07	04/16/21 18:38	1
1,4-Difluorobenzene (Surr)	112		70 - 130				04/16/21 10:07	04/16/21 18:38	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/15/21 16:33	04/22/21 04:50	1
Diesel Range Organics (Over C10-C28)	253		50.0		mg/Kg		04/15/21 16:33	04/22/21 04:50	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/15/21 16:33	04/22/21 04:50	1
Total TPH	253		50.0		mg/Kg		04/15/21 16:33	04/22/21 04:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130				04/15/21 16:33	04/22/21 04:50	1
o-Terphenyl	126		70 - 130				04/15/21 16:33	04/22/21 04:50	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40.9		4.99		mg/Kg			04/17/21 05:08	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Client Sample ID: SW-3

Lab Sample ID: 880-1334-7

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/16/21 10:07	04/16/21 19:04	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/16/21 10:07	04/16/21 19:04	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/16/21 10:07	04/16/21 19:04	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/16/21 10:07	04/16/21 19:04	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/16/21 10:07	04/16/21 19:04	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/16/21 10:07	04/16/21 19:04	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		04/16/21 10:07	04/16/21 19:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130	04/16/21 10:07	04/16/21 19:04	1
1,4-Difluorobenzene (Surr)	90		70 - 130	04/16/21 10:07	04/16/21 19:04	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/15/21 16:33	04/22/21 05:11	1
Diesel Range Organics (Over C10-C28)	366		50.0		mg/Kg		04/15/21 16:33	04/22/21 05:11	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/15/21 16:33	04/22/21 05:11	1
Total TPH	366		50.0		mg/Kg		04/15/21 16:33	04/22/21 05:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 130	04/15/21 16:33	04/22/21 05:11	1
o-Terphenyl	129		70 - 130	04/15/21 16:33	04/22/21 05:11	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.2		4.99		mg/Kg			04/17/21 05:13	1

Client Sample ID: SW-4

Lab Sample ID: 880-1334-8

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/16/21 19:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/16/21 19:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/16/21 19:29	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/16/21 10:07	04/16/21 19:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/16/21 19:29	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/16/21 10:07	04/16/21 19:29	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		04/16/21 10:07	04/16/21 19:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130	04/16/21 10:07	04/16/21 19:29	1
1,4-Difluorobenzene (Surr)	99		70 - 130	04/16/21 10:07	04/16/21 19:29	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/15/21 16:33	04/22/21 05:32	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Client Sample ID: SW-4

Lab Sample ID: 880-1334-8

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/15/21 16:33	04/22/21 05:32	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/15/21 16:33	04/22/21 05:32	1
Total TPH	<50.0	U	50.0		mg/Kg		04/15/21 16:33	04/22/21 05:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	177	S1+	70 - 130				04/15/21 16:33	04/22/21 05:32	1
o-Terphenyl	205	S1+	70 - 130				04/15/21 16:33	04/22/21 05:32	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	43.4		5.02		mg/Kg			04/17/21 05:18	1

Client Sample ID: SW-5

Lab Sample ID: 880-1334-9

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/16/21 19:55	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/16/21 19:55	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/16/21 19:55	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		04/16/21 10:07	04/16/21 19:55	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/16/21 19:55	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		04/16/21 10:07	04/16/21 19:55	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		04/16/21 10:07	04/16/21 19:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	138	S1+	70 - 130				04/16/21 10:07	04/16/21 19:55	1
1,4-Difluorobenzene (Surr)	104		70 - 130				04/16/21 10:07	04/16/21 19:55	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/15/21 16:33	04/22/21 01:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/15/21 16:33	04/22/21 01:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/15/21 16:33	04/22/21 01:24	1
Total TPH	<50.0	U	50.0		mg/Kg		04/15/21 16:33	04/22/21 01:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 130				04/15/21 16:33	04/22/21 01:24	1
o-Terphenyl	103		70 - 130				04/15/21 16:33	04/22/21 01:24	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	44.9		5.04		mg/Kg			04/17/21 05:23	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Client Sample ID: SW-6

Lab Sample ID: 880-1334-10

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		04/16/21 10:07	04/16/21 20:21	1
Toluene	<0.00202	U	0.00202		mg/Kg		04/16/21 10:07	04/16/21 20:21	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		04/16/21 10:07	04/16/21 20:21	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		04/16/21 10:07	04/16/21 20:21	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		04/16/21 10:07	04/16/21 20:21	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		04/16/21 10:07	04/16/21 20:21	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		04/16/21 10:07	04/16/21 20:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	135	S1+	70 - 130	04/16/21 10:07	04/16/21 20:21	1
1,4-Difluorobenzene (Surr)	104		70 - 130	04/16/21 10:07	04/16/21 20:21	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		04/15/21 16:33	04/22/21 01:45	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		04/15/21 16:33	04/22/21 01:45	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		04/15/21 16:33	04/22/21 01:45	1
Total TPH	<50.1	U	50.1		mg/Kg		04/15/21 16:33	04/22/21 01:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	04/15/21 16:33	04/22/21 01:45	1
o-Terphenyl	88		70 - 130	04/15/21 16:33	04/22/21 01:45	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.29		5.05		mg/Kg			04/17/21 05:28	1

Client Sample ID: SW-7

Lab Sample ID: 880-1334-11

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/16/21 22:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/16/21 22:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/16/21 22:28	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		04/16/21 10:07	04/16/21 22:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/16/21 22:28	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		04/16/21 10:07	04/16/21 22:28	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		04/16/21 10:07	04/16/21 22:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130	04/16/21 10:07	04/16/21 22:28	1
1,4-Difluorobenzene (Surr)	84		70 - 130	04/16/21 10:07	04/16/21 22:28	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/15/21 16:33	04/22/21 02:05	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Client Sample ID: SW-7

Lab Sample ID: 880-1334-11

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	92.9		50.0		mg/Kg		04/15/21 16:33	04/22/21 02:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/15/21 16:33	04/22/21 02:05	1
Total TPH	92.9		50.0		mg/Kg		04/15/21 16:33	04/22/21 02:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	126		70 - 130				04/15/21 16:33	04/22/21 02:05	1
o-Terphenyl	112		70 - 130				04/15/21 16:33	04/22/21 02:05	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20.1		4.97		mg/Kg			04/17/21 05:34	1

Client Sample ID: SW-8

Lab Sample ID: 880-1334-12

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/16/21 22:54	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/16/21 22:54	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/16/21 22:54	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/16/21 10:07	04/16/21 22:54	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/16/21 22:54	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/16/21 10:07	04/16/21 22:54	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		04/16/21 10:07	04/16/21 22:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130				04/16/21 10:07	04/16/21 22:54	1
1,4-Difluorobenzene (Surr)	97		70 - 130				04/16/21 10:07	04/16/21 22:54	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/15/21 16:33	04/22/21 02:26	1
Diesel Range Organics (Over C10-C28)	67.6		50.0		mg/Kg		04/15/21 16:33	04/22/21 02:26	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/15/21 16:33	04/22/21 02:26	1
Total TPH	67.6		50.0		mg/Kg		04/15/21 16:33	04/22/21 02:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130				04/15/21 16:33	04/22/21 02:26	1
o-Terphenyl	97		70 - 130				04/15/21 16:33	04/22/21 02:26	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.33		4.98		mg/Kg			04/17/21 05:49	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Client Sample ID: SW-9

Lab Sample ID: 880-1334-13

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/16/21 10:07	04/16/21 23:20	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/16/21 10:07	04/16/21 23:20	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/16/21 10:07	04/16/21 23:20	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/16/21 10:07	04/16/21 23:20	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/16/21 10:07	04/16/21 23:20	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/16/21 10:07	04/16/21 23:20	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		04/16/21 10:07	04/16/21 23:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	134	S1+	70 - 130	04/16/21 10:07	04/16/21 23:20	1
1,4-Difluorobenzene (Surr)	103		70 - 130	04/16/21 10:07	04/16/21 23:20	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		04/15/21 16:33	04/22/21 02:46	1
Diesel Range Organics (Over C10-C28)	643		49.9		mg/Kg		04/15/21 16:33	04/22/21 02:46	1
Oil Range Organics (Over C28-C36)	218		49.9		mg/Kg		04/15/21 16:33	04/22/21 02:46	1
Total TPH	861		49.9		mg/Kg		04/15/21 16:33	04/22/21 02:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	129		70 - 130	04/15/21 16:33	04/22/21 02:46	1
o-Terphenyl	108		70 - 130	04/15/21 16:33	04/22/21 02:46	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15.6		4.96		mg/Kg			04/17/21 05:54	1

Client Sample ID: SW-10

Lab Sample ID: 880-1334-14

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/16/21 10:07	04/16/21 23:45	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/16/21 10:07	04/16/21 23:45	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/16/21 10:07	04/16/21 23:45	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/16/21 10:07	04/16/21 23:45	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/16/21 10:07	04/16/21 23:45	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/16/21 10:07	04/16/21 23:45	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		04/16/21 10:07	04/16/21 23:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	140	S1+	70 - 130	04/16/21 10:07	04/16/21 23:45	1
1,4-Difluorobenzene (Surr)	104		70 - 130	04/16/21 10:07	04/16/21 23:45	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		04/15/21 16:33	04/22/21 03:07	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Client Sample ID: SW-10

Lab Sample ID: 880-1334-14

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	253		49.8		mg/Kg		04/15/21 16:33	04/22/21 03:07	1
Oil Range Organics (Over C28-C36)	111		49.8		mg/Kg		04/15/21 16:33	04/22/21 03:07	1
Total TPH	364		49.8		mg/Kg		04/15/21 16:33	04/22/21 03:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	139	S1+	70 - 130	04/15/21 16:33	04/22/21 03:07	1
o-Terphenyl	116		70 - 130	04/15/21 16:33	04/22/21 03:07	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21.3		4.95		mg/Kg			04/17/21 06:09	1

Client Sample ID: SW-11

Lab Sample ID: 880-1334-15

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/17/21 00:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/17/21 00:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/17/21 00:11	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/16/21 10:07	04/17/21 00:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/17/21 00:11	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/16/21 10:07	04/17/21 00:11	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		04/16/21 10:07	04/17/21 00:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	152	S1+	70 - 130	04/16/21 10:07	04/17/21 00:11	1
1,4-Difluorobenzene (Surr)	106		70 - 130	04/16/21 10:07	04/17/21 00:11	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		04/15/21 16:33	04/22/21 03:27	1
Diesel Range Organics (Over C10-C28)	162		49.9		mg/Kg		04/15/21 16:33	04/22/21 03:27	1
Oil Range Organics (Over C28-C36)	62.2		49.9		mg/Kg		04/15/21 16:33	04/22/21 03:27	1
Total TPH	224		49.9		mg/Kg		04/15/21 16:33	04/22/21 03:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	130		70 - 130	04/15/21 16:33	04/22/21 03:27	1
o-Terphenyl	109		70 - 130	04/15/21 16:33	04/22/21 03:27	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.4		5.04		mg/Kg			04/17/21 06:14	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Client Sample ID: SW-12

Lab Sample ID: 880-1334-16

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		04/19/21 11:01	04/19/21 20:30	1
Toluene	<0.00201	U	0.00201		mg/Kg		04/19/21 11:01	04/19/21 20:30	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		04/19/21 11:01	04/19/21 20:30	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		04/19/21 11:01	04/19/21 20:30	1
o-Xylene	0.00219		0.00201		mg/Kg		04/19/21 11:01	04/19/21 20:30	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		04/19/21 11:01	04/19/21 20:30	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		04/19/21 11:01	04/19/21 20:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	151	S1+	70 - 130	04/19/21 11:01	04/19/21 20:30	1
1,4-Difluorobenzene (Surr)	96		70 - 130	04/19/21 11:01	04/19/21 20:30	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		04/15/21 16:33	04/22/21 03:48	1
Diesel Range Organics (Over C10-C28)	133		49.9		mg/Kg		04/15/21 16:33	04/22/21 03:48	1
Oil Range Organics (Over C28-C36)	50.3		49.9		mg/Kg		04/15/21 16:33	04/22/21 03:48	1
Total TPH	183		49.9		mg/Kg		04/15/21 16:33	04/22/21 03:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130	04/15/21 16:33	04/22/21 03:48	1
o-Terphenyl	95		70 - 130	04/15/21 16:33	04/22/21 03:48	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20.0		5.02		mg/Kg			04/17/21 06:19	1

Client Sample ID: SW-13

Lab Sample ID: 880-1334-17

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/17/21 01:02	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/17/21 01:02	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/17/21 01:02	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		04/16/21 10:07	04/17/21 01:02	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/17/21 01:02	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		04/16/21 10:07	04/17/21 01:02	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		04/16/21 10:07	04/17/21 01:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	138	S1+	70 - 130	04/16/21 10:07	04/17/21 01:02	1
1,4-Difluorobenzene (Surr)	104		70 - 130	04/16/21 10:07	04/17/21 01:02	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		04/15/21 16:33	04/22/21 04:09	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Client Sample ID: SW-13

Lab Sample ID: 880-1334-17

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	120		49.8		mg/Kg		04/15/21 16:33	04/22/21 04:09	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		04/15/21 16:33	04/22/21 04:09	1
Total TPH	120		49.8		mg/Kg		04/15/21 16:33	04/22/21 04:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	125		70 - 130				04/15/21 16:33	04/22/21 04:09	1
o-Terphenyl	104		70 - 130				04/15/21 16:33	04/22/21 04:09	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	66.8		5.03		mg/Kg			04/17/21 06:24	1

Client Sample ID: SW-14

Lab Sample ID: 880-1334-18

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/19/21 11:01	04/19/21 20:51	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/19/21 11:01	04/19/21 20:51	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/19/21 11:01	04/19/21 20:51	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/19/21 11:01	04/19/21 20:51	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/19/21 11:01	04/19/21 20:51	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/19/21 11:01	04/19/21 20:51	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		04/19/21 11:01	04/19/21 20:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	141	S1+	70 - 130				04/19/21 11:01	04/19/21 20:51	1
1,4-Difluorobenzene (Surr)	98		70 - 130				04/19/21 11:01	04/19/21 20:51	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		04/15/21 16:33	04/22/21 04:30	1
Diesel Range Organics (Over C10-C28)	78.0		49.8		mg/Kg		04/15/21 16:33	04/22/21 04:30	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		04/15/21 16:33	04/22/21 04:30	1
Total TPH	78.0		49.8		mg/Kg		04/15/21 16:33	04/22/21 04:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	134	S1+	70 - 130				04/15/21 16:33	04/22/21 04:30	1
o-Terphenyl	113		70 - 130				04/15/21 16:33	04/22/21 04:30	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.23		5.05		mg/Kg			04/17/21 06:29	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Client Sample ID: SW-15

Lab Sample ID: 880-1334-19

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		04/16/21 10:07	04/17/21 01:53	1
Toluene	<0.00201	U	0.00201		mg/Kg		04/16/21 10:07	04/17/21 01:53	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		04/16/21 10:07	04/17/21 01:53	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		04/16/21 10:07	04/17/21 01:53	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		04/16/21 10:07	04/17/21 01:53	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		04/16/21 10:07	04/17/21 01:53	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		04/16/21 10:07	04/17/21 01:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	149	S1+	70 - 130	04/16/21 10:07	04/17/21 01:53	1
1,4-Difluorobenzene (Surr)	89		70 - 130	04/16/21 10:07	04/17/21 01:53	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/15/21 16:33	04/22/21 04:50	1
Diesel Range Organics (Over C10-C28)	443		50.0		mg/Kg		04/15/21 16:33	04/22/21 04:50	1
Oil Range Organics (Over C28-C36)	221		50.0		mg/Kg		04/15/21 16:33	04/22/21 04:50	1
Total TPH	664		50.0		mg/Kg		04/15/21 16:33	04/22/21 04:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130	04/15/21 16:33	04/22/21 04:50	1
o-Terphenyl	89		70 - 130	04/15/21 16:33	04/22/21 04:50	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.7		5.00		mg/Kg			04/17/21 06:35	1

Client Sample ID: SW-16

Lab Sample ID: 880-1334-20

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		04/16/21 10:07	04/17/21 02:19	1
Toluene	<0.00201	U	0.00201		mg/Kg		04/16/21 10:07	04/17/21 02:19	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		04/16/21 10:07	04/17/21 02:19	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		04/16/21 10:07	04/17/21 02:19	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		04/16/21 10:07	04/17/21 02:19	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		04/16/21 10:07	04/17/21 02:19	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		04/16/21 10:07	04/17/21 02:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130	04/16/21 10:07	04/17/21 02:19	1
1,4-Difluorobenzene (Surr)	99		70 - 130	04/16/21 10:07	04/17/21 02:19	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		04/15/21 16:33	04/22/21 05:11	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Client Sample ID: SW-16

Lab Sample ID: 880-1334-20

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	313		50.1		mg/Kg		04/15/21 16:33	04/22/21 05:11	1
Oil Range Organics (Over C28-C36)	128		50.1		mg/Kg		04/15/21 16:33	04/22/21 05:11	1
Total TPH	441		50.1		mg/Kg		04/15/21 16:33	04/22/21 05:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	127		70 - 130	04/15/21 16:33	04/22/21 05:11	1
o-Terphenyl	101		70 - 130	04/15/21 16:33	04/22/21 05:11	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13.0		4.99		mg/Kg			04/17/21 06:40	1

Client Sample ID: BH-1

Lab Sample ID: 880-1334-21

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U F1	0.00200		mg/Kg		04/16/21 10:29	04/17/21 06:11	1
Toluene	<0.00200	U F1 F2	0.00200		mg/Kg		04/16/21 10:29	04/17/21 06:11	1
Ethylbenzene	<0.00200	U F1	0.00200		mg/Kg		04/16/21 10:29	04/17/21 06:11	1
m-Xylene & p-Xylene	<0.00399	U F1 F2	0.00399		mg/Kg		04/16/21 10:29	04/17/21 06:11	1
o-Xylene	<0.00200	U F1 F2	0.00200		mg/Kg		04/16/21 10:29	04/17/21 06:11	1
Xylenes, Total	<0.00399	U F1 F2	0.00399		mg/Kg		04/16/21 10:29	04/17/21 06:11	1
Total BTEX	<0.00399	U F1 F2	0.00399		mg/Kg		04/16/21 10:29	04/17/21 06:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	134	S1+	70 - 130	04/16/21 10:29	04/17/21 06:11	1
1,4-Difluorobenzene (Surr)	84		70 - 130	04/16/21 10:29	04/17/21 06:11	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		04/15/21 16:30	04/15/21 20:01	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		04/15/21 16:30	04/15/21 20:01	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		04/15/21 16:30	04/15/21 20:01	1
Total TPH	<49.8	U	49.8		mg/Kg		04/15/21 16:30	04/15/21 20:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	04/15/21 16:30	04/15/21 20:01	1
o-Terphenyl	93		70 - 130	04/15/21 16:30	04/15/21 20:01	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25.2		5.01		mg/Kg			04/17/21 20:39	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Client Sample ID: BH-2

Lab Sample ID: 880-1334-22

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/16/21 10:29	04/17/21 06:36	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/16/21 10:29	04/17/21 06:36	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/16/21 10:29	04/17/21 06:36	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/16/21 10:29	04/17/21 06:36	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/16/21 10:29	04/17/21 06:36	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/16/21 10:29	04/17/21 06:36	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		04/16/21 10:29	04/17/21 06:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	04/16/21 10:29	04/17/21 06:36	1
1,4-Difluorobenzene (Surr)	86		70 - 130	04/16/21 10:29	04/17/21 06:36	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/15/21 16:30	04/15/21 20:22	1
Diesel Range Organics (Over C10-C28)	60.5		50.0		mg/Kg		04/15/21 16:30	04/15/21 20:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/15/21 16:30	04/15/21 20:22	1
Total TPH	60.5		50.0		mg/Kg		04/15/21 16:30	04/15/21 20:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	04/15/21 16:30	04/15/21 20:22	1
o-Terphenyl	94		70 - 130	04/15/21 16:30	04/15/21 20:22	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.2		5.03		mg/Kg			04/17/21 20:44	1

