

Incident ID	NAPP2118258685
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

Printed Name: Todd Wells Title: Environmental Specialist
Signature: Todd Wells Date: 9/3/21
email: Todd_Wells@eogresources.com Telephone: (432) 686-3613

OCD Only

Received by: Chad Hensley Date: 10/04/2021

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

Closure Approved by: Chad Hensley Date: 10/04/2021
Printed Name: Chad Hensley Title: Environmental Specialist Advanced

SITE INFORMATION

Report Type: Closure Report NAPP2118258685

General Site Information:

Site:	Ophelia Riser					
Company:	EOG Resources					
Section, Township and Range	Unit L	Sec. 26	T 26S	R 33E		
Lease Number:						
County:	Lea County					
GPS:	32.016839			-103.550998		
Surface Owner:	Private					
Mineral Owner:						
Directions:	From the intersection J-2 and Quay Valley Ln, head East on J-2 and follow for 3.88 miles. Turn right onto lease road. Follow for 2.06 miles to the spill location.					

Release Data:

Date Released:	6/8/2021
Type Release:	Produced Water
Source of Contamination:	Lay Flat Reuse Water Line
Fluid Released:	350 bbl water
Fluids Recovered:	25 bbl water

Official Communication:

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

Site Characterization

Depth to Groundwater:	80.71' Below Surface
Karst Potential:	Low

Recommended Remedial Action Levels (RRALs)

Benzene	Total BTEX	TPH (GRO+DRO)	TPH (GRO+DRO+MRO)	Chlorides
10 mg/kg	50 mg/kg	100 mg/kg	100 mg/kg	600 mg/kg



September 1, 2021

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

Re: Closure Report for the EOG Resources, Ophelia Riser, Unit L, Section 26, Township 26 South, Range 33 East, Lea County, New Mexico. NAPP2118258685

Oil Conservation Division:

Tetra Tech, Inc. (Tetra Tech) was contacted by EOG Resources (EOG) to assess and remediate a release that occurred at the EOG Resources, Ophelia Riser, Unit L, Section 26, Township 26 South, Range 33 East, Lea County, New Mexico (Site). The site coordinates are 32.016839°, -103.550998°. The site location is shown on Figures 1 and 2.

Background

According to the State of New Mexico C-141 Initial Report, the release was discovered on June 8, 2021, and released approximately 350 barrels of produced water due to a reuse water line that developed a hole. Approximately 25 barrels of produced water were recovered. The release occurred on a pipeline ROW and flowed onto a pasture, impacting an area measuring approximately 585' X 50'. The C-141 form is included in Appendix A.

Site Characterization

A site characterization was performed for the site and no 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. Additionally, the site is located in a low karst potential area. The nearest well is listed on the USGS National Water Information System is in section 27 approximately 0.52 miles from the site, and has a reported depth to groundwater of 80.17' below surface. Site characterization information is found in Appendix B.

Regulatory

A risk-based evaluation was performed for the site following 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

Tetra Tech

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

Tel 432.682.4559 Fax 432.682.3946 www.tetrattech.com



recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene, and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the site characterization, the proposed RRAL for TPH is 100 mg/kg (GRO + DRO + ORO). Additionally, based on the site characterization, the proposed RRAL for chlorides is 600 mg/kg.

Soil Assessment and Analytical Results

On July 28, 2021, Tetra Tech personnel were onsite to evaluate and sample the release area. A total of eight (8) auger holes (AH-1 through AH-8) were installed in the release footprint with depths ranging from surface to 4.5' below surface. Additionally, eight (8) horizontals were installed to horizontally delineate the spill footprint. Selected samples were submitted to the laboratory 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 C. The results of the sampling are summarized in Table 1. The sample locations are shown in Figure 3.

Referring to Table 1, none of the samples reported benzene, total BTEX, or TPH concentrations above the RRALs. However, the areas of auger holes (AH-3, AH-7, and AH-8) reported chloride concentrations above the 600 mg/kg threshold, with concentrations ranging from 755 mg/kg to 1,480 mg/kg, at depths ranging from surface to 4.5' below surface. Additionally, all horizontal samples reported chloride concentrations below the RRALs. However, vertical delineation was not found in the area of auger hole (AH-3).