Client Sample ID: BH-3

Lab Sample ID: 880-1334-23

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		04/16/21 10:29	04/17/21 07:02	1
Toluene	<0.00198	U	0.00198		mg/Kg		04/16/21 10:29	04/17/21 07:02	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		04/16/21 10:29	04/17/21 07:02	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		04/16/21 10:29	04/17/21 07:02	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		04/16/21 10:29	04/17/21 07:02	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		04/16/21 10:29	04/17/21 07:02	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		04/16/21 10:29	04/17/21 07:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130	04/16/21 10:29	04/17/21 07:02	1
1,4-Difluorobenzene (Surr)	90		70 - 130	04/16/21 10:29	04/17/21 07:02	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		04/15/21 16:30	04/15/21 20:44	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Client Sample ID: BH-3

Lab Sample ID: 880-1334-23

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	297		50.1		mg/Kg		04/15/21 16:30	04/15/21 20:44	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		04/15/21 16:30	04/15/21 20:44	1
Total TPH	297		50.1		mg/Kg		04/15/21 16:30	04/15/21 20:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130				04/15/21 16:30	04/15/21 20:44	1
o-Terphenyl	95		70 - 130				04/15/21 16:30	04/15/21 20:44	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21.0		5.02		mg/Kg			04/17/21 20:49	1

Surrogate Summary

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
880-1334-1	H-1	137 S1+	87
880-1334-1 MS	H-1	122	100
880-1334-1 MSD	H-1	123	104
880-1334-2	H-2	123	96
880-1334-3	H-3	131 S1+	105
880-1334-4	H-4	131 S1+	100
880-1334-5	SW-1	118	88
880-1334-6	SW-2	144 S1+	112
880-1334-7	SW-3	123	90
880-1334-8	SW-4	119	99
880-1334-9	SW-5	138 S1+	104
880-1334-10	SW-6	135 S1+	104
880-1334-11	SW-7	127	84
880-1334-12	SW-8	120	97
880-1334-13	SW-9	134 S1+	103
880-1334-14	SW-10	140 S1+	104
880-1334-15	SW-11	152 S1+	106
880-1334-16	SW-12	151 S1+	96
880-1334-17	SW-13	138 S1+	104
880-1334-18	SW-14	141 S1+	98
880-1334-19	SW-15	149 S1+	89
880-1334-20	SW-16	128	99
880-1334-21	BH-1	134 S1+	84
880-1334-21 MS	BH-1	132 S1+	88
880-1334-21 MSD	BH-1	170 S1+	121
880-1334-22	BH-2	116	86
880-1334-23	BH-3	125	90
LCS 880-1868/1-A	Lab Control Sample	113	97
LCS 880-1872/1-A	Lab Control Sample	117	101
LCS 880-1975/1-A	Lab Control Sample	98	106
LCSD 880-1868/2-A	Lab Control Sample Dup	120	109
LCSD 880-1872/2-A	Lab Control Sample Dup	131 S1+	110
LCSD 880-1975/2-A	Lab Control Sample Dup	98	106
MB 880-1868/5-A	Method Blank	85	83
MB 880-1872/5-A	Method Blank	86	82
MB 880-1975/5-A	Method Blank	97	103
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1	OTPH1
		(70-130)	(70-130)
880-1334-1	H-1	112	124
880-1334-1 MS	H-1	126	123
880-1334-1 MSD	H-1	128	127

Eurofins Xenco, Midland

Surrogate Summary

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-1334-2	H-2	115	131 S1+
880-1334-3	H-3	117	136 S1+
880-1334-4	H-4	115	132 S1+
880-1334-5	SW-1	113	117
880-1334-6	SW-2	117	126
880-1334-7	SW-3	118	129
880-1334-8	SW-4	177 S1+	205 S1+
880-1334-9	SW-5	118	103
880-1334-10	SW-6	104	88
880-1334-11	SW-7	126	112
880-1334-12	SW-8	111	97
880-1334-13	SW-9	129	108
880-1334-14	SW-10	139 S1+	116
880-1334-15	SW-11	130	109
880-1334-16	SW-12	114	95
880-1334-17	SW-13	125	104
880-1334-18	SW-14	134 S1+	113
880-1334-19	SW-15	112	89
880-1334-20	SW-16	127	101
880-1334-21	BH-1	100	93
880-1334-22	BH-2	101	94
880-1334-23	BH-3	108	95
LCS 880-1816/2-A	Lab Control Sample	108	93
LCS 880-1841/2-A	Lab Control Sample	113	117
LCSD 880-1816/3-A	Lab Control Sample Dup	103	88
LCSD 880-1841/3-A	Lab Control Sample Dup	112	124
MB 880-1816/1-A	Method Blank	101	99
MB 880-1841/1-A	Method Blank	104	117

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-1868/5-A

Matrix: Solid

Analysis Batch: 1897

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1868

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/16/21 15:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/16/21 15:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/16/21 15:45	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/16/21 10:07	04/16/21 15:45	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:07	04/16/21 15:45	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/16/21 10:07	04/16/21 15:45	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		04/16/21 10:07	04/16/21 15:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130	04/16/21 10:07	04/16/21 15:45	1
1,4-Difluorobenzene (Surr)	83		70 - 130	04/16/21 10:07	04/16/21 15:45	1

Lab Sample ID: LCS 880-1868/1-A

Matrix: Solid

Analysis Batch: 1897

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1868

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1042		mg/Kg		104	70 - 130
Toluene	0.100	0.1091		mg/Kg		109	70 - 130
Ethylbenzene	0.100	0.1083		mg/Kg		108	70 - 130
m-Xylene & p-Xylene	0.200	0.2197		mg/Kg		110	70 - 130
o-Xylene	0.100	0.1169		mg/Kg		117	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: LCSD 880-1868/2-A

Matrix: Solid

Analysis Batch: 1897

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1868

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1021		mg/Kg		102	70 - 130	2	35
Toluene	0.100	0.09537		mg/Kg		95	70 - 130	13	35
Ethylbenzene	0.100	0.1056		mg/Kg		106	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.2158		mg/Kg		108	70 - 130	2	35
o-Xylene	0.100	0.1166		mg/Kg		117	70 - 130	0	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	120		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: 880-1334-1 MS

Matrix: Solid

Analysis Batch: 1897

Client Sample ID: H-1

Prep Type: Total/NA

Prep Batch: 1868

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U	0.100	0.1031		mg/Kg		103	70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 880-1334-1 MS

Matrix: Solid

Analysis Batch: 1897

Client Sample ID: H-1

Prep Type: Total/NA

Prep Batch: 1868

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	<0.00200	U	0.100	0.09688		mg/Kg		97	70 - 130
Ethylbenzene	<0.00200	U	0.100	0.1022		mg/Kg		102	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.200	0.2055		mg/Kg		103	70 - 130
o-Xylene	<0.00200	U	0.100	0.1114		mg/Kg		111	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	122		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 880-1334-1 MSD

Matrix: Solid

Analysis Batch: 1897

Client Sample ID: H-1

Prep Type: Total/NA

Prep Batch: 1868

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.100	0.1013		mg/Kg		101	70 - 130	2	35
Toluene	<0.00200	U	0.100	0.1114		mg/Kg		111	70 - 130	14	35
Ethylbenzene	<0.00200	U	0.100	0.1035		mg/Kg		103	70 - 130	1	35
m-Xylene & p-Xylene	<0.00401	U	0.201	0.2103		mg/Kg		105	70 - 130	2	35
o-Xylene	<0.00200	U	0.100	0.1156		mg/Kg		115	70 - 130	4	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	123		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: MB 880-1872/5-A

Matrix: Solid

Analysis Batch: 1897

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1872

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:29	04/17/21 05:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:29	04/17/21 05:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:29	04/17/21 05:45	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/16/21 10:29	04/17/21 05:45	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/16/21 10:29	04/17/21 05:45	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/16/21 10:29	04/17/21 05:45	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		04/16/21 10:29	04/17/21 05:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130	04/16/21 10:29	04/17/21 05:45	1
1,4-Difluorobenzene (Surr)	82		70 - 130	04/16/21 10:29	04/17/21 05:45	1

Lab Sample ID: LCS 880-1872/1-A

Matrix: Solid

Analysis Batch: 1897

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1872

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1034		mg/Kg		103	70 - 130
Toluene	0.100	0.1131		mg/Kg		113	70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 880-1872/1-A

Matrix: Solid

Analysis Batch: 1897

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1872

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	0.100	0.1043		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	0.200	0.2098		mg/Kg		105	70 - 130
o-Xylene	0.100	0.1143		mg/Kg		114	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	117		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: LCSD 880-1872/2-A

Matrix: Solid

Analysis Batch: 1897

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1872

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1024		mg/Kg		102	70 - 130	1	35
Toluene	0.100	0.1151		mg/Kg		115	70 - 130	2	35
Ethylbenzene	0.100	0.1054		mg/Kg		105	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.2137		mg/Kg		107	70 - 130	2	35
o-Xylene	0.100	0.1185		mg/Kg		119	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: 880-1334-21 MS

Matrix: Solid

Analysis Batch: 1897

Client Sample ID: BH-1

Prep Type: Total/NA

Prep Batch: 1872

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U F1	0.100	0.04692	F1	mg/Kg		47	70 - 130
Toluene	<0.00200	U F1 F2	0.100	0.02716	F1	mg/Kg		27	70 - 130
Ethylbenzene	<0.00200	U F1	0.100	0.03431	F1	mg/Kg		34	70 - 130
m-Xylene & p-Xylene	<0.00399	U F1 F2	0.200	0.06800	F1	mg/Kg		34	70 - 130
o-Xylene	<0.00200	U F1 F2	0.100	0.03841	F1	mg/Kg		38	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

Lab Sample ID: 880-1334-21 MSD

Matrix: Solid

Analysis Batch: 1897

Client Sample ID: BH-1

Prep Type: Total/NA

Prep Batch: 1872

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.0998	0.05832	F1	mg/Kg		58	70 - 130	22	35
Toluene	<0.00200	U F1 F2	0.0998	0.04891	F1 F2	mg/Kg		49	70 - 130	57	35
Ethylbenzene	<0.00200	U F1	0.0998	0.04803	F1	mg/Kg		47	70 - 130	33	35
m-Xylene & p-Xylene	<0.00399	U F1 F2	0.200	0.09941	F1 F2	mg/Kg		50	70 - 130	38	35
o-Xylene	<0.00200	U F1 F2	0.0998	0.06431	F1 F2	mg/Kg		64	70 - 130	50	35

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	170	S1+	70 - 130
1,4-Difluorobenzene (Surr)	121		70 - 130

Lab Sample ID: MB 880-1975/5-A

Matrix: Solid

Analysis Batch: 1974

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1975

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/19/21 11:01	04/19/21 13:55	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/19/21 11:01	04/19/21 13:55	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/19/21 11:01	04/19/21 13:55	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/19/21 11:01	04/19/21 13:55	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/19/21 11:01	04/19/21 13:55	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/19/21 11:01	04/19/21 13:55	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		04/19/21 11:01	04/19/21 13:55	1

	MB	MB							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130				04/19/21 11:01	04/19/21 13:55	1
1,4-Difluorobenzene (Surr)	103		70 - 130				04/19/21 11:01	04/19/21 13:55	1

Lab Sample ID: LCS 880-1975/1-A

Matrix: Solid

Analysis Batch: 1974

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1975

	Spike	LCS	LCS						
Analyte	Added	Result	Qualifier	Unit	D	%Rec	%Rec.	Limits	
Benzene	0.100	0.08818		mg/Kg		88		70 - 130	
Toluene	0.100	0.09256		mg/Kg		93		70 - 130	
Ethylbenzene	0.100	0.09748		mg/Kg		97		70 - 130	
m-Xylene & p-Xylene	0.200	0.1951		mg/Kg		98		70 - 130	
o-Xylene	0.100	0.09469		mg/Kg		95		70 - 130	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: LCSD 880-1975/2-A

Matrix: Solid

Analysis Batch: 1974

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1975

	Spike	LCSD	LCSD							
Analyte	Added	Result	Qualifier	Unit	D	%Rec	%Rec.	Limits	RPD	Limit
Benzene	0.100	0.09326		mg/Kg		93		70 - 130	6	35
Toluene	0.100	0.09526		mg/Kg		95		70 - 130	3	35
Ethylbenzene	0.100	0.1020		mg/Kg		102		70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.2053		mg/Kg		103		70 - 130	5	35
o-Xylene	0.100	0.09991		mg/Kg		100		70 - 130	5	35

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-1816/1-A

Matrix: Solid

Analysis Batch: 1818

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1816

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/15/21 10:01	04/15/21 11:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/15/21 10:01	04/15/21 11:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/15/21 10:01	04/15/21 11:52	1
Total TPH	<50.0	U	50.0		mg/Kg		04/15/21 10:01	04/15/21 11:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	04/15/21 10:01	04/15/21 11:52	1
o-Terphenyl	99		70 - 130	04/15/21 10:01	04/15/21 11:52	1

Lab Sample ID: LCS 880-1816/2-A

Matrix: Solid

Analysis Batch: 1818

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1816

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1241		mg/Kg		124	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1079		mg/Kg		108	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	108		70 - 130
o-Terphenyl	93		70 - 130

Lab Sample ID: LCSD 880-1816/3-A

Matrix: Solid

Analysis Batch: 1818

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1816

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1101		mg/Kg		110	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	1000	1010		mg/Kg		101	70 - 130	7	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	88		70 - 130

Lab Sample ID: MB 880-1841/1-A

Matrix: Solid

Analysis Batch: 2089

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1841

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/15/21 16:33	04/22/21 01:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/15/21 16:33	04/22/21 01:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/15/21 16:33	04/22/21 01:24	1
Total TPH	<50.0	U	50.0		mg/Kg		04/15/21 16:33	04/22/21 01:24	1

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	04/15/21 16:33	04/22/21 01:24	1
o-Terphenyl	117		70 - 130	04/15/21 16:33	04/22/21 01:24	1

Lab Sample ID: LCS 880-1841/2-A

Matrix: Solid

Analysis Batch: 2089

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1841

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1242		mg/Kg		124	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1233		mg/Kg		123	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	113		70 - 130
o-Terphenyl	117		70 - 130

Lab Sample ID: LCSD 880-1841/3-A

Matrix: Solid

Analysis Batch: 2089

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1841

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1182		mg/Kg		118	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	1000	1268		mg/Kg		127	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	112		70 - 130
o-Terphenyl	124		70 - 130

Lab Sample ID: 880-1334-1 MS

Matrix: Solid

Analysis Batch: 2089

Client Sample ID: H-1

Prep Type: Total/NA

Prep Batch: 1841

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	1231		mg/Kg		123	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	998	1294		mg/Kg		127	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	126		70 - 130
o-Terphenyl	123		70 - 130

Lab Sample ID: 880-1334-1 MSD

Matrix: Solid

Analysis Batch: 2089

Client Sample ID: H-1

Prep Type: Total/NA

Prep Batch: 1841

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	1230		mg/Kg		123	70 - 130	0	20

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 880-1334-1 MSD

Matrix: Solid

Analysis Batch: 2089

Client Sample ID: H-1

Prep Type: Total/NA

Prep Batch: 1841

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)	<49.9	U	998	1321		mg/Kg		129	70 - 130	2	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	128		70 - 130								
o-Terphenyl	127		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-1850/1-A

Matrix: Solid

Analysis Batch: 1920

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			04/17/21 04:15	1

Lab Sample ID: LCS 880-1850/3-A

Matrix: Solid

Analysis Batch: 1920

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	247.1		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-1850/2-A

Matrix: Solid

Analysis Batch: 1920

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	248.3		mg/Kg		99	90 - 110	1	20

Lab Sample ID: 880-1334-1 MS

Matrix: Solid

Analysis Batch: 1920

Client Sample ID: H-1

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	59.2		252	302.4		mg/Kg		96	90 - 110

Lab Sample ID: 880-1334-1 MSD

Matrix: Solid

Analysis Batch: 1920

Client Sample ID: H-1

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	59.2		252	304.6		mg/Kg		97	90 - 110	1	20

Lab Sample ID: 880-1334-11 MS

Matrix: Solid

Analysis Batch: 1920

Client Sample ID: SW-7

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	20.1		249	266.2		mg/Kg		99	90 - 110

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-1334-11 MSD

Matrix: Solid

Analysis Batch: 1920

Client Sample ID: SW-7

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	20.1		249	265.8		mg/Kg		99	90 - 110	0	20

Lab Sample ID: MB 880-1848/1-A

Matrix: Solid

Analysis Batch: 1931

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			04/17/21 18:16	1

Lab Sample ID: LCS 880-1848/2-A

Matrix: Solid

Analysis Batch: 1931

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	242.3		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-1848/3-A

Matrix: Solid

Analysis Batch: 1931

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	246.4		mg/Kg		99	90 - 110	2	20

Eurofins Xenco, Midland

QC Association Summary

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

GC VOA

Prep Batch: 1868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1334-1	H-1	Total/NA	Solid	5035	
880-1334-2	H-2	Total/NA	Solid	5035	
880-1334-3	H-3	Total/NA	Solid	5035	
880-1334-4	H-4	Total/NA	Solid	5035	
880-1334-5	SW-1	Total/NA	Solid	5035	
880-1334-6	SW-2	Total/NA	Solid	5035	
880-1334-7	SW-3	Total/NA	Solid	5035	
880-1334-8	SW-4	Total/NA	Solid	5035	
880-1334-9	SW-5	Total/NA	Solid	5035	
880-1334-10	SW-6	Total/NA	Solid	5035	
880-1334-11	SW-7	Total/NA	Solid	5035	
880-1334-12	SW-8	Total/NA	Solid	5035	
880-1334-13	SW-9	Total/NA	Solid	5035	
880-1334-14	SW-10	Total/NA	Solid	5035	
880-1334-15	SW-11	Total/NA	Solid	5035	
880-1334-17	SW-13	Total/NA	Solid	5035	
880-1334-19	SW-15	Total/NA	Solid	5035	
880-1334-20	SW-16	Total/NA	Solid	5035	
MB 880-1868/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1868/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1868/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-1334-1 MS	H-1	Total/NA	Solid	5035	
880-1334-1 MSD	H-1	Total/NA	Solid	5035	

Prep Batch: 1872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1334-21	BH-1	Total/NA	Solid	5035	
880-1334-22	BH-2	Total/NA	Solid	5035	
880-1334-23	BH-3	Total/NA	Solid	5035	
MB 880-1872/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1872/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1872/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-1334-21 MS	BH-1	Total/NA	Solid	5035	
880-1334-21 MSD	BH-1	Total/NA	Solid	5035	

Analysis Batch: 1897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1334-1	H-1	Total/NA	Solid	8021B	1868
880-1334-2	H-2	Total/NA	Solid	8021B	1868
880-1334-3	H-3	Total/NA	Solid	8021B	1868
880-1334-4	H-4	Total/NA	Solid	8021B	1868
880-1334-5	SW-1	Total/NA	Solid	8021B	1868
880-1334-6	SW-2	Total/NA	Solid	8021B	1868
880-1334-7	SW-3	Total/NA	Solid	8021B	1868
880-1334-8	SW-4	Total/NA	Solid	8021B	1868
880-1334-9	SW-5	Total/NA	Solid	8021B	1868
880-1334-10	SW-6	Total/NA	Solid	8021B	1868
880-1334-11	SW-7	Total/NA	Solid	8021B	1868
880-1334-12	SW-8	Total/NA	Solid	8021B	1868
880-1334-13	SW-9	Total/NA	Solid	8021B	1868
880-1334-14	SW-10	Total/NA	Solid	8021B	1868

Eurofins Xenco, Midland

QC Association Summary

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

GC VOA (Continued)

Analysis Batch: 1897 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1334-15	SW-11	Total/NA	Solid	8021B	1868
880-1334-17	SW-13	Total/NA	Solid	8021B	1868
880-1334-19	SW-15	Total/NA	Solid	8021B	1868
880-1334-20	SW-16	Total/NA	Solid	8021B	1868
880-1334-21	BH-1	Total/NA	Solid	8021B	1872
880-1334-22	BH-2	Total/NA	Solid	8021B	1872
880-1334-23	BH-3	Total/NA	Solid	8021B	1872
MB 880-1868/5-A	Method Blank	Total/NA	Solid	8021B	1868
MB 880-1872/5-A	Method Blank	Total/NA	Solid	8021B	1872
LCS 880-1868/1-A	Lab Control Sample	Total/NA	Solid	8021B	1868
LCS 880-1872/1-A	Lab Control Sample	Total/NA	Solid	8021B	1872
LCSD 880-1868/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1868
LCSD 880-1872/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1872
880-1334-1 MS	H-1	Total/NA	Solid	8021B	1868
880-1334-1 MSD	H-1	Total/NA	Solid	8021B	1868
880-1334-21 MS	BH-1	Total/NA	Solid	8021B	1872
880-1334-21 MSD	BH-1	Total/NA	Solid	8021B	1872

Analysis Batch: 1974

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1334-16	SW-12	Total/NA	Solid	8021B	1975
880-1334-18	SW-14	Total/NA	Solid	8021B	1975
MB 880-1975/5-A	Method Blank	Total/NA	Solid	8021B	1975
LCS 880-1975/1-A	Lab Control Sample	Total/NA	Solid	8021B	1975
LCSD 880-1975/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1975

Prep Batch: 1975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1334-16	SW-12	Total/NA	Solid	5035	
880-1334-18	SW-14	Total/NA	Solid	5035	
MB 880-1975/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1975/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1975/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 1816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1334-21	BH-1	Total/NA	Solid	8015NM Prep	
880-1334-22	BH-2	Total/NA	Solid	8015NM Prep	
880-1334-23	BH-3	Total/NA	Solid	8015NM Prep	
MB 880-1816/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-1816/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-1816/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 1818

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1334-21	BH-1	Total/NA	Solid	8015B NM	1816
880-1334-22	BH-2	Total/NA	Solid	8015B NM	1816
880-1334-23	BH-3	Total/NA	Solid	8015B NM	1816
MB 880-1816/1-A	Method Blank	Total/NA	Solid	8015B NM	1816

Eurofins Xenco, Midland

QC Association Summary

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

GC Semi VOA (Continued)

Analysis Batch: 1818 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-1816/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	1816
LCSD 880-1816/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	1816

Prep Batch: 1841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1334-1	H-1	Total/NA	Solid	8015NM Prep	
880-1334-2	H-2	Total/NA	Solid	8015NM Prep	
880-1334-3	H-3	Total/NA	Solid	8015NM Prep	
880-1334-4	H-4	Total/NA	Solid	8015NM Prep	
880-1334-5	SW-1	Total/NA	Solid	8015NM Prep	
880-1334-6	SW-2	Total/NA	Solid	8015NM Prep	
880-1334-7	SW-3	Total/NA	Solid	8015NM Prep	
880-1334-8	SW-4	Total/NA	Solid	8015NM Prep	
880-1334-9	SW-5	Total/NA	Solid	8015NM Prep	
880-1334-10	SW-6	Total/NA	Solid	8015NM Prep	
880-1334-11	SW-7	Total/NA	Solid	8015NM Prep	
880-1334-12	SW-8	Total/NA	Solid	8015NM Prep	
880-1334-13	SW-9	Total/NA	Solid	8015NM Prep	
880-1334-14	SW-10	Total/NA	Solid	8015NM Prep	
880-1334-15	SW-11	Total/NA	Solid	8015NM Prep	
880-1334-16	SW-12	Total/NA	Solid	8015NM Prep	
880-1334-17	SW-13	Total/NA	Solid	8015NM Prep	
880-1334-18	SW-14	Total/NA	Solid	8015NM Prep	
880-1334-19	SW-15	Total/NA	Solid	8015NM Prep	
880-1334-20	SW-16	Total/NA	Solid	8015NM Prep	
MB 880-1841/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-1841/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-1841/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-1334-1 MS	H-1	Total/NA	Solid	8015NM Prep	
880-1334-1 MSD	H-1	Total/NA	Solid	8015NM Prep	

Analysis Batch: 2089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1334-1	H-1	Total/NA	Solid	8015B NM	1841
880-1334-2	H-2	Total/NA	Solid	8015B NM	1841
880-1334-3	H-3	Total/NA	Solid	8015B NM	1841
880-1334-4	H-4	Total/NA	Solid	8015B NM	1841
880-1334-5	SW-1	Total/NA	Solid	8015B NM	1841
880-1334-6	SW-2	Total/NA	Solid	8015B NM	1841
880-1334-7	SW-3	Total/NA	Solid	8015B NM	1841
880-1334-8	SW-4	Total/NA	Solid	8015B NM	1841
MB 880-1841/1-A	Method Blank	Total/NA	Solid	8015B NM	1841
LCS 880-1841/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	1841
LCSD 880-1841/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	1841
880-1334-1 MS	H-1	Total/NA	Solid	8015B NM	1841
880-1334-1 MSD	H-1	Total/NA	Solid	8015B NM	1841

Analysis Batch: 2091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1334-9	SW-5	Total/NA	Solid	8015B NM	1841
880-1334-10	SW-6	Total/NA	Solid	8015B NM	1841

Eurofins Xenco, Midland

QC Association Summary

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

GC Semi VOA (Continued)

Analysis Batch: 2091 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1334-11	SW-7	Total/NA	Solid	8015B NM	1841
880-1334-12	SW-8	Total/NA	Solid	8015B NM	1841
880-1334-13	SW-9	Total/NA	Solid	8015B NM	1841
880-1334-14	SW-10	Total/NA	Solid	8015B NM	1841
880-1334-15	SW-11	Total/NA	Solid	8015B NM	1841
880-1334-16	SW-12	Total/NA	Solid	8015B NM	1841
880-1334-17	SW-13	Total/NA	Solid	8015B NM	1841
880-1334-18	SW-14	Total/NA	Solid	8015B NM	1841
880-1334-19	SW-15	Total/NA	Solid	8015B NM	1841
880-1334-20	SW-16	Total/NA	Solid	8015B NM	1841

HPLC/IC

Leach Batch: 1848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1334-21	BH-1	Soluble	Solid	DI Leach	
880-1334-22	BH-2	Soluble	Solid	DI Leach	
880-1334-23	BH-3	Soluble	Solid	DI Leach	
MB 880-1848/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1848/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1848/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Leach Batch: 1850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1334-1	H-1	Soluble	Solid	DI Leach	
880-1334-2	H-2	Soluble	Solid	DI Leach	
880-1334-3	H-3	Soluble	Solid	DI Leach	
880-1334-4	H-4	Soluble	Solid	DI Leach	
880-1334-5	SW-1	Soluble	Solid	DI Leach	
880-1334-6	SW-2	Soluble	Solid	DI Leach	
880-1334-7	SW-3	Soluble	Solid	DI Leach	
880-1334-8	SW-4	Soluble	Solid	DI Leach	
880-1334-9	SW-5	Soluble	Solid	DI Leach	
880-1334-10	SW-6	Soluble	Solid	DI Leach	
880-1334-11	SW-7	Soluble	Solid	DI Leach	
880-1334-12	SW-8	Soluble	Solid	DI Leach	
880-1334-13	SW-9	Soluble	Solid	DI Leach	
880-1334-14	SW-10	Soluble	Solid	DI Leach	
880-1334-15	SW-11	Soluble	Solid	DI Leach	
880-1334-16	SW-12	Soluble	Solid	DI Leach	
880-1334-17	SW-13	Soluble	Solid	DI Leach	
880-1334-18	SW-14	Soluble	Solid	DI Leach	
880-1334-19	SW-15	Soluble	Solid	DI Leach	
880-1334-20	SW-16	Soluble	Solid	DI Leach	
MB 880-1850/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1850/3-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1850/2-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-1334-1 MS	H-1	Soluble	Solid	DI Leach	
880-1334-1 MSD	H-1	Soluble	Solid	DI Leach	
880-1334-11 MS	SW-7	Soluble	Solid	DI Leach	
880-1334-11 MSD	SW-7	Soluble	Solid	DI Leach	

Eurofins Xenco, Midland

QC Association Summary

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

HPLC/IC

Analysis Batch: 1920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1334-1	H-1	Soluble	Solid	300.0	1850
880-1334-2	H-2	Soluble	Solid	300.0	1850
880-1334-3	H-3	Soluble	Solid	300.0	1850
880-1334-4	H-4	Soluble	Solid	300.0	1850
880-1334-5	SW-1	Soluble	Solid	300.0	1850
880-1334-6	SW-2	Soluble	Solid	300.0	1850
880-1334-7	SW-3	Soluble	Solid	300.0	1850
880-1334-8	SW-4	Soluble	Solid	300.0	1850
880-1334-9	SW-5	Soluble	Solid	300.0	1850
880-1334-10	SW-6	Soluble	Solid	300.0	1850
880-1334-11	SW-7	Soluble	Solid	300.0	1850
880-1334-12	SW-8	Soluble	Solid	300.0	1850
880-1334-13	SW-9	Soluble	Solid	300.0	1850
880-1334-14	SW-10	Soluble	Solid	300.0	1850
880-1334-15	SW-11	Soluble	Solid	300.0	1850
880-1334-16	SW-12	Soluble	Solid	300.0	1850
880-1334-17	SW-13	Soluble	Solid	300.0	1850
880-1334-18	SW-14	Soluble	Solid	300.0	1850
880-1334-19	SW-15	Soluble	Solid	300.0	1850
880-1334-20	SW-16	Soluble	Solid	300.0	1850
MB 880-1850/1-A	Method Blank	Soluble	Solid	300.0	1850
LCS 880-1850/3-A	Lab Control Sample	Soluble	Solid	300.0	1850
LCSD 880-1850/2-A	Lab Control Sample Dup	Soluble	Solid	300.0	1850
880-1334-1 MS	H-1	Soluble	Solid	300.0	1850
880-1334-1 MSD	H-1	Soluble	Solid	300.0	1850
880-1334-11 MS	SW-7	Soluble	Solid	300.0	1850
880-1334-11 MSD	SW-7	Soluble	Solid	300.0	1850

Analysis Batch: 1931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1334-21	BH-1	Soluble	Solid	300.0	1848
880-1334-22	BH-2	Soluble	Solid	300.0	1848
880-1334-23	BH-3	Soluble	Solid	300.0	1848
MB 880-1848/1-A	Method Blank	Soluble	Solid	300.0	1848
LCS 880-1848/2-A	Lab Control Sample	Soluble	Solid	300.0	1848
LCSD 880-1848/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1848

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

Job ID: 880-1334-1
SDG: Eddy County New Mexico

Client Sample ID: H-1

Lab Sample ID: 880-1334-1

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1868	04/16/21 10:07	MR	XM
Total/NA	Analysis	8021B		1	1897	04/16/21 16:11	MR	XM
Total/NA	Prep	8015NM Prep			1841	04/15/21 16:33	DM	XM
Total/NA	Analysis	8015B NM		1	2089	04/22/21 02:26	AJ	XM
Soluble	Leach	DI Leach			1850	04/15/21 18:04	SC	XM
Soluble	Analysis	300.0		1	1920	04/17/21 04:30	WP	XM

Client Sample ID: H-2

Lab Sample ID: 880-1334-2

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1868	04/16/21 10:07	MR	XM
Total/NA	Analysis	8021B		1	1897	04/16/21 16:57	MR	XM
Total/NA	Prep	8015NM Prep			1841	04/15/21 16:33	DM	XM
Total/NA	Analysis	8015B NM		1	2089	04/22/21 03:27	AJ	XM
Soluble	Leach	DI Leach			1850	04/15/21 18:04	SC	XM
Soluble	Analysis	300.0		1	1920	04/17/21 04:38	WP	XM

Client Sample ID: H-3

Lab Sample ID: 880-1334-3

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1868	04/16/21 10:07	MR	XM
Total/NA	Analysis	8021B		1	1897	04/16/21 17:22	MR	XM
Total/NA	Prep	8015NM Prep			1841	04/15/21 16:33	DM	XM
Total/NA	Analysis	8015B NM		1	2089	04/22/21 03:48	AJ	XM
Soluble	Leach	DI Leach			1850	04/15/21 18:04	SC	XM
Soluble	Analysis	300.0		1	1920	04/17/21 04:43	WP	XM

Client Sample ID: H-4

Lab Sample ID: 880-1334-4

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1868	04/16/21 10:07	MR	XM
Total/NA	Analysis	8021B		1	1897	04/16/21 17:48	MR	XM
Total/NA	Prep	8015NM Prep			1841	04/15/21 16:33	DM	XM
Total/NA	Analysis	8015B NM		1	2089	04/22/21 04:09	AJ	XM
Soluble	Leach	DI Leach			1850	04/15/21 18:04	SC	XM
Soluble	Analysis	300.0		1	1920	04/17/21 04:48	WP	XM

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

Job ID: 880-1334-1
SDG: Eddy County New Mexico

Client Sample ID: SW-1

Lab Sample ID: 880-1334-5

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1868	04/16/21 10:07	MR	XM
Total/NA	Analysis	8021B		1	1897	04/16/21 18:13	MR	XM
Total/NA	Prep	8015NM Prep			1841	04/15/21 16:33	DM	XM
Total/NA	Analysis	8015B NM		1	2089	04/22/21 04:30	AJ	XM
Soluble	Leach	DI Leach			1850	04/15/21 18:04	SC	XM
Soluble	Analysis	300.0		1	1920	04/17/21 04:53	WP	XM

Client Sample ID: SW-2

Lab Sample ID: 880-1334-6

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1868	04/16/21 10:07	MR	XM
Total/NA	Analysis	8021B		1	1897	04/16/21 18:38	MR	XM
Total/NA	Prep	8015NM Prep			1841	04/15/21 16:33	DM	XM
Total/NA	Analysis	8015B NM		1	2089	04/22/21 04:50	AJ	XM
Soluble	Leach	DI Leach			1850	04/15/21 18:04	SC	XM
Soluble	Analysis	300.0		1	1920	04/17/21 05:08	WP	XM

Client Sample ID: SW-3

Lab Sample ID: 880-1334-7

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1868	04/16/21 10:07	MR	XM
Total/NA	Analysis	8021B		1	1897	04/16/21 19:04	MR	XM
Total/NA	Prep	8015NM Prep			1841	04/15/21 16:33	DM	XM
Total/NA	Analysis	8015B NM		1	2089	04/22/21 05:11	AJ	XM
Soluble	Leach	DI Leach			1850	04/15/21 18:04	SC	XM
Soluble	Analysis	300.0		1	1920	04/17/21 05:13	WP	XM

Client Sample ID: SW-4

Lab Sample ID: 880-1334-8

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1868	04/16/21 10:07	MR	XM
Total/NA	Analysis	8021B		1	1897	04/16/21 19:29	MR	XM
Total/NA	Prep	8015NM Prep			1841	04/15/21 16:33	DM	XM
Total/NA	Analysis	8015B NM		1	2089	04/22/21 05:32	AJ	XM
Soluble	Leach	DI Leach			1850	04/15/21 18:04	SC	XM
Soluble	Analysis	300.0		1	1920	04/17/21 05:18	WP	XM

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Client Sample ID: SW-5

Lab Sample ID: 880-1334-9

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1868	04/16/21 10:07	MR	XM
Total/NA	Analysis	8021B		1	1897	04/16/21 19:55	MR	XM
Total/NA	Prep	8015NM Prep			1841	04/15/21 16:33	DM	XM
Total/NA	Analysis	8015B NM		1	2091	04/22/21 01:24	AJ	XM
Soluble	Leach	DI Leach			1850	04/15/21 18:04	SC	XM
Soluble	Analysis	300.0		1	1920	04/17/21 05:23	WP	XM

Client Sample ID: SW-6

Lab Sample ID: 880-1334-10

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1868	04/16/21 10:07	MR	XM
Total/NA	Analysis	8021B		1	1897	04/16/21 20:21	MR	XM
Total/NA	Prep	8015NM Prep			1841	04/15/21 16:33	DM	XM
Total/NA	Analysis	8015B NM		1	2091	04/22/21 01:45	AJ	XM
Soluble	Leach	DI Leach			1850	04/15/21 18:04	SC	XM
Soluble	Analysis	300.0		1	1920	04/17/21 05:28	WP	XM

Client Sample ID: SW-7

Lab Sample ID: 880-1334-11

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1868	04/16/21 10:07	MR	XM
Total/NA	Analysis	8021B		1	1897	04/16/21 22:28	MR	XM
Total/NA	Prep	8015NM Prep			1841	04/15/21 16:33	DM	XM
Total/NA	Analysis	8015B NM		1	2091	04/22/21 02:05	AJ	XM
Soluble	Leach	DI Leach			1850	04/15/21 18:04	SC	XM
Soluble	Analysis	300.0		1	1920	04/17/21 05:34	WP	XM

Client Sample ID: SW-8

Lab Sample ID: 880-1334-12

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1868	04/16/21 10:07	MR	XM
Total/NA	Analysis	8021B		1	1897	04/16/21 22:54	MR	XM
Total/NA	Prep	8015NM Prep			1841	04/15/21 16:33	DM	XM
Total/NA	Analysis	8015B NM		1	2091	04/22/21 02:26	AJ	XM
Soluble	Leach	DI Leach			1850	04/15/21 18:04	SC	XM
Soluble	Analysis	300.0		1	1920	04/17/21 05:49	WP	XM

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Client Sample ID: SW-9

Lab Sample ID: 880-1334-13

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1868	04/16/21 10:07	MR	XM
Total/NA	Analysis	8021B		1	1897	04/16/21 23:20	MR	XM
Total/NA	Prep	8015NM Prep			1841	04/15/21 16:33	DM	XM
Total/NA	Analysis	8015B NM		1	2091	04/22/21 02:46	AJ	XM
Soluble	Leach	DI Leach			1850	04/15/21 18:04	SC	XM
Soluble	Analysis	300.0		1	1920	04/17/21 05:54	WP	XM

Client Sample ID: SW-10

Lab Sample ID: 880-1334-14

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1868	04/16/21 10:07	MR	XM
Total/NA	Analysis	8021B		1	1897	04/16/21 23:45	MR	XM
Total/NA	Prep	8015NM Prep			1841	04/15/21 16:33	DM	XM
Total/NA	Analysis	8015B NM		1	2091	04/22/21 03:07	AJ	XM
Soluble	Leach	DI Leach			1850	04/15/21 18:04	SC	XM
Soluble	Analysis	300.0		1	1920	04/17/21 06:09	WP	XM

Client Sample ID: SW-11

Lab Sample ID: 880-1334-15

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1868	04/16/21 10:07	MR	XM
Total/NA	Analysis	8021B		1	1897	04/17/21 00:11	MR	XM
Total/NA	Prep	8015NM Prep			1841	04/15/21 16:33	DM	XM
Total/NA	Analysis	8015B NM		1	2091	04/22/21 03:27	AJ	XM
Soluble	Leach	DI Leach			1850	04/15/21 18:04	SC	XM
Soluble	Analysis	300.0		1	1920	04/17/21 06:14	WP	XM