Remediation and Reclamation Activities

Tetra Tech personnel were onsite August 16, 2021 through August 30, 2021, to supervise the remediation and collect confirmation samples. The impacted areas were excavated to depths ranging from 2.0' below surface and 6.0' below surface, as shown on Figure 4 and Table 2.

Confirmation bottom hole and sidewall samples were collected every 200 square feet, a total of 30 bottom hole samples (BH-1 through BH-27 and BH-1 (Road) through BH-3 (Road)) and 33 sidewall samples (SW-1 through SW-29 and SW-1 (Road) through SW-4 (Road)) were collected to ensure proper removal of the impacted soils. The samples were submitted to the laboratory to be analyzed for TPH method 8015 modified, BTEX method 8021B, and Chloride by EPA Method 300.0. The sampling results are summarized in Table 2. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The excavation depths, and sample locations are shown in Figure 4.

Referring to Table 2, all final confirmation samples collected showed benzene, total BTEX, TPH, and chloride concentrations below the RRALs.

Approximately 949 cubic yards of material was excavated and transported offsite for proper disposal. The areas were then backfilled with clean material to surface grade.



Conclusion

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

Respectfully submitted,
TETRA TECH

A handwritten signature in blue ink, appearing to read 'Brittany Long'.

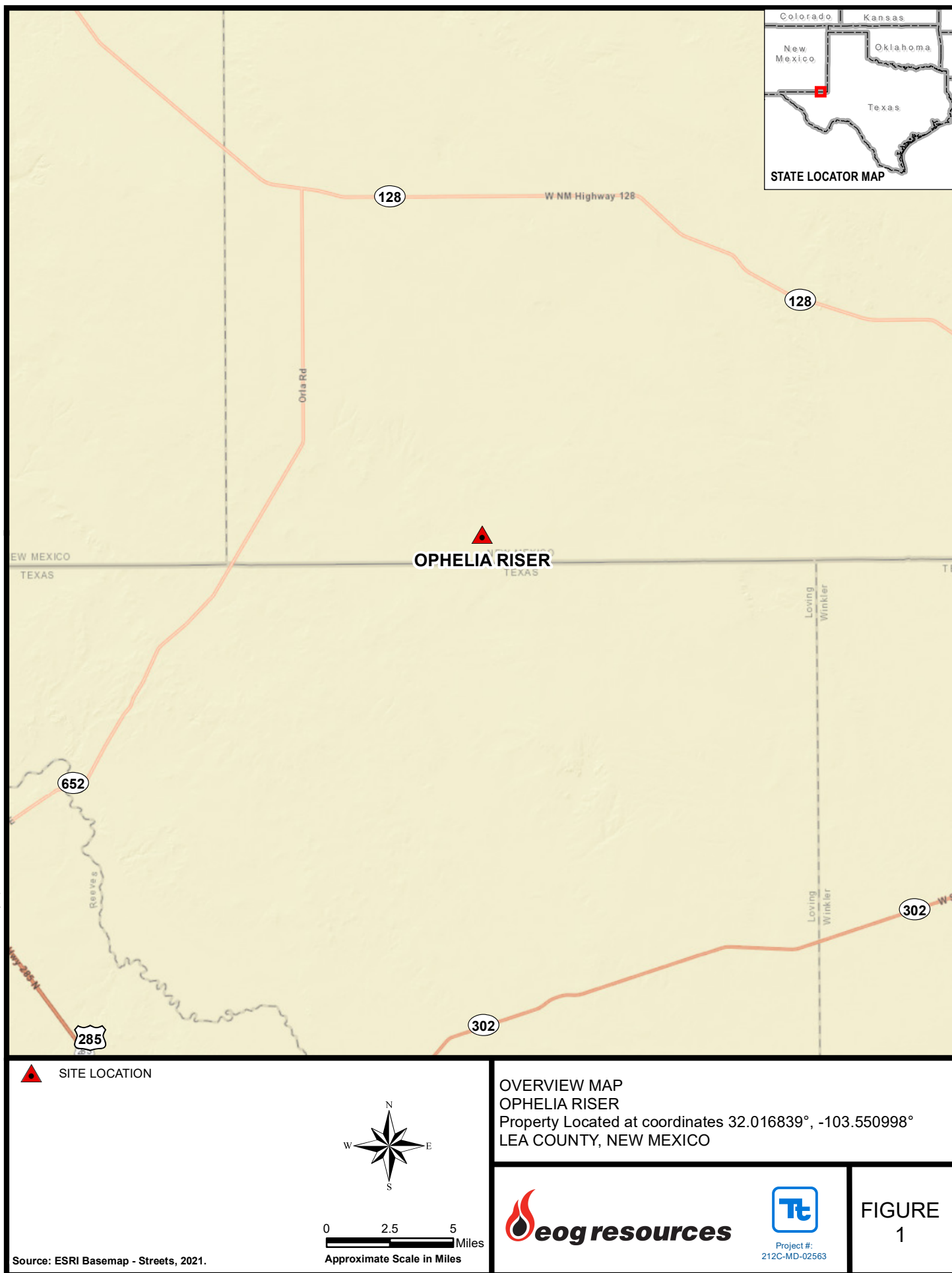
Brittany Long,
Project Manager

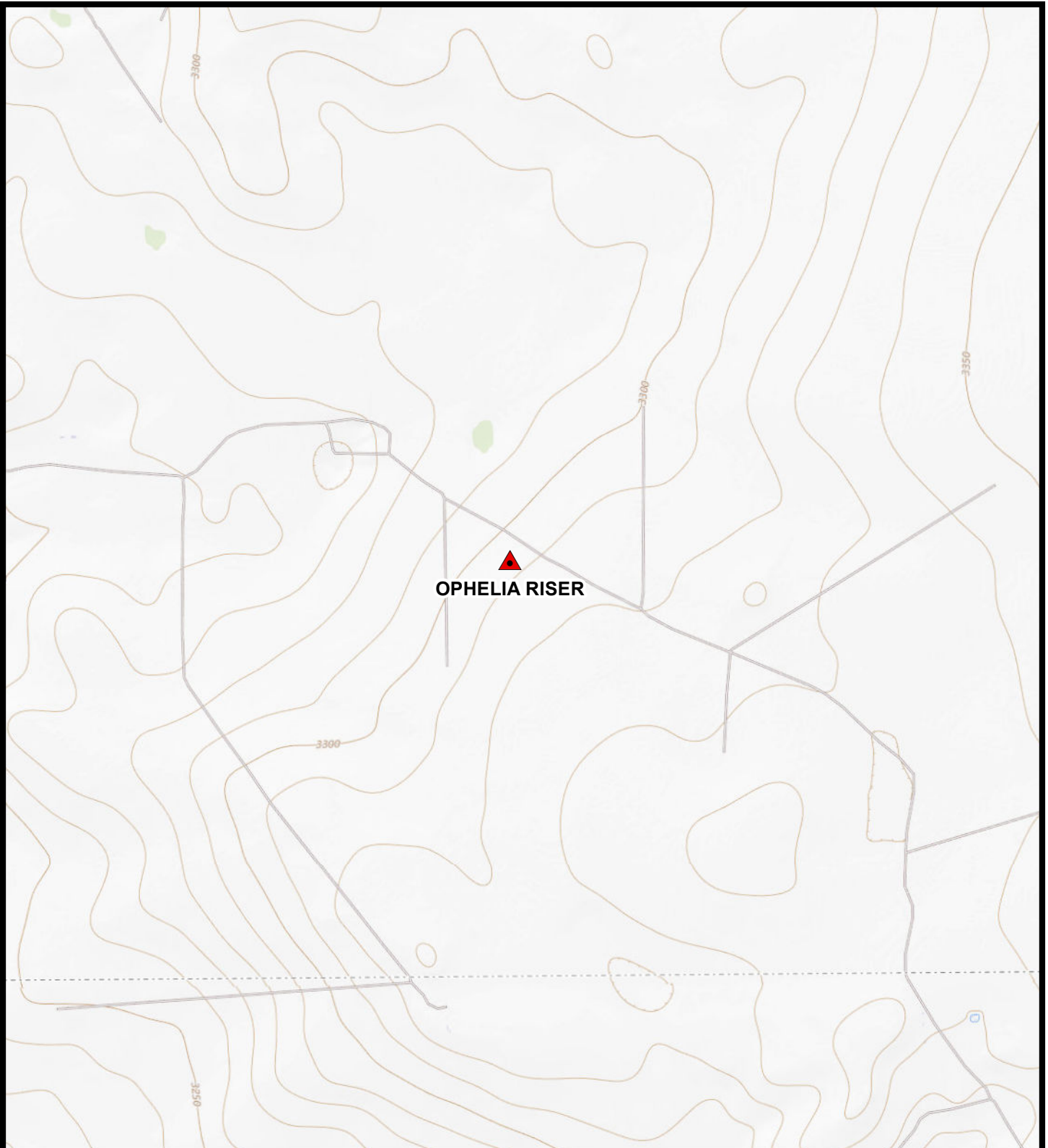
A handwritten signature in blue ink, appearing to read 'Clair Gonzales'.