Client Sample ID: SW-12

Lab Sample ID: 880-1334-16

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1975	04/19/21 11:01	MR	XM
Total/NA	Analysis	8021B		1	1974	04/19/21 20:30	MR	XM
Total/NA	Prep	8015NM Prep			1841	04/15/21 16:33	DM	XM
Total/NA	Analysis	8015B NM		1	2091	04/22/21 03:48	AJ	XM
Soluble	Leach	DI Leach			1850	04/15/21 18:04	SC	XM
Soluble	Analysis	300.0		1	1920	04/17/21 06:19	WP	XM

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Client Sample ID: SW-13

Lab Sample ID: 880-1334-17

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1868	04/16/21 10:07	MR	XM
Total/NA	Analysis	8021B		1	1897	04/17/21 01:02	MR	XM
Total/NA	Prep	8015NM Prep			1841	04/15/21 16:33	DM	XM
Total/NA	Analysis	8015B NM		1	2091	04/22/21 04:09	AJ	XM
Soluble	Leach	DI Leach			1850	04/15/21 18:04	SC	XM
Soluble	Analysis	300.0		1	1920	04/17/21 06:24	WP	XM

Client Sample ID: SW-14

Lab Sample ID: 880-1334-18

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1975	04/19/21 11:01	MR	XM
Total/NA	Analysis	8021B		1	1974	04/19/21 20:51	MR	XM
Total/NA	Prep	8015NM Prep			1841	04/15/21 16:33	DM	XM
Total/NA	Analysis	8015B NM		1	2091	04/22/21 04:30	AJ	XM
Soluble	Leach	DI Leach			1850	04/15/21 18:04	SC	XM
Soluble	Analysis	300.0		1	1920	04/17/21 06:29	WP	XM

Client Sample ID: SW-15

Lab Sample ID: 880-1334-19

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1868	04/16/21 10:07	MR	XM
Total/NA	Analysis	8021B		1	1897	04/17/21 01:53	MR	XM
Total/NA	Prep	8015NM Prep			1841	04/15/21 16:33	DM	XM
Total/NA	Analysis	8015B NM		1	2091	04/22/21 04:50	AJ	XM
Soluble	Leach	DI Leach			1850	04/15/21 18:04	SC	XM
Soluble	Analysis	300.0		1	1920	04/17/21 06:35	WP	XM

Client Sample ID: SW-16

Lab Sample ID: 880-1334-20

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1868	04/16/21 10:07	MR	XM
Total/NA	Analysis	8021B		1	1897	04/17/21 02:19	MR	XM
Total/NA	Prep	8015NM Prep			1841	04/15/21 16:33	DM	XM
Total/NA	Analysis	8015B NM		1	2091	04/22/21 05:11	AJ	XM
Soluble	Leach	DI Leach			1850	04/15/21 18:04	SC	XM
Soluble	Analysis	300.0		1	1920	04/17/21 06:40	WP	XM

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.
 Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

Job ID: 880-1334-1
 SDG: Eddy County New Mexico

Client Sample ID: BH-1

Lab Sample ID: 880-1334-21

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1872	04/16/21 10:29	MR	XM
Total/NA	Analysis	8021B		1	1897	04/17/21 06:11	MR	XM
Total/NA	Prep	8015NM Prep			1816	04/15/21 16:30	DM	XM
Total/NA	Analysis	8015B NM		1	1818	04/15/21 20:01	AJ	XM
Soluble	Leach	DI Leach			1848	04/15/21 17:50	SC	XM
Soluble	Analysis	300.0		1	1931	04/17/21 20:39	WP	XM

Client Sample ID: BH-2

Lab Sample ID: 880-1334-22

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1872	04/16/21 10:29	MR	XM
Total/NA	Analysis	8021B		1	1897	04/17/21 06:36	MR	XM
Total/NA	Prep	8015NM Prep			1816	04/15/21 16:30	DM	XM
Total/NA	Analysis	8015B NM		1	1818	04/15/21 20:22	AJ	XM
Soluble	Leach	DI Leach			1848	04/15/21 17:50	SC	XM
Soluble	Analysis	300.0		1	1931	04/17/21 20:44	WP	XM

Client Sample ID: BH-3

Lab Sample ID: 880-1334-23

Date Collected: 04/08/21 00:00

Matrix: Solid

Date Received: 04/15/21 16:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1872	04/16/21 10:29	MR	XM
Total/NA	Analysis	8021B		1	1897	04/17/21 07:02	MR	XM
Total/NA	Prep	8015NM Prep			1816	04/15/21 16:30	DM	XM
Total/NA	Analysis	8015B NM		1	1818	04/15/21 20:44	AJ	XM
Soluble	Leach	DI Leach			1848	04/15/21 17:50	SC	XM
Soluble	Analysis	300.0		1	1931	04/17/21 20:49	WP	XM

Laboratory References:

XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Midland

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

Job ID: 880-1334-1
SDG: Eddy County New Mexico

Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Method Summary

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XM
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XM
300.0	Anions, Ion Chromatography	MCAWW	XM
5035	Closed System Purge and Trap	SW846	XM
8015NM Prep	Microextraction	SW846	XM
DI Leach	Deionized Water Leaching Procedure	ASTM	XM

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Midland

Sample Summary

Client: Tetra Tech, Inc.

Job ID: 880-1334-1

Project/Site: Creek AL Fed #1 212C-MD-02419 Task 1700

SDG: Eddy County New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
880-1334-1	H-1	Solid	04/08/21 00:00	04/15/21 16:03	
880-1334-2	H-2	Solid	04/08/21 00:00	04/15/21 16:03	
880-1334-3	H-3	Solid	04/08/21 00:00	04/15/21 16:03	
880-1334-4	H-4	Solid	04/08/21 00:00	04/15/21 16:03	
880-1334-5	SW-1	Solid	04/08/21 00:00	04/15/21 16:03	
880-1334-6	SW-2	Solid	04/08/21 00:00	04/15/21 16:03	
880-1334-7	SW-3	Solid	04/08/21 00:00	04/15/21 16:03	
880-1334-8	SW-4	Solid	04/08/21 00:00	04/15/21 16:03	
880-1334-9	SW-5	Solid	04/08/21 00:00	04/15/21 16:03	
880-1334-10	SW-6	Solid	04/08/21 00:00	04/15/21 16:03	
880-1334-11	SW-7	Solid	04/08/21 00:00	04/15/21 16:03	
880-1334-12	SW-8	Solid	04/08/21 00:00	04/15/21 16:03	
880-1334-13	SW-9	Solid	04/08/21 00:00	04/15/21 16:03	
880-1334-14	SW-10	Solid	04/08/21 00:00	04/15/21 16:03	
880-1334-15	SW-11	Solid	04/08/21 00:00	04/15/21 16:03	
880-1334-16	SW-12	Solid	04/08/21 00:00	04/15/21 16:03	
880-1334-17	SW-13	Solid	04/08/21 00:00	04/15/21 16:03	
880-1334-18	SW-14	Solid	04/08/21 00:00	04/15/21 16:03	
880-1334-19	SW-15	Solid	04/08/21 00:00	04/15/21 16:03	
880-1334-20	SW-16	Solid	04/08/21 00:00	04/15/21 16:03	
880-1334-21	BH-1	Solid	04/08/21 00:00	04/15/21 16:03	
880-1334-22	BH-2	Solid	04/08/21 00:00	04/15/21 16:03	
880-1334-23	BH-3	Solid	04/08/21 00:00	04/15/21 16:03	

Eurofins Xenco, Midland

**Tetra Tech, Inc.**901 West Wall St
Midland, TX
Tel (432) 1
Fax (432) 6

880-1334 Chain of Custody

1334

Client Name: EOG

Site Manager: Paula TocoraAlonso

Project Name: Creek AL Fed #1

Contact Info: Paula TocoraAlonso@tetratech.com

Project Location: Eddy County New Mexico
(county, state)

Project #: 212C-MD-02419 Task 1700

Invoice to: EOG James Kennedy

Receiving Laboratory: Xenco

Sampler Signature: Matthew Castrejon

Comments:

LAB #
(LAB USE ONLY)

SAMPLE IDENTIFICATION

SAMPLING

MATRIX

PRESERVATIVE METHOD

WATER
SOIL
HCL
HNO₃
ICE
NONE# CONTAINERS
FILTERED (Y/N)

BTX 8021B BTX 8260B

TPH TX1005 (Ext to C35)

TPH 8015M (GRO DRO - ORO - MRO)

PAH 8270C

Total Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol 8260B / 624

GC/MS Semi Vol 8270C/625

PCB's 8082 / 608

NORM

PLM (Asbestos)

Chloride 300 0

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

TPH 8015R

HOLD

ANALYSIS REQUEST
(Circle or Specify Method No.)

Relinquished by:

Date Time

Received by:

Date Time

Date Time

LAB USE ONLY

REMARKS:

☐ Standard☒ RUSH Same Day 24 hr 48 hr☐ Rush Charges Authorized☐ Special Report Limits or TRRP Report

Relinquished by:

Date Time

Received by:

Date Time

Date Time

LAB USE ONLY

REMARKS:

☐ Standard

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #



Tetra Tech, Inc.

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

1334

Client Name: EOG

Site Manager: Paula TocoraAlonso

Project Name: Creek AL Fed #1

Contact Info: Paula.TocoraAlonso@tetratech.com

Project Location: Eddy County New Mexico
(county, state)

Project #: 212C-MD-02419 Task 1700

Invoice to: EOG James Kennedy

Receiving Laboratory: Xenco

Sampler Signature: Matthew Castrejon

Comments:

LAB #
(LAB USE ONLY)

SAMPLE IDENTIFICATION

SAMPLING

MATRIX

PRESERVATIVE METHOD

WATER
SOIL
HCL
HNO₃
ICE
NONE

CONTAINERS

FILTERED (Y/N)

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 300 0

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

TPH 8015R

HOLD

ANALYSIS REQUEST

(Circle or Specify Method No.)

Relinquished by

Date Time

Received by

Date Time

CONTAINERS

FILTERED (Y/N)

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 300 0

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

TPH 8015R

HOLD

Relinquished by

Date Time

Received by

Date Time

CONTAINERS

FILTERED (Y/N)

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 300 0

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

TPH 8015R

HOLD

Relinquished by

Date Time

Received by

Date Time

CONTAINERS

FILTERED (Y/N)

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 300 0

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

TPH 8015R

HOLD

Relinquished by

Date Time

Received by

Date Time

CONTAINERS

FILTERED (Y/N)

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 300 0

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

TPH 8015R

HOLD

Relinquished by

Date Time

Received by

Date Time

CONTAINERS

FILTERED (Y/N)

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 300 0

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

TPH 8015R

HOLD

Relinquished by

Date Time

Received by

Date Time

CONTAINERS

FILTERED (Y/N)

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 300 0

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

TPH 8015R

HOLD

Relinquished by

Date Time

Received by

Date Time

CONTAINERS

FILTERED (Y/N)

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 300 0

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

TPH 8015R

HOLD

Relinquished by

Date Time

Received by

Date Time

CONTAINERS

FILTERED (Y/N)

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 300 0

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

TPH 8015R

HOLD

Relinquished by

Date Time

Received by

Date Time

CONTAINERS

FILTERED (Y/N)

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 300 0

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

TPH 8015R

HOLD

ORIGINAL COPY

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

5.5/10.0

+0.5

(Circle) HAND DELIVERED FEDEX UPS Tracking #



Tetra Tech, Inc.

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

1334

Client Name: EOG

Site Manager:

Paula TocoraAlonso

Project Name: Creek AL Fed #1

Contact Info:

Paula.TocoraAlonso@tetratech.com

Project Location: Eddy County New Mexico
(county, state)

Project #:

212C-MD-02419 Task 1700

Invoice to: EOG James Kennedy

Receiving Laboratory: Xenco

Sampler Signature:

Matthew Castrejon

Comments:

LAB #
(LAB USE ONLY)

SAMPLE IDENTIFICATION

SAMPLING

MATRIX

PRESERVATIVE METHOD

YEAR 2021

DATE

TIME

WATER

SOIL

HCL

HNO₃

ICE

NONE

CONTAINERS

FILTERED (Y/N)

BTX 8021B BTX 8260B

TPH TX1005 (Ext to C35)

TPH 8015M (GRO DRO ORO - MRO)

PAH 8270C

Total Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol 8260B / 624

GC/MS Semi Vol 8270C/625

PCB's 8082 / 608

NORM

PLM (Asbestos)

Chloride 300 0

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

TPH 8015R

HOLD

ANALYSIS REQUEST

(Circle or Specify Method No.)

Relinquished by:

Date Time

Received by:

Date Time

LAB USE ONLY

REMARKS:

Standard

RUSH Same Day 24 hr 48 hr

Rush Charges Authorized

Special Report Limits or TRAP Report

72 hr.

Relinquished by:

Date Time

Received by:

Date Time

LAB USE ONLY

REMARKS:

Standard

RUSH Same Day 24 hr 48 hr

Rush Charges Authorized

Special Report Limits or TRAP Report

72 hr.

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 880-1334-1

SDG Number: Eddy County New Mexico

Login Number: 1334

List Number: 1

List Source: Eurofins Midland

Creator: Phillips, Kerianna

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	False	No date or time on COC or sample containers
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-1719-1

Laboratory Sample Delivery Group: Eddy County, New Mexico
Client Project/Site: Creek AL Fed #1

For:

Tetra Tech, Inc.
901 W Wall
Ste 100
Midland, Texas 79701

Attn: Clair Gonzales

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

Authorized for release by:
4/30/2021 1:42:25 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Tetra Tech, Inc.
Project/Site: Creek AL Fed #1

Laboratory Job ID: 880-1719-1
SDG: Eddy County, New Mexico

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	13
QC Sample Results	14
QC Association Summary	18
Lab Chronicle	21
Certification Summary	24
Method Summary	25
Sample Summary	26
Chain of Custody	27
Receipt Checklists	29

1

2

3

4

5

6

7

8

9

10

11

12

13

14

Definitions/Glossary

Client: Tetra Tech, Inc.
Project/Site: Creek AL Fed #1

Job ID: 880-1719-1
SDG: Eddy County, New Mexico

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Tetra Tech, Inc.
Project/Site: Creek AL Fed #1

Job ID: 880-1719-1
SDG: Eddy County, New Mexico

Job ID: 880-1719-1**Laboratory: Eurofins Xenco, Midland****Narrative****Job Narrative
880-1719-1****Comments**

No additional comments.

Receipt

The samples were received on 4/29/2021 11:26 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.5° C.

GC VOA

Method 8021B: Internal standard responses were outside of acceptance limits for the following samples: SW 11 (880-1719-6) and SW 13 (880-1719-8). The sample(s) shows evidence of matrix interference.

Method 8021B: Surrogate recovery for the following sample was outside control limits: BH-3 (2.5') (880-1719-11). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

Method 8015B NM: The continuing calibration verification (CCV) associated with batch 880-2484 recovered above the upper control limit for < Diesel Range Organics (Over C10-C28)>. The samples that took a detection in this range were reanalyzed to confirm the detection, therefore the data is reportable.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Creek AL Fed #1

Job ID: 880-1719-1
SDG: Eddy County, New Mexico

Client Sample ID: SW 1

Lab Sample ID: 880-1719-1

Date Collected: 04/28/21 10:00

Matrix: Solid

Date Received: 04/29/21 11:26

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F1	0.00199		mg/Kg		04/29/21 12:40	04/30/21 01:21	1
Toluene	<0.00199	U F1	0.00199		mg/Kg		04/29/21 12:40	04/30/21 01:21	1
Ethylbenzene	<0.00199	U F1	0.00199		mg/Kg		04/29/21 12:40	04/30/21 01:21	1
m-Xylene & p-Xylene	<0.00398	U F1	0.00398		mg/Kg		04/29/21 12:40	04/30/21 01:21	1
o-Xylene	<0.00199	U F1	0.00199		mg/Kg		04/29/21 12:40	04/30/21 01:21	1
Xylenes, Total	<0.00398	U F1	0.00398		mg/Kg		04/29/21 12:40	04/30/21 01:21	1
Total BTEX	<0.00398	U F1	0.00398		mg/Kg		04/29/21 12:40	04/30/21 01:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	04/29/21 12:40	04/30/21 01:21	1
1,4-Difluorobenzene (Surr)	72		70 - 130	04/29/21 12:40	04/30/21 01:21	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/29/21 11:28	04/30/21 02:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/29/21 11:28	04/30/21 02:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/29/21 11:28	04/30/21 02:52	1
Total TPH	<50.0	U	50.0		mg/Kg		04/29/21 11:28	04/30/21 02:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	129		70 - 130	04/29/21 11:28	04/30/21 02:52	1
o-Terphenyl	128		70 - 130	04/29/21 11:28	04/30/21 02:52	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	124		4.98		mg/Kg			04/29/21 19:06	1

Client Sample ID: SW 2

Lab Sample ID: 880-1719-2

Date Collected: 04/28/21 10:10

Matrix: Solid

Date Received: 04/29/21 11:26

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/29/21 12:40	04/30/21 01:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/29/21 12:40	04/30/21 01:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/29/21 12:40	04/30/21 01:46	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/29/21 12:40	04/30/21 01:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/29/21 12:40	04/30/21 01:46	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/29/21 12:40	04/30/21 01:46	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		04/29/21 12:40	04/30/21 01:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130	04/29/21 12:40	04/30/21 01:46	1
1,4-Difluorobenzene (Surr)	113		70 - 130	04/29/21 12:40	04/30/21 01:46	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/29/21 11:28	04/30/21 03:14	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Creek AL Fed #1

Job ID: 880-1719-1
SDG: Eddy County, New Mexico

Client Sample ID: SW 2

Lab Sample ID: 880-1719-2

Date Collected: 04/28/21 10:10

Matrix: Solid

Date Received: 04/29/21 11:26

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/29/21 11:28	04/30/21 03:14	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/29/21 11:28	04/30/21 03:14	1
Total TPH	<50.0	U	50.0		mg/Kg		04/29/21 11:28	04/30/21 03:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	129		70 - 130				04/29/21 11:28	04/30/21 03:14	1
o-Terphenyl	131	S1+	70 - 130				04/29/21 11:28	04/30/21 03:14	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.04	U	5.04		mg/Kg			04/29/21 19:22	1

Client Sample ID: SW 3

Lab Sample ID: 880-1719-3

Date Collected: 04/28/21 10:20

Matrix: Solid

Date Received: 04/29/21 11:26

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/29/21 12:40	04/30/21 02:12	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/29/21 12:40	04/30/21 02:12	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/29/21 12:40	04/30/21 02:12	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		04/29/21 12:40	04/30/21 02:12	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/29/21 12:40	04/30/21 02:12	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		04/29/21 12:40	04/30/21 02:12	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		04/29/21 12:40	04/30/21 02:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130				04/29/21 12:40	04/30/21 02:12	1
1,4-Difluorobenzene (Surr)	112		70 - 130				04/29/21 12:40	04/30/21 02:12	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/29/21 11:28	04/30/21 03:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/29/21 11:28	04/30/21 03:35	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/29/21 11:28	04/30/21 03:35	1
Total TPH	<50.0	U	50.0		mg/Kg		04/29/21 11:28	04/30/21 03:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130				04/29/21 11:28	04/30/21 03:35	1
o-Terphenyl	126		70 - 130				04/29/21 11:28	04/30/21 03:35	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.05	U	5.05		mg/Kg			04/29/21 19:27	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Creek AL Fed #1

Job ID: 880-1719-1
SDG: Eddy County, New Mexico

Client Sample ID: SW 9

Lab Sample ID: 880-1719-4

Date Collected: 04/28/21 10:30

Matrix: Solid

Date Received: 04/29/21 11:26

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/29/21 12:40	04/30/21 02:37	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/29/21 12:40	04/30/21 02:37	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/29/21 12:40	04/30/21 02:37	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/29/21 12:40	04/30/21 02:37	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/29/21 12:40	04/30/21 02:37	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/29/21 12:40	04/30/21 02:37	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		04/29/21 12:40	04/30/21 02:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	133	S1+	70 - 130	04/29/21 12:40	04/30/21 02:37	1
1,4-Difluorobenzene (Surr)	117		70 - 130	04/29/21 12:40	04/30/21 02:37	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/29/21 11:28	04/30/21 03:56	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/29/21 11:28	04/30/21 03:56	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/29/21 11:28	04/30/21 03:56	1
Total TPH	<50.0	U	50.0		mg/Kg		04/29/21 11:28	04/30/21 03:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130	04/29/21 11:28	04/30/21 03:56	1
o-Terphenyl	135	S1+	70 - 130	04/29/21 11:28	04/30/21 03:56	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	107		24.9		mg/Kg			04/29/21 19:32	5

Client Sample ID: SW 10

Lab Sample ID: 880-1719-5

Date Collected: 04/28/21 10:40

Matrix: Solid

Date Received: 04/29/21 11:26

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		04/29/21 12:40	04/30/21 03:03	1
Toluene	<0.00198	U	0.00198		mg/Kg		04/29/21 12:40	04/30/21 03:03	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		04/29/21 12:40	04/30/21 03:03	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		04/29/21 12:40	04/30/21 03:03	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		04/29/21 12:40	04/30/21 03:03	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		04/29/21 12:40	04/30/21 03:03	1
Total BTEX	<0.00396	U	0.00396		mg/Kg		04/29/21 12:40	04/30/21 03:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130	04/29/21 12:40	04/30/21 03:03	1
1,4-Difluorobenzene (Surr)	112		70 - 130	04/29/21 12:40	04/30/21 03:03	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		04/29/21 11:28	04/30/21 04:39	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Creek AL Fed #1

Job ID: 880-1719-1
SDG: Eddy County, New Mexico

Client Sample ID: SW 10

Lab Sample ID: 880-1719-5

Date Collected: 04/28/21 10:40

Matrix: Solid

Date Received: 04/29/21 11:26

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/29/21 11:28	04/30/21 04:39	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/29/21 11:28	04/30/21 04:39	1
Total TPH	<49.9	U	49.9		mg/Kg		04/29/21 11:28	04/30/21 04:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130				04/29/21 11:28	04/30/21 04:39	1
o-Terphenyl	137	S1+	70 - 130				04/29/21 11:28	04/30/21 04:39	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.95	U	4.95		mg/Kg			04/29/21 19:37	1

Client Sample ID: SW 11

Lab Sample ID: 880-1719-6

Date Collected: 04/28/21 10:50

Matrix: Solid

Date Received: 04/29/21 11:26

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/29/21 12:40	04/30/21 09:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/29/21 12:40	04/30/21 09:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/29/21 12:40	04/30/21 09:52	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		04/29/21 12:40	04/30/21 09:52	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/29/21 12:40	04/30/21 09:52	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		04/29/21 12:40	04/30/21 09:52	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		04/29/21 12:40	04/30/21 09:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	56	S1-	70 - 130				04/29/21 12:40	04/30/21 09:52	1
1,4-Difluorobenzene (Surr)	82		70 - 130				04/29/21 12:40	04/30/21 09:52	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		04/29/21 11:28	04/30/21 05:01	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/29/21 11:28	04/30/21 05:01	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/29/21 11:28	04/30/21 05:01	1
Total TPH	<49.9	U	49.9		mg/Kg		04/29/21 11:28	04/30/21 05:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	131	S1+	70 - 130				04/29/21 11:28	04/30/21 05:01	1
o-Terphenyl	136	S1+	70 - 130				04/29/21 11:28	04/30/21 05:01	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.95	U	4.95		mg/Kg			04/29/21 19:53	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Creek AL Fed #1

Job ID: 880-1719-1
SDG: Eddy County, New Mexico

Client Sample ID: SW 12

Lab Sample ID: 880-1719-7

Date Collected: 04/28/21 11:00

Matrix: Solid

Date Received: 04/29/21 11:26

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		04/29/21 12:40	04/30/21 03:54	1
Toluene	<0.00202	U	0.00202		mg/Kg		04/29/21 12:40	04/30/21 03:54	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		04/29/21 12:40	04/30/21 03:54	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		04/29/21 12:40	04/30/21 03:54	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		04/29/21 12:40	04/30/21 03:54	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		04/29/21 12:40	04/30/21 03:54	1
Total BTEX	<0.00404	U	0.00404		mg/Kg		04/29/21 12:40	04/30/21 03:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	04/29/21 12:40	04/30/21 03:54	1
1,4-Difluorobenzene (Surr)	96		70 - 130	04/29/21 12:40	04/30/21 03:54	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/29/21 11:28	04/30/21 05:44	1
Diesel Range Organics (Over C10-C28)	79.7		50.0		mg/Kg		04/29/21 11:28	04/30/21 05:44	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/29/21 11:28	04/30/21 05:44	1
Total TPH	79.7		50.0		mg/Kg		04/29/21 11:28	04/30/21 05:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	122		70 - 130	04/29/21 11:28	04/30/21 05:44	1
o-Terphenyl	137	S1+	70 - 130	04/29/21 11:28	04/30/21 05:44	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.96	U	4.96		mg/Kg			04/29/21 19:58	1

Client Sample ID: SW 13

Lab Sample ID: 880-1719-8

Date Collected: 04/28/21 11:30

Matrix: Solid

Date Received: 04/29/21 11:26

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		04/29/21 12:40	04/30/21 04:20	1
Toluene	<0.00201	U	0.00201		mg/Kg		04/29/21 12:40	04/30/21 04:20	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		04/29/21 12:40	04/30/21 04:20	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		04/29/21 12:40	04/30/21 04:20	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		04/29/21 12:40	04/30/21 04:20	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		04/29/21 12:40	04/30/21 04:20	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		04/29/21 12:40	04/30/21 04:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	04/29/21 12:40	04/30/21 04:20	1
1,4-Difluorobenzene (Surr)	97		70 - 130	04/29/21 12:40	04/30/21 04:20	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		04/29/21 11:28	04/30/21 05:23	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Creek AL Fed #1

Job ID: 880-1719-1
SDG: Eddy County, New Mexico

Client Sample ID: SW 13

Lab Sample ID: 880-1719-8

Date Collected: 04/28/21 11:30

Matrix: Solid

Date Received: 04/29/21 11:26

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/29/21 11:28	04/30/21 05:23	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/29/21 11:28	04/30/21 05:23	1
Total TPH	<49.9	U	49.9		mg/Kg		04/29/21 11:28	04/30/21 05:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	136	S1+	70 - 130				04/29/21 11:28	04/30/21 05:23	1
o-Terphenyl	137	S1+	70 - 130				04/29/21 11:28	04/30/21 05:23	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.62		4.99		mg/Kg			04/29/21 20:03	1

Client Sample ID: SW 15

Lab Sample ID: 880-1719-9

Date Collected: 04/28/21 11:40

Matrix: Solid

Date Received: 04/29/21 11:26

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/29/21 12:40	04/30/21 04:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/29/21 12:40	04/30/21 04:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/29/21 12:40	04/30/21 04:45	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/29/21 12:40	04/30/21 04:45	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/29/21 12:40	04/30/21 04:45	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/29/21 12:40	04/30/21 04:45	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		04/29/21 12:40	04/30/21 04:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130				04/29/21 12:40	04/30/21 04:45	1
1,4-Difluorobenzene (Surr)	110		70 - 130				04/29/21 12:40	04/30/21 04:45	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/29/21 11:28	04/30/21 06:06	1
Diesel Range Organics (Over C10-C28)	78.1		50.0		mg/Kg		04/29/21 11:28	04/30/21 06:06	1
Oil Range Organics (Over C28-C36)	147		50.0		mg/Kg		04/29/21 11:28	04/30/21 06:06	1
Total TPH	225		50.0		mg/Kg		04/29/21 11:28	04/30/21 06:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	128		70 - 130				04/29/21 11:28	04/30/21 06:06	1
o-Terphenyl	124		70 - 130				04/29/21 11:28	04/30/21 06:06	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.69		4.97		mg/Kg			04/29/21 20:08	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Creek AL Fed #1

Job ID: 880-1719-1
SDG: Eddy County, New Mexico

Client Sample ID: SW 16

Lab Sample ID: 880-1719-10

Date Collected: 04/28/21 11:50

Matrix: Solid

Date Received: 04/29/21 11:26

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/29/21 12:40	04/30/21 05:11	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/29/21 12:40	04/30/21 05:11	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/29/21 12:40	04/30/21 05:11	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/29/21 12:40	04/30/21 05:11	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/29/21 12:40	04/30/21 05:11	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/29/21 12:40	04/30/21 05:11	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		04/29/21 12:40	04/30/21 05:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	04/29/21 12:40	04/30/21 05:11	1
1,4-Difluorobenzene (Surr)	106		70 - 130	04/29/21 12:40	04/30/21 05:11	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		04/29/21 11:28	04/30/21 08:50	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/29/21 11:28	04/30/21 08:50	1
Oil Range Organics (Over C28-C36)	94.9		49.9		mg/Kg		04/29/21 11:28	04/30/21 08:50	1
Total TPH	94.9		49.9		mg/Kg		04/29/21 11:28	04/30/21 08:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	124		70 - 130	04/29/21 11:28	04/30/21 08:50	1
o-Terphenyl	121		70 - 130	04/29/21 11:28	04/30/21 08:50	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.98	U	4.98		mg/Kg			04/29/21 20:13	1

Client Sample ID: BH-3 (2.5')

Lab Sample ID: 880-1719-11

Date Collected: 04/28/21 14:10

Matrix: Solid

Date Received: 04/29/21 11:26

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		04/29/21 12:40	04/30/21 06:54	1
Toluene	<0.00198	U	0.00198		mg/Kg		04/29/21 12:40	04/30/21 06:54	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		04/29/21 12:40	04/30/21 06:54	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		04/29/21 12:40	04/30/21 06:54	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		04/29/21 12:40	04/30/21 06:54	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		04/29/21 12:40	04/30/21 06:54	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		04/29/21 12:40	04/30/21 06:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130	04/29/21 12:40	04/30/21 06:54	1
1,4-Difluorobenzene (Surr)	97		70 - 130	04/29/21 12:40	04/30/21 06:54	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/29/21 11:28	04/30/21 09:12	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Creek AL Fed #1

Job ID: 880-1719-1
SDG: Eddy County, New Mexico

Client Sample ID: BH-3 (2.5')

Lab Sample ID: 880-1719-11

Date Collected: 04/28/21 14:10

Matrix: Solid

Date Received: 04/29/21 11:26

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	88.2		50.0		mg/Kg		04/29/21 11:28	04/30/21 09:12	1
Oil Range Organics (Over C28-C36)	162		50.0		mg/Kg		04/29/21 11:28	04/30/21 09:12	1
Total TPH	250		50.0		mg/Kg		04/29/21 11:28	04/30/21 09:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	128		70 - 130	04/29/21 11:28	04/30/21 09:12	1
o-Terphenyl	125		70 - 130	04/29/21 11:28	04/30/21 09:12	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13.0		5.05		mg/Kg			04/29/21 20:18	1

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: Creek AL Fed #1

Job ID: 880-1719-1
SDG: Eddy County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-1719-1	SW 1	110	72
880-1719-1 MS	SW 1	115	109
880-1719-1 MSD	SW 1	112	109
880-1719-2	SW 2	123	113
880-1719-3	SW 3	131 S1+	112
880-1719-4	SW 9	133 S1+	117
880-1719-5	SW 10	131 S1+	112
880-1719-6	SW 11	56 S1-	82
880-1719-7	SW 12	103	96
880-1719-8	SW 13	104	97
880-1719-9	SW 15	113	110
880-1719-10	SW 16	117	106
880-1719-11	BH-3 (2.5')	132 S1+	97
LCS 880-2496/1-A	Lab Control Sample	109	112
LCSD 880-2496/2-A	Lab Control Sample Dup	117	110
MB 880-2450/5-A	Method Blank	77	85
MB 880-2496/5-A	Method Blank	72	90
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-1719-1	SW 1	129	128
880-1719-2	SW 2	129	131 S1+
880-1719-3	SW 3	117	126
880-1719-4	SW 9	117	135 S1+
880-1719-5	SW 10	120	137 S1+
880-1719-6	SW 11	131 S1+	136 S1+
880-1719-7	SW 12	122	137 S1+
880-1719-8	SW 13	136 S1+	137 S1+
880-1719-9	SW 15	128	124
880-1719-10	SW 16	124	121
880-1719-11	BH-3 (2.5')	128	125
LCS 880-2490/2-A	Lab Control Sample	135 S1+	132 S1+
LCSD 880-2490/3-A	Lab Control Sample Dup	134 S1+	131 S1+
MB 880-2490/1-A	Method Blank	119	132 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Creek AL Fed #1

Job ID: 880-1719-1
SDG: Eddy County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-2450/5-A

Matrix: Solid

Analysis Batch: 2447

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2450

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/28/21 13:23	04/29/21 11:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/28/21 13:23	04/29/21 11:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/28/21 13:23	04/29/21 11:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/28/21 13:23	04/29/21 11:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/28/21 13:23	04/29/21 11:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/28/21 13:23	04/29/21 11:43	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		04/28/21 13:23	04/29/21 11:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77		70 - 130	04/28/21 13:23	04/29/21 11:43	1
1,4-Difluorobenzene (Surr)	85		70 - 130	04/28/21 13:23	04/29/21 11:43	1

Lab Sample ID: MB 880-2496/5-A

Matrix: Solid

Analysis Batch: 2447

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2496

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/29/21 12:40	04/30/21 00:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/29/21 12:40	04/30/21 00:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/29/21 12:40	04/30/21 00:56	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/29/21 12:40	04/30/21 00:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/29/21 12:40	04/30/21 00:56	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/29/21 12:40	04/30/21 00:56	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		04/29/21 12:40	04/30/21 00:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	72		70 - 130	04/29/21 12:40	04/30/21 00:56	1
1,4-Difluorobenzene (Surr)	90		70 - 130	04/29/21 12:40	04/30/21 00:56	1

Lab Sample ID: LCS 880-2496/1-A

Matrix: Solid

Analysis Batch: 2447

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2496

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1076		mg/Kg		108	70 - 130
Toluene	0.100	0.1154		mg/Kg		115	70 - 130
Ethylbenzene	0.100	0.1127		mg/Kg		113	70 - 130
m-Xylene & p-Xylene	0.200	0.2025		mg/Kg		101	70 - 130
o-Xylene	0.100	0.1140		mg/Kg		114	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Creek AL Fed #1

Job ID: 880-1719-1
SDG: Eddy County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-2496/2-A

Matrix: Solid

Analysis Batch: 2447

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 2496

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	Limit
							Limits	RPD		
Benzene	0.100	0.1150		mg/Kg		115	70 - 130	7		35
Toluene	0.100	0.1257		mg/Kg		126	70 - 130	9		35
Ethylbenzene	0.100	0.1230		mg/Kg		123	70 - 130	9		35
m-Xylene & p-Xylene	0.200	0.2213		mg/Kg		111	70 - 130	9		35
o-Xylene	0.100	0.1248		mg/Kg		125	70 - 130	9		35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	117		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: 880-1719-1 MS

Matrix: Solid

Analysis Batch: 2447

Client Sample ID: SW 1

Prep Type: Total/NA

Prep Batch: 2496

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	
									Limits	
Benzene	<0.00199	U F1	0.0990	0.08074		mg/Kg		82	70 - 130	
Toluene	<0.00199	U F1	0.0990	0.07694		mg/Kg		78	70 - 130	
Ethylbenzene	<0.00199	U F1	0.0990	0.07577		mg/Kg		77	70 - 130	
m-Xylene & p-Xylene	<0.00398	U F1	0.198	0.1338	F1	mg/Kg		68	70 - 130	
o-Xylene	<0.00199	U F1	0.0990	0.07498		mg/Kg		76	70 - 130	

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: 880-1719-1 MSD

Matrix: Solid

Analysis Batch: 2447

Client Sample ID: SW 1

Prep Type: Total/NA

Prep Batch: 2496

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	Limit
									Limits	RPD		
Benzene	<0.00199	U F1	0.0998	0.06513	F1	mg/Kg		65	70 - 130	21		35
Toluene	<0.00199	U F1	0.0998	0.06157	F1	mg/Kg		62	70 - 130	22		35
Ethylbenzene	<0.00199	U F1	0.0998	0.06563	F1	mg/Kg		66	70 - 130	14		35
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.1178	F1	mg/Kg		59	70 - 130	13		35
o-Xylene	<0.00199	U F1	0.0998	0.06640	F1	mg/Kg		67	70 - 130	12		35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Creek AL Fed #1

Job ID: 880-1719-1
SDG: Eddy County, New Mexico

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-2490/1-A

Matrix: Solid

Analysis Batch: 2484

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2490

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/29/21 11:28	04/29/21 22:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/29/21 11:28	04/29/21 22:54	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/29/21 11:28	04/29/21 22:54	1
Total TPH	<50.0	U	50.0		mg/Kg		04/29/21 11:28	04/29/21 22:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130	04/29/21 11:28	04/29/21 22:54	1
o-Terphenyl	132	S1+	70 - 130	04/29/21 11:28	04/29/21 22:54	1

Lab Sample ID: LCS 880-2490/2-A

Matrix: Solid

Analysis Batch: 2484

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2490

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1180		mg/Kg		118	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1155		mg/Kg		116	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	135	S1+	70 - 130
o-Terphenyl	132	S1+	70 - 130

Lab Sample ID: LCSD 880-2490/3-A

Matrix: Solid

Analysis Batch: 2484

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 2490

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1150		mg/Kg		115	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	1140		mg/Kg		114	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	134	S1+	70 - 130
o-Terphenyl	131	S1+	70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-2501/1-A

Matrix: Solid

Analysis Batch: 2511

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			04/29/21 18:50	1

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Creek AL Fed #1

Job ID: 880-1719-1
SDG: Eddy County, New Mexico

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-2501/2-A

Matrix: Solid

Analysis Batch: 2511

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	246.2		mg/Kg		98	90 - 110

Lab Sample ID: LCSD 880-2501/3-A

Matrix: Solid

Analysis Batch: 2511

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	247.7		mg/Kg		99	90 - 110	1	20

Lab Sample ID: 880-1719-1 MS

Matrix: Solid

Analysis Batch: 2511

Client Sample ID: SW 1

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	124		249	376.7		mg/Kg		101	90 - 110

Lab Sample ID: 880-1719-1 MSD

Matrix: Solid

Analysis Batch: 2511

Client Sample ID: SW 1

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	124		249	375.9		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 880-1719-11 MS

Matrix: Solid

Analysis Batch: 2511

Client Sample ID: BH-3 (2.5')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	13.0		253	260.0		mg/Kg		98	90 - 110

Lab Sample ID: 880-1719-11 MSD

Matrix: Solid

Analysis Batch: 2511

Client Sample ID: BH-3 (2.5')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	13.0		253	259.4		mg/Kg		98	90 - 110	0	20