Clair Gonzales, P.G.
Senior Project Manager



Figures





 SITE LOCATION



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

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

TOPOGRAPHIC MAP

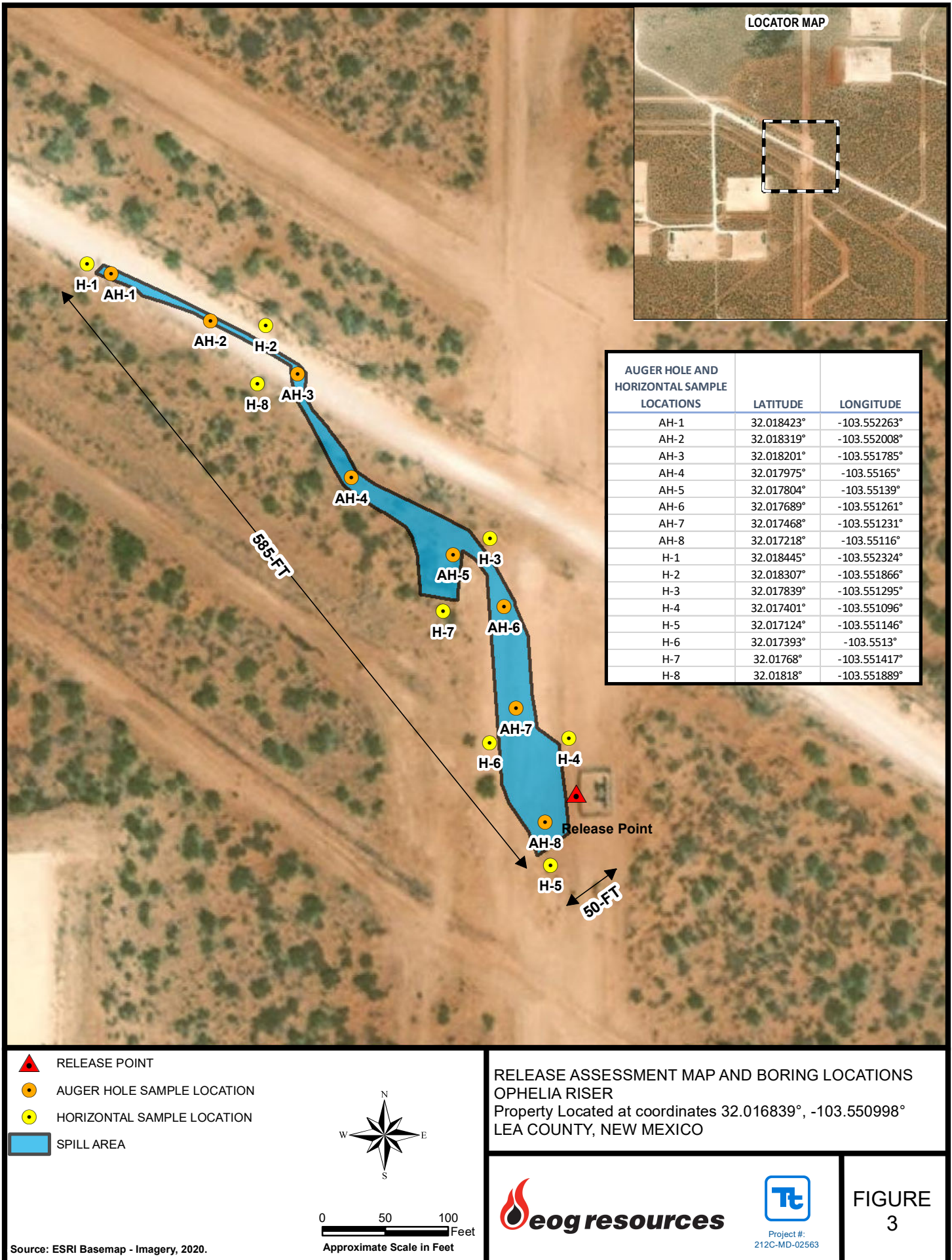
OPHELIA RISER

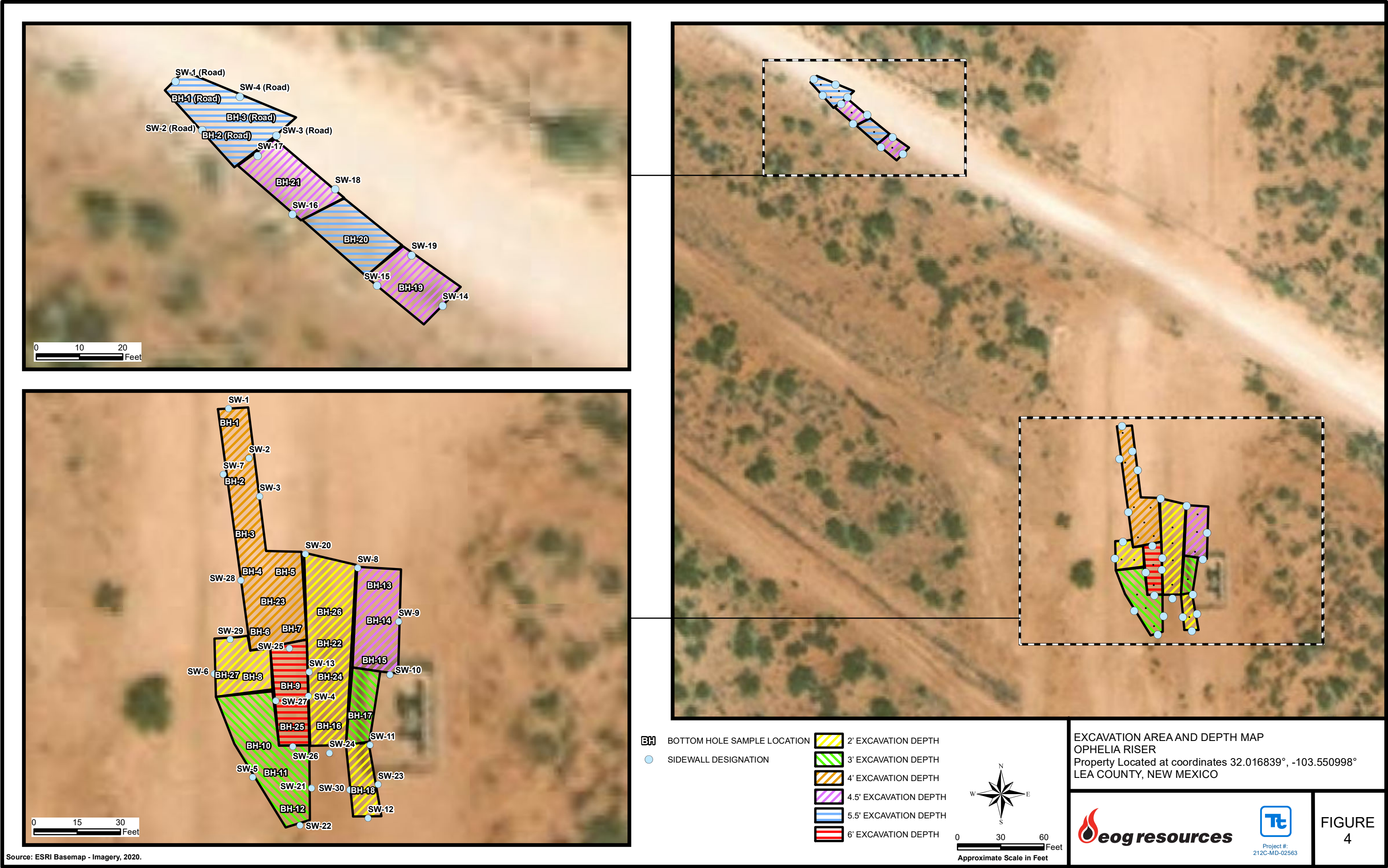
Property Located at coordinates 32.016839°, -103.550998°
LEA COUNTY, NEW MEXICO