Eurofins Xenco, Midland

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Creek AL Fed #1

Job ID: 880-1719-1
SDG: Eddy County, New Mexico

GC VOA

Analysis Batch: 2447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1719-1	SW 1	Total/NA	Solid	8021B	2496
880-1719-2	SW 2	Total/NA	Solid	8021B	2496
880-1719-3	SW 3	Total/NA	Solid	8021B	2496
880-1719-4	SW 9	Total/NA	Solid	8021B	2496
880-1719-5	SW 10	Total/NA	Solid	8021B	2496
880-1719-6	SW 11	Total/NA	Solid	8021B	2496
880-1719-7	SW 12	Total/NA	Solid	8021B	2496
880-1719-8	SW 13	Total/NA	Solid	8021B	2496
880-1719-9	SW 15	Total/NA	Solid	8021B	2496
880-1719-10	SW 16	Total/NA	Solid	8021B	2496
880-1719-11	BH-3 (2.5')	Total/NA	Solid	8021B	2496
MB 880-2450/5-A	Method Blank	Total/NA	Solid	8021B	2450
MB 880-2496/5-A	Method Blank	Total/NA	Solid	8021B	2496
LCS 880-2496/1-A	Lab Control Sample	Total/NA	Solid	8021B	2496
LCSD 880-2496/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	2496
880-1719-1 MS	SW 1	Total/NA	Solid	8021B	2496
880-1719-1 MSD	SW 1	Total/NA	Solid	8021B	2496

Prep Batch: 2450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-2450/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 2496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1719-1	SW 1	Total/NA	Solid	5035	
880-1719-2	SW 2	Total/NA	Solid	5035	
880-1719-3	SW 3	Total/NA	Solid	5035	
880-1719-4	SW 9	Total/NA	Solid	5035	
880-1719-5	SW 10	Total/NA	Solid	5035	
880-1719-6	SW 11	Total/NA	Solid	5035	
880-1719-7	SW 12	Total/NA	Solid	5035	
880-1719-8	SW 13	Total/NA	Solid	5035	
880-1719-9	SW 15	Total/NA	Solid	5035	
880-1719-10	SW 16	Total/NA	Solid	5035	
880-1719-11	BH-3 (2.5')	Total/NA	Solid	5035	
MB 880-2496/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-2496/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-2496/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-1719-1 MS	SW 1	Total/NA	Solid	5035	
880-1719-1 MSD	SW 1	Total/NA	Solid	5035	

GC Semi VOA

Analysis Batch: 2484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1719-1	SW 1	Total/NA	Solid	8015B NM	2490
880-1719-2	SW 2	Total/NA	Solid	8015B NM	2490
880-1719-3	SW 3	Total/NA	Solid	8015B NM	2490
880-1719-4	SW 9	Total/NA	Solid	8015B NM	2490
880-1719-5	SW 10	Total/NA	Solid	8015B NM	2490
880-1719-6	SW 11	Total/NA	Solid	8015B NM	2490

Eurofins Xenco, Midland

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Creek AL Fed #1

Job ID: 880-1719-1
SDG: Eddy County, New Mexico

GC Semi VOA (Continued)

Analysis Batch: 2484 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1719-7	SW 12	Total/NA	Solid	8015B NM	2490
880-1719-8	SW 13	Total/NA	Solid	8015B NM	2490
880-1719-9	SW 15	Total/NA	Solid	8015B NM	2490
880-1719-10	SW 16	Total/NA	Solid	8015B NM	2490
880-1719-11	BH-3 (2.5')	Total/NA	Solid	8015B NM	2490
MB 880-2490/1-A	Method Blank	Total/NA	Solid	8015B NM	2490
LCS 880-2490/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	2490
LCSD 880-2490/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	2490

Prep Batch: 2490

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1719-1	SW 1	Total/NA	Solid	8015NM Prep	
880-1719-2	SW 2	Total/NA	Solid	8015NM Prep	
880-1719-3	SW 3	Total/NA	Solid	8015NM Prep	
880-1719-4	SW 9	Total/NA	Solid	8015NM Prep	
880-1719-5	SW 10	Total/NA	Solid	8015NM Prep	
880-1719-6	SW 11	Total/NA	Solid	8015NM Prep	
880-1719-7	SW 12	Total/NA	Solid	8015NM Prep	
880-1719-8	SW 13	Total/NA	Solid	8015NM Prep	
880-1719-9	SW 15	Total/NA	Solid	8015NM Prep	
880-1719-10	SW 16	Total/NA	Solid	8015NM Prep	
880-1719-11	BH-3 (2.5')	Total/NA	Solid	8015NM Prep	
MB 880-2490/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-2490/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-2490/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 2501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1719-1	SW 1	Soluble	Solid	DI Leach	
880-1719-2	SW 2	Soluble	Solid	DI Leach	
880-1719-3	SW 3	Soluble	Solid	DI Leach	
880-1719-4	SW 9	Soluble	Solid	DI Leach	
880-1719-5	SW 10	Soluble	Solid	DI Leach	
880-1719-6	SW 11	Soluble	Solid	DI Leach	
880-1719-7	SW 12	Soluble	Solid	DI Leach	
880-1719-8	SW 13	Soluble	Solid	DI Leach	
880-1719-9	SW 15	Soluble	Solid	DI Leach	
880-1719-10	SW 16	Soluble	Solid	DI Leach	
880-1719-11	BH-3 (2.5')	Soluble	Solid	DI Leach	
MB 880-2501/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-2501/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-2501/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-1719-1 MS	SW 1	Soluble	Solid	DI Leach	
880-1719-1 MSD	SW 1	Soluble	Solid	DI Leach	
880-1719-11 MS	BH-3 (2.5')	Soluble	Solid	DI Leach	
880-1719-11 MSD	BH-3 (2.5')	Soluble	Solid	DI Leach	

Eurofins Xenco, Midland

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Creek AL Fed #1

Job ID: 880-1719-1
SDG: Eddy County, New Mexico

HPLC/IC

Analysis Batch: 2511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1719-1	SW 1	Soluble	Solid	300.0	2501
880-1719-2	SW 2	Soluble	Solid	300.0	2501
880-1719-3	SW 3	Soluble	Solid	300.0	2501
880-1719-4	SW 9	Soluble	Solid	300.0	2501
880-1719-5	SW 10	Soluble	Solid	300.0	2501
880-1719-6	SW 11	Soluble	Solid	300.0	2501
880-1719-7	SW 12	Soluble	Solid	300.0	2501
880-1719-8	SW 13	Soluble	Solid	300.0	2501
880-1719-9	SW 15	Soluble	Solid	300.0	2501
880-1719-10	SW 16	Soluble	Solid	300.0	2501
880-1719-11	BH-3 (2.5')	Soluble	Solid	300.0	2501
MB 880-2501/1-A	Method Blank	Soluble	Solid	300.0	2501
LCS 880-2501/2-A	Lab Control Sample	Soluble	Solid	300.0	2501
LCSD 880-2501/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	2501
880-1719-1 MS	SW 1	Soluble	Solid	300.0	2501
880-1719-1 MSD	SW 1	Soluble	Solid	300.0	2501
880-1719-11 MS	BH-3 (2.5')	Soluble	Solid	300.0	2501
880-1719-11 MSD	BH-3 (2.5')	Soluble	Solid	300.0	2501

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Creek AL Fed #1

Job ID: 880-1719-1
SDG: Eddy County, New Mexico

Client Sample ID: SW 1

Lab Sample ID: 880-1719-1

Date Collected: 04/28/21 10:00

Matrix: Solid

Date Received: 04/29/21 11:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2496	04/29/21 12:40	MR	XM
Total/NA	Analysis	8021B		1	2447	04/30/21 01:21	KL	XM
Total/NA	Prep	8015NM Prep			2490	04/29/21 11:28	DM	XM
Total/NA	Analysis	8015B NM		1	2484	04/30/21 02:52	AJ	XM
Soluble	Leach	DI Leach			2501	04/29/21 15:09	SC	XM
Soluble	Analysis	300.0		1	2511	04/29/21 19:06	CH	XM

Client Sample ID: SW 2

Lab Sample ID: 880-1719-2

Date Collected: 04/28/21 10:10

Matrix: Solid

Date Received: 04/29/21 11:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2496	04/29/21 12:40	MR	XM
Total/NA	Analysis	8021B		1	2447	04/30/21 01:46	KL	XM
Total/NA	Prep	8015NM Prep			2490	04/29/21 11:28	DM	XM
Total/NA	Analysis	8015B NM		1	2484	04/30/21 03:14	AJ	XM
Soluble	Leach	DI Leach			2501	04/29/21 15:09	SC	XM
Soluble	Analysis	300.0		1	2511	04/29/21 19:22	CH	XM

Client Sample ID: SW 3

Lab Sample ID: 880-1719-3

Date Collected: 04/28/21 10:20

Matrix: Solid

Date Received: 04/29/21 11:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2496	04/29/21 12:40	MR	XM
Total/NA	Analysis	8021B		1	2447	04/30/21 02:12	KL	XM
Total/NA	Prep	8015NM Prep			2490	04/29/21 11:28	DM	XM
Total/NA	Analysis	8015B NM		1	2484	04/30/21 03:35	AJ	XM
Soluble	Leach	DI Leach			2501	04/29/21 15:09	SC	XM
Soluble	Analysis	300.0		1	2511	04/29/21 19:27	CH	XM

Client Sample ID: SW 9

Lab Sample ID: 880-1719-4

Date Collected: 04/28/21 10:30

Matrix: Solid

Date Received: 04/29/21 11:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2496	04/29/21 12:40	MR	XM
Total/NA	Analysis	8021B		1	2447	04/30/21 02:37	KL	XM
Total/NA	Prep	8015NM Prep			2490	04/29/21 11:28	DM	XM
Total/NA	Analysis	8015B NM		1	2484	04/30/21 03:56	AJ	XM
Soluble	Leach	DI Leach			2501	04/29/21 15:09	SC	XM
Soluble	Analysis	300.0		5	2511	04/29/21 19:32	CH	XM

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Creek AL Fed #1

Job ID: 880-1719-1
SDG: Eddy County, New Mexico

Client Sample ID: SW 10

Lab Sample ID: 880-1719-5

Date Collected: 04/28/21 10:40

Matrix: Solid

Date Received: 04/29/21 11:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2496	04/29/21 12:40	MR	XM
Total/NA	Analysis	8021B		1	2447	04/30/21 03:03	KL	XM
Total/NA	Prep	8015NM Prep			2490	04/29/21 11:28	DM	XM
Total/NA	Analysis	8015B NM		1	2484	04/30/21 04:39	AJ	XM
Soluble	Leach	DI Leach			2501	04/29/21 15:09	SC	XM
Soluble	Analysis	300.0		1	2511	04/29/21 19:37	CH	XM

Client Sample ID: SW 11

Lab Sample ID: 880-1719-6

Date Collected: 04/28/21 10:50

Matrix: Solid

Date Received: 04/29/21 11:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2496	04/29/21 12:40	MR	XM
Total/NA	Analysis	8021B		1	2447	04/30/21 09:52	KL	XM
Total/NA	Prep	8015NM Prep			2490	04/29/21 11:28	DM	XM
Total/NA	Analysis	8015B NM		1	2484	04/30/21 05:01	AJ	XM
Soluble	Leach	DI Leach			2501	04/29/21 15:09	SC	XM
Soluble	Analysis	300.0		1	2511	04/29/21 19:53	CH	XM

Client Sample ID: SW 12

Lab Sample ID: 880-1719-7

Date Collected: 04/28/21 11:00

Matrix: Solid

Date Received: 04/29/21 11:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2496	04/29/21 12:40	MR	XM
Total/NA	Analysis	8021B		1	2447	04/30/21 03:54	KL	XM
Total/NA	Prep	8015NM Prep			2490	04/29/21 11:28	DM	XM
Total/NA	Analysis	8015B NM		1	2484	04/30/21 05:44	AJ	XM
Soluble	Leach	DI Leach			2501	04/29/21 15:09	SC	XM
Soluble	Analysis	300.0		1	2511	04/29/21 19:58	CH	XM

Client Sample ID: SW 13

Lab Sample ID: 880-1719-8

Date Collected: 04/28/21 11:30

Matrix: Solid

Date Received: 04/29/21 11:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2496	04/29/21 12:40	MR	XM
Total/NA	Analysis	8021B		1	2447	04/30/21 04:20	KL	XM
Total/NA	Prep	8015NM Prep			2490	04/29/21 11:28	DM	XM
Total/NA	Analysis	8015B NM		1	2484	04/30/21 05:23	AJ	XM
Soluble	Leach	DI Leach			2501	04/29/21 15:09	SC	XM
Soluble	Analysis	300.0		1	2511	04/29/21 20:03	CH	XM

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Creek AL Fed #1

Job ID: 880-1719-1
SDG: Eddy County, New Mexico

Client Sample ID: SW 15

Lab Sample ID: 880-1719-9

Date Collected: 04/28/21 11:40

Matrix: Solid

Date Received: 04/29/21 11:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2496	04/29/21 12:40	MR	XM
Total/NA	Analysis	8021B		1	2447	04/30/21 04:45	KL	XM
Total/NA	Prep	8015NM Prep			2490	04/29/21 11:28	DM	XM
Total/NA	Analysis	8015B NM		1	2484	04/30/21 06:06	AJ	XM
Soluble	Leach	DI Leach			2501	04/29/21 15:09	SC	XM
Soluble	Analysis	300.0		1	2511	04/29/21 20:08	CH	XM

Client Sample ID: SW 16

Lab Sample ID: 880-1719-10

Date Collected: 04/28/21 11:50

Matrix: Solid

Date Received: 04/29/21 11:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2496	04/29/21 12:40	MR	XM
Total/NA	Analysis	8021B		1	2447	04/30/21 05:11	KL	XM
Total/NA	Prep	8015NM Prep			2490	04/29/21 11:28	DM	XM
Total/NA	Analysis	8015B NM		1	2484	04/30/21 08:50	AJ	XM
Soluble	Leach	DI Leach			2501	04/29/21 15:09	SC	XM
Soluble	Analysis	300.0		1	2511	04/29/21 20:13	CH	XM

Client Sample ID: BH-3 (2.5')

Lab Sample ID: 880-1719-11

Date Collected: 04/28/21 14:10

Matrix: Solid

Date Received: 04/29/21 11:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2496	04/29/21 12:40	MR	XM
Total/NA	Analysis	8021B		1	2447	04/30/21 06:54	KL	XM
Total/NA	Prep	8015NM Prep			2490	04/29/21 11:28	DM	XM
Total/NA	Analysis	8015B NM		1	2484	04/30/21 09:12	AJ	XM
Soluble	Leach	DI Leach			2501	04/29/21 15:09	SC	XM
Soluble	Analysis	300.0		1	2511	04/29/21 20:18	CH	XM

Laboratory References:

XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Midland

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Creek AL Fed #1

Job ID: 880-1719-1
SDG: Eddy County, New Mexico

Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Method Summary

Client: Tetra Tech, Inc.
Project/Site: Creek AL Fed #1

Job ID: 880-1719-1
SDG: Eddy County, New Mexico

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XM
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XM
300.0	Anions, Ion Chromatography	MCAWW	XM
5035	Closed System Purge and Trap	SW846	XM
8015NM Prep	Microextraction	SW846	XM
DI Leach	Deionized Water Leaching Procedure	ASTM	XM

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Midland

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Creek AL Fed #1

Job ID: 880-1719-1
SDG: Eddy County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
880-1719-1	SW 1	Solid	04/28/21 10:00	04/29/21 11:26	
880-1719-2	SW 2	Solid	04/28/21 10:10	04/29/21 11:26	
880-1719-3	SW 3	Solid	04/28/21 10:20	04/29/21 11:26	
880-1719-4	SW 9	Solid	04/28/21 10:30	04/29/21 11:26	
880-1719-5	SW 10	Solid	04/28/21 10:40	04/29/21 11:26	
880-1719-6	SW 11	Solid	04/28/21 10:50	04/29/21 11:26	
880-1719-7	SW 12	Solid	04/28/21 11:00	04/29/21 11:26	
880-1719-8	SW 13	Solid	04/28/21 11:30	04/29/21 11:26	
880-1719-9	SW 15	Solid	04/28/21 11:40	04/29/21 11:26	
880-1719-10	SW 16	Solid	04/28/21 11:50	04/29/21 11:26	
880-1719-11	BH-3 (2.5')	Solid	04/28/21 14:10	04/29/21 11:26	

Eurofins Xenco, Midland

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.



file 100
01
3
6

880-1719

880-1719 Chain of Custody

Client Name:

EOG

Site Manager:

Paula TocooroAlonso

ANALYSIS REQUEST

Project Name:

Creek AL Fed # 1

Contact Info:

Email: paula.tocooroalonso@tetratech.com
Phone: 432-241-5813

Project Location:
(county, state)

Eddy County, New Mexico

Project #:

812CUM-02419 Task 1700

Invoice to:

Tetra Tech, Inc

Receiving Laboratory:

Eurofins

Sampler Signature:

Adrian Garcia

Comments:

Attn: James Kennedy

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD				# CONTAINERS	FILTERED (Y/N)	ANALYSIS REQUEST (Circle or Specify Method No.)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
		YEAR 2020		DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	NONE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															

ORIGINAL COPY

LAB USE ONLY

Sample Temperature

0.0/0.5

40.5

REMARKS:

☐ Standard

☒ RUSH Same Day

24 hr

48 hr

72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

Page 2 of 2

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 880-1719-1

SDG Number: Eddy County, New Mexico

Login Number: 1719

List Number: 1

List Source: Eurofins Midland

Creator: Phillips, Kerianna

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-1911-1

Laboratory Sample Delivery Group: Eddy County, NM
Client Project/Site: EOG-Creek AL Fed #1

For:

Tetra Tech, Inc.
901 W Wall
Ste 100
Midland, Texas 79701

Attn: Clair Gonzales

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

Authorized for release by:
5/6/2021 6:10:56 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Tetra Tech, Inc.
Project/Site: EOG-Creek AL Fed #1

Laboratory Job ID: 880-1911-1
SDG: Eddy County, NM

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	7
QC Sample Results	8
QC Association Summary	11
Lab Chronicle	12
Certification Summary	13
Method Summary	14
Sample Summary	15
Chain of Custody	16
Receipt Checklists	17

1

2

3

4

5

6

7

8

9

10

11

12

13

14

Definitions/Glossary

Client: Tetra Tech, Inc.
Project/Site: EOG-Creek AL Fed #1

Job ID: 880-1911-1
SDG: Eddy County, NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
SQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Tetra Tech, Inc.
Project/Site: EOG-Creek AL Fed #1

Job ID: 880-1911-1
SDG: Eddy County, NM

Job ID: 880-1911-1

Laboratory: Eurofins Xenco, Midland**Narrative**

**Job Narrative
880-1911-1****Receipt**

The samples were received on 5/5/2021 4:59 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.6°C

GC VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: EOG-Creek AL Fed #1

Job ID: 880-1911-1
SDG: Eddy County, NM

Client Sample ID: SW 15

Lab Sample ID: 880-1911-1

Date Collected: 05/05/21 10:00

Matrix: Solid

Date Received: 05/05/21 16:59

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/05/21 17:00	05/05/21 21:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/05/21 17:00	05/05/21 21:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/05/21 17:00	05/05/21 21:11	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/05/21 17:00	05/05/21 21:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/05/21 17:00	05/05/21 21:11	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/05/21 17:00	05/05/21 21:11	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/05/21 17:00	05/05/21 21:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	05/05/21 17:00	05/05/21 21:11	1
1,4-Difluorobenzene (Surr)	104		70 - 130	05/05/21 17:00	05/05/21 21:11	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/05/21 17:26	05/06/21 06:41	1
Diesel Range Organics (Over C10-C28)	266		49.9		mg/Kg		05/05/21 17:26	05/06/21 06:41	1
Oil Range Organics (Over C28-C36)	157		49.9		mg/Kg		05/05/21 17:26	05/06/21 06:41	1
Total TPH	423		49.9		mg/Kg		05/05/21 17:26	05/06/21 06:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane				05/05/21 17:26	05/06/21 06:41	1
o-Terphenyl				05/05/21 17:26	05/06/21 06:41	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	28.4		5.00		mg/Kg			05/06/21 11:16	1

Client Sample ID: BH 3 (3.5')

Lab Sample ID: 880-1911-2

Date Collected: 05/05/21 10:10

Matrix: Solid

Date Received: 05/05/21 16:59

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00000202	U	0.0000020		mg/Kg		05/05/21 17:00	05/05/21 21:31	1
			2						
Toluene	<0.00000202	U	0.0000020		mg/Kg		05/05/21 17:00	05/05/21 21:31	1
			2						
Ethylbenzene	<0.00000202	U	0.0000020		mg/Kg		05/05/21 17:00	05/05/21 21:31	1
			2						
m-Xylene & p-Xylene	<0.00000404	U	0.0000040		mg/Kg		05/05/21 17:00	05/05/21 21:31	1
			4						
o-Xylene	<0.00000202	U	0.0000020		mg/Kg		05/05/21 17:00	05/05/21 21:31	1
			2						
Xylenes, Total	<0.00000404	U	0.0000040		mg/Kg		05/05/21 17:00	05/05/21 21:31	1
			4						
Total BTEX	<0.00000404	U	0.0000040		mg/Kg		05/05/21 17:00	05/05/21 21:31	1
			4						

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130	05/05/21 17:00	05/05/21 21:31	1
1,4-Difluorobenzene (Surr)	102		70 - 130	05/05/21 17:00	05/05/21 21:31	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: EOG-Creek AL Fed #1

Job ID: 880-1911-1
SDG: Eddy County, NM

Client Sample ID: BH 3 (3.5')

Lab Sample ID: 880-1911-2

Date Collected: 05/05/21 10:10

Matrix: Solid

Date Received: 05/05/21 16:59

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/05/21 17:26	05/06/21 07:02	1
Diesel Range Organics (Over C10-C28)	149		50.0		mg/Kg		05/05/21 17:26	05/06/21 07:02	1
Oil Range Organics (Over C28-C36)	74.2		50.0		mg/Kg		05/05/21 17:26	05/06/21 07:02	1
Total TPH	223		50.0		mg/Kg		05/05/21 17:26	05/06/21 07:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane				05/05/21 17:26	05/06/21 07:02	1
o-Terphenyl				05/05/21 17:26	05/06/21 07:02	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	60.4		4.95		mg/Kg			05/06/21 11:21	1

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: EOG-Creek AL Fed #1

Job ID: 880-1911-1
SDG: Eddy County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-1911-1	SW 15	113	104
880-1911-2	BH 3 (3.5')	115	102
LCS 880-2703/1-A	Lab Control Sample	113	107
LCSD 880-2703/2-A	Lab Control Sample Dup	111	102
MB 880-2703/5-A	Method Blank	92	94
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1	OTPH1
880-1911-1	SW 15		
880-1911-2	BH 3 (3.5')		
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
LCS 880-2705/2-A	Lab Control Sample	111	107
LCSD 880-2705/3-A	Lab Control Sample Dup	112	107
MB 880-2705/1-A	Method Blank	107	110
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: EOG-Creek AL Fed #1

Job ID: 880-1911-1
SDG: Eddy County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-2703/5-A

Matrix: Solid

Analysis Batch: 2704

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2703

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/05/21 08:54	05/05/21 12:07	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/05/21 08:54	05/05/21 12:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/05/21 08:54	05/05/21 12:07	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/05/21 08:54	05/05/21 12:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/05/21 08:54	05/05/21 12:07	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/05/21 08:54	05/05/21 12:07	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/05/21 08:54	05/05/21 12:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	05/05/21 08:54	05/05/21 12:07	1
1,4-Difluorobenzene (Surr)	94		70 - 130	05/05/21 08:54	05/05/21 12:07	1

Lab Sample ID: LCS 880-2703/1-A

Matrix: Solid

Analysis Batch: 2704

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2703

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08949		mg/Kg		89	70 - 130
Toluene	0.100	0.08579		mg/Kg		86	70 - 130
Ethylbenzene	0.100	0.09189		mg/Kg		92	70 - 130
m-Xylene & p-Xylene	0.200	0.1953		mg/Kg		98	70 - 130
o-Xylene	0.100	0.1028		mg/Kg		103	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: LCSD 880-2703/2-A

Matrix: Solid

Analysis Batch: 2704

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 2703

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08619		mg/Kg		86	70 - 130	4	35
Toluene	0.100	0.08277		mg/Kg		83	70 - 130	4	35
Ethylbenzene	0.100	0.08820		mg/Kg		88	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1877		mg/Kg		94	70 - 130	4	35
o-Xylene	0.100	0.09784		mg/Kg		98	70 - 130	5	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: EOG-Creek AL Fed #1

Job ID: 880-1911-1
SDG: Eddy County, NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-2705/1-A

Matrix: Solid

Analysis Batch: 2715

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2705

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/05/21 09:09	05/06/21 00:46	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/05/21 09:09	05/06/21 00:46	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/05/21 09:09	05/06/21 00:46	1
Total TPH	<50.0	U	50.0		mg/Kg		05/05/21 09:09	05/06/21 00:46	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	05/05/21 09:09	05/06/21 00:46	1
o-Terphenyl	110		70 - 130	05/05/21 09:09	05/06/21 00:46	1

Lab Sample ID: LCS 880-2705/2-A

Matrix: Solid

Analysis Batch: 2715

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2705

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	976.9		mg/Kg		98	70 - 130
Diesel Range Organics (Over C10-C28)	1000	827.9		mg/Kg		83	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	111		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: LCSD 880-2705/3-A

Matrix: Solid

Analysis Batch: 2715

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 2705

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	908.1		mg/Kg		91	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	1000	838.9		mg/Kg		84	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	112		70 - 130
o-Terphenyl	107		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-2742/1-A

Matrix: Solid

Analysis Batch: 2759

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			05/06/21 08:51	1

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: EOG-Creek AL Fed #1

Job ID: 880-1911-1
SDG: Eddy County, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-2742/2-A					Client Sample ID: Lab Control Sample				
Matrix: Solid					Prep Type: Soluble				
Analysis Batch: 2759									
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	250	234.2		mg/Kg		94	90 - 110		

Lab Sample ID: LCSD 880-2742/3-A					Client Sample ID: Lab Control Sample Dup				
Matrix: Solid					Prep Type: Soluble				
Analysis Batch: 2759									
Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	225.9		mg/Kg		90	90 - 110	4	20

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: EOG-Creek AL Fed #1

Job ID: 880-1911-1
SDG: Eddy County, NM

GC VOA

Prep Batch: 2703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1911-1	SW 15	Total/NA	Solid	5035	
880-1911-2	BH 3 (3.5')	Total/NA	Solid	5035	
MB 880-2703/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-2703/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-2703/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 2704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1911-1	SW 15	Total/NA	Solid	8021B	2703
880-1911-2	BH 3 (3.5')	Total/NA	Solid	8021B	2703
MB 880-2703/5-A	Method Blank	Total/NA	Solid	8021B	2703
LCS 880-2703/1-A	Lab Control Sample	Total/NA	Solid	8021B	2703
LCSD 880-2703/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	2703

GC Semi VOA

Prep Batch: 2705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1911-1	SW 15	Total/NA	Solid	8015NM Prep	
880-1911-2	BH 3 (3.5')	Total/NA	Solid	8015NM Prep	
MB 880-2705/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-2705/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-2705/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 2715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1911-1	SW 15	Total/NA	Solid	8015B NM	2705
880-1911-2	BH 3 (3.5')	Total/NA	Solid	8015B NM	2705
MB 880-2705/1-A	Method Blank	Total/NA	Solid	8015B NM	2705
LCS 880-2705/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	2705
LCSD 880-2705/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	2705

HPLC/IC

Leach Batch: 2742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1911-1	SW 15	Soluble	Solid	DI Leach	
880-1911-2	BH 3 (3.5')	Soluble	Solid	DI Leach	
MB 880-2742/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-2742/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-2742/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 2759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1911-1	SW 15	Soluble	Solid	300.0	2742
880-1911-2	BH 3 (3.5')	Soluble	Solid	300.0	2742
MB 880-2742/1-A	Method Blank	Soluble	Solid	300.0	2742
LCS 880-2742/2-A	Lab Control Sample	Soluble	Solid	300.0	2742
LCSD 880-2742/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	2742

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: EOG-Creek AL Fed #1

Job ID: 880-1911-1
SDG: Eddy County, NM

Client Sample ID: SW 15

Lab Sample ID: 880-1911-1

Date Collected: 05/05/21 10:00

Matrix: Solid

Date Received: 05/05/21 16:59

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2703	05/05/21 17:00	KL	XM
Total/NA	Analysis	8021B		1	2704	05/05/21 21:11	KL	XM
Total/NA	Prep	8015NM Prep			2705	05/05/21 17:26	DM	XM
Total/NA	Analysis	8015B NM		1	2715	05/06/21 06:41	AJ	XM
Soluble	Leach	DI Leach			2742	05/05/21 17:40	CH	XM
Soluble	Analysis	300.0		1	2759	05/06/21 11:16	CH	XM

Client Sample ID: BH 3 (3.5')

Lab Sample ID: 880-1911-2

Date Collected: 05/05/21 10:10

Matrix: Solid

Date Received: 05/05/21 16:59

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2703	05/05/21 17:00	KL	XM
Total/NA	Analysis	8021B		1	2704	05/05/21 21:31	KL	XM
Total/NA	Prep	8015NM Prep			2705	05/05/21 17:26	DM	XM
Total/NA	Analysis	8015B NM		1	2715	05/06/21 07:02	AJ	XM
Soluble	Leach	DI Leach			2742	05/05/21 17:40	CH	XM
Soluble	Analysis	300.0		1	2759	05/06/21 11:21	CH	XM

Laboratory References:

XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: EOG-Creek AL Fed #1

Job ID: 880-1911-1
SDG: Eddy County, NM

Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Method Summary

Client: Tetra Tech, Inc.
Project/Site: EOG-Creek AL Fed #1

Job ID: 880-1911-1
SDG: Eddy County, NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XM
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XM
300.0	Anions, Ion Chromatography	MCAWW	XM
5035	Closed System Purge and Trap	SW846	XM
8015NM Prep	Microextraction	SW846	XM
DI Leach	Deionized Water Leaching Procedure	ASTM	XM

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Midland

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: EOG-Creek AL Fed #1

Job ID: 880-1911-1
SDG: Eddy County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
880-1911-1	SW 15	Solid	05/05/21 10:00	05/05/21 16:59	
880-1911-2	BH 3 (3.5')	Solid	05/05/21 10:10	05/05/21 16:59	

1

2

3

4

5

6

7

8

9

10

11

12

13

14

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

901 West Wall St
Midland, Tex
Tel (432) 66
Fax (432) 66

880-1911 Chain of Custody

080-1911

Client Name: EOG

Site Manager:

Paula Tocoalonso

Project Name: Creek AL Fed #1

Contact Info:

Email: paula.tocoalonso@tetratech.com
Phone: 432-741-5813

Project Location: Eddy County New Mexico
(county, state)

Project #:

212C-MD-02419 Task 1700

Invoice to: Tetra Tech, Inc

Receiving Laboratory: Eurofins

Sampler Signature:

Adrian Garcia

Comments: Attn: James Kennedy

ANALYSIS REQUEST

(Circle or Specify Method No.)

LAB #
(LAB USE ONLY)

SAMPLE IDENTIFICATION

SAMPLING
YEAR 2020

MATRIX
PRESERVATIVE METHOD

CONTAINERS

FILTERED (Y/N)

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 300 0

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

TPH 8015R

HOLD

SW 15

05/05/21

1000

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

BH 3 (3 S)

05/05/21

1010

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 880-1911-1
SDG Number: Eddy County, NM

Login Number: 1911

List Number: 1

Creator: Phillips, Kerianna

List Source: Eurofins Midland

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-2356-1

Laboratory Sample Delivery Group: Eddy County, NM
Client Project/Site: Creek AL #1

For:

Tetra Tech, Inc.
901 W Wall
Ste 100
Midland, Texas 79701

Attn: Clair Gonzales

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

Authorized for release by:
5/24/2021 4:22:58 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Tetra Tech, Inc.
Project/Site: Creek AL #1

Laboratory Job ID: 880-2356-1
SDG: Eddy County, NM

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	6
QC Sample Results	7
QC Association Summary	10
Lab Chronicle	11
Certification Summary	12
Method Summary	13
Sample Summary	14
Chain of Custody	15
Receipt Checklists	16

1

2

3

4

5

6

7

8

9

10

11

12

13

14

Definitions/Glossary

Client: Tetra Tech, Inc.
Project/Site: Creek AL #1

Job ID: 880-2356-1
SDG: Eddy County, NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
SQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Tetra Tech, Inc.
Project/Site: Creek AL #1

Job ID: 880-2356-1
SDG: Eddy County, NM

Job ID: 880-2356-1**Laboratory: Eurofins Xenco, Midland****Narrative****Job Narrative
880-2356-1****Receipt**

The sample was received on 5/21/2021 9:46 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.6°C

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: SW-15 (2-3) (880-2356-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA

Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-3369 recovered above the upper control limit for Diesel Range Organics (Over C10-C28) The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The samples associated with this CCV that had a detection in this range were only reported if there were multiple runs to confirm.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Creek AL #1

Job ID: 880-2356-1
SDG: Eddy County, NM

Client Sample ID: SW-15 (2-3)

Lab Sample ID: 880-2356-1

Date Collected: 05/21/21 09:38

Matrix: Solid

Date Received: 05/21/21 09:46

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/21/21 10:27	05/22/21 17:01	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/21/21 10:27	05/22/21 17:01	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/21/21 10:27	05/22/21 17:01	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		05/21/21 10:27	05/22/21 17:01	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/21/21 10:27	05/22/21 17:01	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		05/21/21 10:27	05/22/21 17:01	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		05/21/21 10:27	05/22/21 17:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	05/21/21 10:27	05/22/21 17:01	1
1,4-Difluorobenzene (Surr)	123		70 - 130	05/21/21 10:27	05/22/21 17:01	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/21/21 11:01	05/23/21 09:54	1
Diesel Range Organics (Over C10-C28)	143		50.0		mg/Kg		05/21/21 11:01	05/23/21 09:54	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/21/21 11:01	05/23/21 09:54	1
Total TPH	143		50.0		mg/Kg		05/21/21 11:01	05/23/21 09:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	62	S1-	70 - 130	05/21/21 11:01	05/23/21 09:54	1
1-Chlorooctane	84		70 - 130	05/21/21 11:01	05/23/21 10:49	5
o-Terphenyl	54	S1-	70 - 130	05/21/21 11:01	05/23/21 09:54	1
o-Terphenyl	77		70 - 130	05/21/21 11:01	05/23/21 10:49	5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.04		4.98		mg/Kg			05/21/21 19:30	1

Eurofins Xenco, Midland

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: Creek AL #1

Job ID: 880-2356-1
SDG: Eddy County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-2356-1	SW-15 (2-3)	105	123
LCS 880-3337/1-A	Lab Control Sample	86	108
LCSD 880-3337/2-A	Lab Control Sample Dup	93	109
MB 880-3333/5-A	Method Blank	108	105
MB 880-3337/5-A	Method Blank	100	96
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-2356-1	SW-15 (2-3)	62 S1-	54 S1-
880-2356-1	SW-15 (2-3)	84	77
LCS 880-3342/2-A	Lab Control Sample	96	89
LCSD 880-3342/3-A	Lab Control Sample Dup	97	90
MB 880-3342/1-A	Method Blank	100	100
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Creek AL #1

Job ID: 880-2356-1
SDG: Eddy County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-3333/5-A

Matrix: Solid

Analysis Batch: 3318

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3333

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/21/21 09:48	05/21/21 23:39	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/21/21 09:48	05/21/21 23:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/21/21 09:48	05/21/21 23:39	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/21/21 09:48	05/21/21 23:39	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/21/21 09:48	05/21/21 23:39	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/21/21 09:48	05/21/21 23:39	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/21/21 09:48	05/21/21 23:39	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	05/21/21 09:48	05/21/21 23:39	1
1,4-Difluorobenzene (Surr)	105		70 - 130	05/21/21 09:48	05/21/21 23:39	1

Lab Sample ID: MB 880-3337/5-A

Matrix: Solid

Analysis Batch: 3318

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3337

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/21/21 10:27	05/22/21 10:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/21/21 10:27	05/22/21 10:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/21/21 10:27	05/22/21 10:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/21/21 10:27	05/22/21 10:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/21/21 10:27	05/22/21 10:44	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/21/21 10:27	05/22/21 10:44	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/21/21 10:27	05/22/21 10:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	05/21/21 10:27	05/22/21 10:44	1
1,4-Difluorobenzene (Surr)	96		70 - 130	05/21/21 10:27	05/22/21 10:44	1

Lab Sample ID: LCS 880-3337/1-A

Matrix: Solid

Analysis Batch: 3318

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3337

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08749		mg/Kg		87	70 - 130
Toluene	0.100	0.08877		mg/Kg		89	70 - 130
Ethylbenzene	0.100	0.08153		mg/Kg		82	70 - 130
m-Xylene & p-Xylene	0.200	0.1658		mg/Kg		83	70 - 130
o-Xylene	0.100	0.08276		mg/Kg		83	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	86		70 - 130
1,4-Difluorobenzene (Surr)	108		70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Creek AL #1

Job ID: 880-2356-1
SDG: Eddy County, NM

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-3337/2-A

Matrix: Solid

Analysis Batch: 3318

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3337

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09645		mg/Kg		96	70 - 130	10	35
Toluene	0.100	0.1011		mg/Kg		101	70 - 130	13	35
Ethylbenzene	0.100	0.09283		mg/Kg		93	70 - 130	13	35
m-Xylene & p-Xylene	0.200	0.1831		mg/Kg		92	70 - 130	10	35
o-Xylene	0.100	0.09130		mg/Kg		91	70 - 130	10	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-3342/1-A

Matrix: Solid

Analysis Batch: 3369

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3342

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/21/21 11:01	05/23/21 01:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/21/21 11:01	05/23/21 01:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/21/21 11:01	05/23/21 01:12	1
Total TPH	<50.0	U	50.0		mg/Kg		05/21/21 11:01	05/23/21 01:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	05/21/21 11:01	05/23/21 01:12	1
o-Terphenyl	100		70 - 130	05/21/21 11:01	05/23/21 01:12	1

Lab Sample ID: LCS 880-3342/2-A

Matrix: Solid

Analysis Batch: 3369

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3342

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	814.7		mg/Kg		81	70 - 130
Diesel Range Organics (Over C10-C28)	1000	941.7		mg/Kg		94	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	89		70 - 130

Lab Sample ID: LCSD 880-3342/3-A

Matrix: Solid

Analysis Batch: 3369

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3342

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	827.2		mg/Kg		83	70 - 130	2	20

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Creek AL #1

Job ID: 880-2356-1
SDG: Eddy County, NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 880-3342/3-A

Matrix: Solid

Analysis Batch: 3369

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3342

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)	1000	950.9		mg/Kg		95	70 - 130	1	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	97		70 - 130						
o-Terphenyl	90		70 - 130						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-3344/1-A

Matrix: Solid

Analysis Batch: 3361

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			05/21/21 17:20	1

Lab Sample ID: LCS 880-3344/2-A

Matrix: Solid

Analysis Batch: 3361

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	250	256.8		mg/Kg		103	90 - 110		