Project #:
212C-MD-02563

FIGURE
2







Tables

Table 1
EOG Resources
Ophelia Riser Spill
Lea County, New Mexico

Sample ID	Sample Date	Excavation 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	7/28/2021	0-1	X	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	7.90
	7/28/2021	1-1.5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	7.22
	7/28/2021	2-2.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	12.0
	7/28/2021	3-3.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	34.7
	7/28/2021	4-4.5'	X	-	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	33.8
AH-2	7/28/2021	0-1	X	-	<49.7	<49.7	<49.7	<49.7	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	11.2
	7/28/2021	1-1.5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	10.4
	7/28/2021	2-2.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	12.2
	7/28/2021	3-3.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	64.1
	7/28/2021	4-4.5'	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	41.2
AH-3	7/28/2021	0-1	-	X	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	64.4
	7/28/2021	1-1.5	-	X	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	27.2
	7/28/2021	2-2.5	-	X	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	57.3
	7/28/2021	3-3.5	-	X	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	255
	7/28/2021	4-4.5'	-	X	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	1,020
AH-4	7/28/2021	0-1	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	11.4
	7/28/2021	1-1.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	12.0
	7/28/2021	2-2.5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	22.6
	7/28/2021	3-3.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	95.3
	7/28/2021	4-4.5'	X	-	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	161
AH-5	7/28/2021	0-1	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	8.95
	7/28/2021	1-1.5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	14.5
	7/28/2021	2-2.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	54.1
	7/28/2021	3-3.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	222
	7/28/2021	4-4.5'	X	-	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	210
AH-6	7/28/2021	0-1	X	-	<49.7	<49.7	<49.7	<49.7	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	8.65
	7/28/2021	1-1.5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	7.58
	7/28/2021	2-2.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	18.5
	7/28/2021	3-3.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	16.4
	7/28/2021	4-4.5'	X	-	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	16.0
AH-7	7/28/2021	0-1	-	X	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	38.8
	7/28/2021	1-1.5	-	X	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	755
	7/28/2021	2-2.5	-	X	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	1,460
	7/28/2021	3-3.5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	153
	7/28/2021	4-4.5'	X	-	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	36.0
AH-8	7/28/2021	0-1	-	X	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	86.7
	7/28/2021	1-1.5	-	X	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	1,460
	7/28/2021	2-2.5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	395
	7/28/2021	3-3.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	279
	7/28/2021	4-4.5'	X	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	51.3