Lab Sample ID: LCSD 880-3344/3-A

Matrix: Solid

Analysis Batch: 3361

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	252.0		mg/Kg		101	90 - 110	2	20

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Creek AL #1

Job ID: 880-2356-1
SDG: Eddy County, NM

GC VOA

Analysis Batch: 3318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2356-1	SW-15 (2-3)	Total/NA	Solid	8021B	3337
MB 880-3333/5-A	Method Blank	Total/NA	Solid	8021B	3333
MB 880-3337/5-A	Method Blank	Total/NA	Solid	8021B	3337
LCS 880-3337/1-A	Lab Control Sample	Total/NA	Solid	8021B	3337
LCSD 880-3337/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	3337

Prep Batch: 3333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-3333/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 3337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2356-1	SW-15 (2-3)	Total/NA	Solid	5035	
MB 880-3337/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-3337/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-3337/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 3342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2356-1	SW-15 (2-3)	Total/NA	Solid	8015NM Prep	
MB 880-3342/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-3342/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-3342/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 3369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2356-1	SW-15 (2-3)	Total/NA	Solid	8015B NM	3342
880-2356-1	SW-15 (2-3)	Total/NA	Solid	8015B NM	3342
MB 880-3342/1-A	Method Blank	Total/NA	Solid	8015B NM	3342
LCS 880-3342/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	3342
LCSD 880-3342/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	3342

HPLC/IC

Leach Batch: 3344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2356-1	SW-15 (2-3)	Soluble	Solid	DI Leach	
MB 880-3344/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-3344/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-3344/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 3361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2356-1	SW-15 (2-3)	Soluble	Solid	300.0	3344
MB 880-3344/1-A	Method Blank	Soluble	Solid	300.0	3344
LCS 880-3344/2-A	Lab Control Sample	Soluble	Solid	300.0	3344
LCSD 880-3344/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	3344

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Creek AL #1

Job ID: 880-2356-1
SDG: Eddy County, NM

Client Sample ID: SW-15 (2-3)

Lab Sample ID: 880-2356-1

Date Collected: 05/21/21 09:38

Matrix: Solid

Date Received: 05/21/21 09:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	3337	05/21/21 10:27	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3318	05/22/21 17:01	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	3342	05/21/21 11:01	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3369	05/23/21 09:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	3342	05/21/21 11:01	DM	XEN MID
Total/NA	Analysis	8015B NM		5			3369	05/23/21 10:49	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	3344	05/21/21 11:11	CH	XEN MID
Soluble	Analysis	300.0		1			3361	05/21/21 19:30	SC	XEN MID

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Creek AL #1

Job ID: 880-2356-1
SDG: Eddy County, NM

Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

Method Summary

Client: Tetra Tech, Inc.
Project/Site: Creek AL #1

Job ID: 880-2356-1
SDG: Eddy County, NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Midland

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Creek AL #1

Job ID: 880-2356-1
SDG: Eddy County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
880-2356-1	SW-15 (2-3)	Solid	05/21/21 09:38	05/21/21 09:46	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.



880-2356 Chain of Custody

Page 1 of 1

880-2356

Client Name Egg Resources							Site Manager Paula Torero																									
Project Name Creek AL #1																																
Project Location (county, state) Edgy County, New Mexico				Project #: ZICC-MD-02419 (2000)																												
Invoice to Eog Attn James Kennedy																																
Receiving Laboratory Eurofins (Xenco)				Sampler Signature 																												
Comments																																
LAB # (LAB USE ONLY)				SAMPLE IDENTIFICATION				SAMPLING YEAR		DATE		TIME		MATRIX WATER SOIL		PRESERVATIVE METHOD HCL HNO3 ICE		# CONTAINERS		FILTERED (Y/N)		(Circle or Specify Method No.)										
				SW-15 (2-3)				5/20/21										1				BTEx 8021B BTEx 8260B										
																						TPH TX1005 (Ext to C35)										
																						TPH 8015M (GRO - DRO - ORO)										
																						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										
																						PCBs s 8082 / 608										
																						NORM										
																						PLM (Asbestos)										
																						Chloride 300.00										
																						Chloride Sulfate TDS										
																						General Water Chemistry (see attached list)										
																						Anion/Cation Balance										
																						Asbestos										
																						Hold										
Relinquished by Date Time 5/21/20 938				Received by Date Time 5/21/21 0938				REMARKS LAB USE ONLY Sample Temperature 4.1/4.6 +0.5 RUSH Same Day 24 hr 48 hr 72 hr Rush Charges Authorized Special Report Limits or TRRP Report																								
Retrieved by Date Time 5/21/20 938				Received by Date Time 5/21/21 0938																												

ORIGINAL COPY

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 880-2356-1

SDG Number: Eddy County, NM

Login Number: 2356

List Number: 1

Creator: Phillips, Kerianna

List Source: Eurofins Xenco, Midland

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-2754-1

Laboratory Sample Delivery Group: Eddy Co, NM
Client Project/Site: Creek AL Federal #1

For:

Tetra Tech, Inc.
901 W Wall
Ste 100
Midland, Texas 79701

Attn: Clair Gonzales

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

Authorized for release by:
6/8/2021 3:37:41 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Tetra Tech, Inc.
Project/Site: Creek AL Federal #1

Laboratory Job ID: 880-2754-1
SDG: Eddy Co, NM

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	7
QC Sample Results	8
QC Association Summary	11
Lab Chronicle	13
Certification Summary	14
Method Summary	15
Sample Summary	16
Chain of Custody	17
Receipt Checklists	18

1
2
3
4
5
6
7
8
9
10
11
12
13
14

Definitions/Glossary

Client: Tetra Tech, Inc.
Project/Site: Creek AL Federal #1

Job ID: 880-2754-1
SDG: Eddy Co, NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Tetra Tech, Inc.
Project/Site: Creek AL Federal #1

Job ID: 880-2754-1
SDG: Eddy Co, NM

Job ID: 880-2754-1**Laboratory: Eurofins Xenco, Midland****Narrative****Job Narrative
880-2754-1****Receipt**

The samples were received on 6/4/2021 4:36 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.1°C

GC VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA

Method 8015MOD_NM: Manual integration was performed on the following samples: SW-15 (880-2754-1), BH-3 (880-2754-2) and (890-776-A-1-H). A manual integration was performed on these jobs because baseline rise in the >C12-C28 hydrocarbon range and the >C28-C35 hydrocarbon range created a false detection.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Creek AL Federal #1

Job ID: 880-2754-1
SDG: Eddy Co, NM

Client Sample ID: SW-15

Lab Sample ID: 880-2754-1

Date Collected: 06/04/21 00:00

Matrix: Solid

Date Received: 06/04/21 16:36

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		06/04/21 16:45	06/05/21 05:01	1
Toluene	<0.00198	U	0.00198		mg/Kg		06/04/21 16:45	06/05/21 05:01	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		06/04/21 16:45	06/05/21 05:01	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		06/04/21 16:45	06/05/21 05:01	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		06/04/21 16:45	06/05/21 05:01	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		06/04/21 16:45	06/05/21 05:01	1
Total BTEX	<0.00396	U	0.00396		mg/Kg		06/04/21 16:45	06/05/21 05:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	06/04/21 16:45	06/05/21 05:01	1
1,4-Difluorobenzene (Surr)	100		70 - 130	06/04/21 16:45	06/05/21 05:01	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/07/21 15:02	06/08/21 05:53	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/07/21 15:02	06/08/21 05:53	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/07/21 15:02	06/08/21 05:53	1
Total TPH	<49.8	U	49.8		mg/Kg		06/07/21 15:02	06/08/21 05:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	06/07/21 15:02	06/08/21 05:53	1
o-Terphenyl	90		70 - 130	06/07/21 15:02	06/08/21 05:53	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.04	U	5.04		mg/Kg			06/07/21 09:26	1

Client Sample ID: BH-3

Lab Sample ID: 880-2754-2

Date Collected: 06/04/21 00:00

Matrix: Solid

Date Received: 06/04/21 16:36

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		06/04/21 16:45	06/05/21 05:22	1
Toluene	<0.00198	U	0.00198		mg/Kg		06/04/21 16:45	06/05/21 05:22	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		06/04/21 16:45	06/05/21 05:22	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		06/04/21 16:45	06/05/21 05:22	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		06/04/21 16:45	06/05/21 05:22	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		06/04/21 16:45	06/05/21 05:22	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		06/04/21 16:45	06/05/21 05:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	06/04/21 16:45	06/05/21 05:22	1
1,4-Difluorobenzene (Surr)	101		70 - 130	06/04/21 16:45	06/05/21 05:22	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/07/21 15:02	06/08/21 06:13	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Creek AL Federal #1

Job ID: 880-2754-1
SDG: Eddy Co, NM

Client Sample ID: BH-3

Lab Sample ID: 880-2754-2

Date Collected: 06/04/21 00:00

Matrix: Solid

Date Received: 06/04/21 16:36

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/07/21 15:02	06/08/21 06:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/07/21 15:02	06/08/21 06:13	1
Total TPH	<50.0	U	50.0		mg/Kg		06/07/21 15:02	06/08/21 06:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130				06/07/21 15:02	06/08/21 06:13	1
o-Terphenyl	99		70 - 130				06/07/21 15:02	06/08/21 06:13	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15.7		5.02		mg/Kg			06/07/21 09:32	1

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: Creek AL Federal #1

Job ID: 880-2754-1
SDG: Eddy Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-2754-1	SW-15	112	100
880-2754-2	BH-3	118	101
LCS 880-3773/1-B	Lab Control Sample	110	98
LCSD 880-3773/2-B	Lab Control Sample Dup	110	97
MB 880-3773/5-B	Method Blank	110	93
MB 880-3785/5-A	Method Blank	112	94
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-2754-1	SW-15	102	90
880-2754-2	BH-3	103	99
LCS 880-3865/2-A	Lab Control Sample	110	105
LCSD 880-3865/3-A	Lab Control Sample Dup	110	104
MB 880-3865/1-A	Method Blank	100	104
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Creek AL Federal #1

Job ID: 880-2754-1
SDG: Eddy Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-3773/5-B

Matrix: Solid

Analysis Batch: 3786

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3773

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/04/21 15:00	06/04/21 23:19	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/04/21 15:00	06/04/21 23:19	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/04/21 15:00	06/04/21 23:19	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/04/21 15:00	06/04/21 23:19	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/04/21 15:00	06/04/21 23:19	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/04/21 15:00	06/04/21 23:19	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/04/21 15:00	06/04/21 23:19	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	06/04/21 15:00	06/04/21 23:19	1
1,4-Difluorobenzene (Surr)	93		70 - 130	06/04/21 15:00	06/04/21 23:19	1

Lab Sample ID: LCS 880-3773/1-B

Matrix: Solid

Analysis Batch: 3786

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3773

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09156		mg/Kg		92	70 - 130
Toluene	0.100	0.1021		mg/Kg		102	70 - 130
Ethylbenzene	0.100	0.1030		mg/Kg		103	70 - 130
m-Xylene & p-Xylene	0.200	0.2105		mg/Kg		105	70 - 130
o-Xylene	0.100	0.1071		mg/Kg		107	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: LCSD 880-3773/2-B

Matrix: Solid

Analysis Batch: 3786

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3773

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09035		mg/Kg		90	70 - 130	1	35
Toluene	0.100	0.1011		mg/Kg		101	70 - 130	1	35
Ethylbenzene	0.100	0.1031		mg/Kg		103	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.2117		mg/Kg		106	70 - 130	1	35
o-Xylene	0.100	0.1087		mg/Kg		109	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: MB 880-3785/5-A

Matrix: Solid

Analysis Batch: 3786

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3785

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/04/21 08:28	06/04/21 11:43	1

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Creek AL Federal #1

Job ID: 880-2754-1
SDG: Eddy Co, NM

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 880-3785/5-A

Matrix: Solid

Analysis Batch: 3786

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3785

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.00200	U	0.00200		mg/Kg		06/04/21 08:28	06/04/21 11:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/04/21 08:28	06/04/21 11:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/04/21 08:28	06/04/21 11:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/04/21 08:28	06/04/21 11:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/04/21 08:28	06/04/21 11:43	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/04/21 08:28	06/04/21 11:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	06/04/21 08:28	06/04/21 11:43	1
1,4-Difluorobenzene (Surr)	94		70 - 130	06/04/21 08:28	06/04/21 11:43	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-3865/1-A

Matrix: Solid

Analysis Batch: 3831

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3865

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/07/21 15:02	06/07/21 22:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/07/21 15:02	06/07/21 22:50	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/07/21 15:02	06/07/21 22:50	1
Total TPH	<50.0	U	50.0		mg/Kg		06/07/21 15:02	06/07/21 22:50	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	06/07/21 15:02	06/07/21 22:50	1
o-Terphenyl	104		70 - 130	06/07/21 15:02	06/07/21 22:50	1

Lab Sample ID: LCS 880-3865/2-A

Matrix: Solid

Analysis Batch: 3831

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3865

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	937.2		mg/Kg		94	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1051		mg/Kg		105	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	105		70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Creek AL Federal #1

Job ID: 880-2754-1
SDG: Eddy Co, NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 880-3865/3-A

Matrix: Solid

Analysis Batch: 3831

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3865

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	931.3		mg/Kg		93	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	1036		mg/Kg		104	70 - 130	1	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	110		70 - 130						
o-Terphenyl	104		70 - 130						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-3826/1-A

Matrix: Solid

Analysis Batch: 3828

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			06/07/21 08:43	1

Lab Sample ID: LCS 880-3826/2-A

Matrix: Solid

Analysis Batch: 3828

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	250	241.8		mg/Kg		97	90 - 110		

Lab Sample ID: LCSD 880-3826/3-A

Matrix: Solid

Analysis Batch: 3828

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	242.4		mg/Kg		97	90 - 110	0	20

Eurofins Xenco, Midland

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Creek AL Federal #1

Job ID: 880-2754-1
SDG: Eddy Co, NM

GC VOA

Prep Batch: 3773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2754-1	SW-15	Total/NA	Solid	5035	
880-2754-2	BH-3	Total/NA	Solid	5035	
MB 880-3773/5-B	Method Blank	Total/NA	Solid	5035	
LCS 880-3773/1-B	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-3773/2-B	Lab Control Sample Dup	Total/NA	Solid	5035	

Prep Batch: 3785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-3785/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 3786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2754-1	SW-15	Total/NA	Solid	8021B	3773
880-2754-2	BH-3	Total/NA	Solid	8021B	3773
MB 880-3773/5-B	Method Blank	Total/NA	Solid	8021B	3773
MB 880-3785/5-A	Method Blank	Total/NA	Solid	8021B	3785
LCS 880-3773/1-B	Lab Control Sample	Total/NA	Solid	8021B	3773
LCSD 880-3773/2-B	Lab Control Sample Dup	Total/NA	Solid	8021B	3773

GC Semi VOA

Analysis Batch: 3831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2754-1	SW-15	Total/NA	Solid	8015B NM	3865
880-2754-2	BH-3	Total/NA	Solid	8015B NM	3865
MB 880-3865/1-A	Method Blank	Total/NA	Solid	8015B NM	3865
LCS 880-3865/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	3865
LCSD 880-3865/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	3865

Prep Batch: 3865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2754-1	SW-15	Total/NA	Solid	8015NM Prep	
880-2754-2	BH-3	Total/NA	Solid	8015NM Prep	
MB 880-3865/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-3865/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-3865/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 3826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2754-1	SW-15	Soluble	Solid	DI Leach	
880-2754-2	BH-3	Soluble	Solid	DI Leach	
MB 880-3826/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-3826/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-3826/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 3828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2754-1	SW-15	Soluble	Solid	300.0	3826
880-2754-2	BH-3	Soluble	Solid	300.0	3826
MB 880-3826/1-A	Method Blank	Soluble	Solid	300.0	3826

Eurofins Xenco, Midland

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Creek AL Federal #1

Job ID: 880-2754-1
SDG: Eddy Co, NM

HPLC/IC (Continued)

Analysis Batch: 3828 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-3826/2-A	Lab Control Sample	Soluble	Solid	300.0	3826
LCSD 880-3826/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	3826

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Creek AL Federal #1

Job ID: 880-2754-1
SDG: Eddy Co, NM

Client Sample ID: SW-15

Lab Sample ID: 880-2754-1

Date Collected: 06/04/21 00:00

Matrix: Solid

Date Received: 06/04/21 16:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	3773	06/04/21 16:45	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3786	06/05/21 05:01	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	3865	06/07/21 15:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3831	06/08/21 05:53	AM	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	3826	06/07/21 08:00	CH	XEN MID
Soluble	Analysis	300.0		1			3828	06/07/21 09:26	CH	XEN MID

Client Sample ID: BH-3

Lab Sample ID: 880-2754-2

Date Collected: 06/04/21 00:00

Matrix: Solid

Date Received: 06/04/21 16:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	3773	06/04/21 16:45	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3786	06/05/21 05:22	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	3865	06/07/21 15:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3831	06/08/21 06:13	AM	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	3826	06/07/21 08:00	CH	XEN MID
Soluble	Analysis	300.0		1			3828	06/07/21 09:32	CH	XEN MID

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Creek AL Federal #1

Job ID: 880-2754-1
SDG: Eddy Co, NM

Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

Method Summary

Client: Tetra Tech, Inc.
Project/Site: Creek AL Federal #1

Job ID: 880-2754-1
SDG: Eddy Co, NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Midland

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Creek AL Federal #1

Job ID: 880-2754-1
SDG: Eddy Co, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
880-2754-1	SW-15	Solid	06/04/21 00:00	06/04/21 16:36	
880-2754-2	BH-3	Solid	06/04/21 00:00	06/04/21 16:36	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Analysis Request of Chain of Custody Record

Tetra Tech. Inc.

901 West Wall St Ste 1
Midland, Texas 79701
Tel (432) 682-4559
Fax (432) 682-394

880-2754 Chain of Custody

Client Name

EOG

Site Manager

Paula Tocora

Project Name

Creek AL Federal #1

Project Location
(county, state)

Eddy Co, NM

Project #: 212c-md-02419 Task 1700

Invoice to

EOG, Attn James Kennedy

Receiving Laboratory

Xenco (Midland, TX)

Sampler Signature

Adrian Garcia

Comments

SAMPLE IDENTIFICATION

LAB #
(LAB USE ONLY)

SW-15

BH-3

YEAR	SAMPLING		MATRIX		PRESERVATIVE METHOD	# CONTAINERS	FILTERED (Y/N)
	DATE	TIME	WATER	SOIL	HCL HNO ₃ ICE		

BTEX 8021B BTEX 8260B

TPH TX1005 (Ext to C35)

TPH 8015M (GRO - DRO - ORO)

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

RCl

GC/MS Vol 8260B / 624

GC/MS Semi Vol 8270C/625

PCBs s 8082 / 608

NORM

PLM (Asbestos)

Chloride 300 0

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

Asbestos

ANALYSIS REQUEST

(Circle or Specify Method No.)

Relinquished by

Oedres Dan 6/4/21 1632

Relinquished by

Date Time

Received by Vagana

Date Time 6/4/21 1633

LAB USE ONLY

Sample Temperature

4.6/5.1

[X] RUSH

Same Day 24 hr 48 hr 72 hr

[] Rush Charges Authorized

[] Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #

+0.9

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 880-2754-1

SDG Number: Eddy Co, NM

Login Number: 2754

List Number: 1

Creator: Teel, Brianna

List Source: Eurofins Xenco, Midland

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	False	No times on COC, logged in per container labels.
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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 55305

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 55305
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bbillings	None	11/1/2021