Table 1
EOG Resources
Ophelia Riser Spill
Lea County, New Mexico

Sample ID	Sample Date	Excavtion Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total						
H-1	7/28/2021	0-0.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00199	0.00789	<0.00199	0.0174	0.0253	8.81
H-2	7/28/2021	0-0.5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	35.3
H-3	7/28/2021	0-0.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	45.2
H-4	7/28/2021	0-0.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	10.8
H-5	7/28/2021	0-0.5	X	-	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	8.38
H-6	7/28/2021	0-0.5	X	-	<49.7	<49.7	<49.7	<49.7	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	33.6
H-7	7/28/2021	0-0.5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00198	0.00360	<0.00198	<0.00397	<0.00397	7.66
H-8	7/28/2021	0-0.5	X	-	<50.0	<50.0	<50.0	<50.0	0.00264	<0.00198	0.00302	<0.00397	0.00894	19.2


(-) Not Analyzed
 Exceeds Thresholds

Table 2
EOG
Ophelia Riser Release
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	DRO	GRO	ORO	Total						
BH-1	8/27/2021	4.0'	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
BH-2	8/27/2021	4.0'	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
BH-3	8/27/2021	4.0'	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
BH-4	8/27/2021	4.0'	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
BH-5	8/27/2021	4.0'	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	<16.0
BH-6	8/27/2021	4.0'	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	144
BH-7	8/27/2021	4.0'	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	144
BH-8	8/25/2021	2.0'	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	96.0
BH-9	8/27/2021	6.0'	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
BH-10	8/27/2021	3.0'	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
BH-11	8/27/2021	3.5'	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	160
BH-12	8/27/2021	3.0'	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	176
BH-13	8/27/2021	4.5'	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	48.0
BH-14	8/27/2021	4.5'	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	48.0
BH-15	8/27/2021	4.5'	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
BH-16	8/25/2021	2.0'	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	288
BH-17	8/25/2021	3.0'	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	256
BH-18	8/25/2021	2.0'	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	80.0
BH-19	8/25/2021	4.5'	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	96.0
BH-20	8/25/2021	5.5'	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	464
BH-21	8/25/2021	4.5'	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	272
BH-22	8/25/2021	2.0'	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	128
BH-23	8/30/2021	4.0'	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	128

Table 2
EOG
Ophelia Riser Release
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	DRO	GRO	ORO	Total						
BH-24	8/30/2021	2.0'	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	96.0
BH-25	8/30/2021	6.0'	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
BH-26	8/30/2021	2.0'	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
BH-27	8/30/2021	2.0'	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	<16.0
SW-1	8/25/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	208
SW-2	8/25/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	304
SW-3	8/25/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	112
SW-4	8/27/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
SW-5	8/27/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
SW-6	8/27/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	16.0
SW-7	8/27/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	80.0
SW-8	8/25/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
SW-9	8/25/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
SW-10	8/25/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	48.0
SW-11	8/25/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	48.0
SW-12	8/25/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	16.0
SW-13	8/27/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
SW-14	8/25/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
SW-15	8/25/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	176
SW-16	8/25/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	80.0
SW-17	8/25/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
SW-18	8/25/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
SW-19	8/25/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	48.0
SW-20	8/30/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	<16.0
SW-21	8/30/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	<16.0
SW-22	8/30/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	144
SW-23	8/30/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	144

Table 2
EOG
Ophelia Riser Release
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	DRO	GRO	ORO	Total						
SW-24	8/30/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	128
SW-25	8/30/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	112
SW-26	8/30/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
SW-27	8/30/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
SW-28	8/30/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	16.0
SW-29	8/30/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	96.0
Road Area														
BH-1 (Road)	8/20/2021	5.0'	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	192
BH-2 (Road)	8/20/2021	5.0'	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32
BH-3 (Road)	8/20/2021	5.0'	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	160
SW-1 (Road)	8/20/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	112
SW-2 (Road)	8/20/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	528
SW-3 (Road)	8/20/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
SW-4 (Road)	8/20/2021	-	X	-	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	128

(-)

Not Analyzed



Photographic Documentation

EOG Resources
Ophelia Riser
Lea County, New Mexico



View of Remediation Activities – View Northwest



View of Remediation Activities – View South

EOG Resources
Ophelia Riser
Lea County, New Mexico



View of Remediation Activities – View North



View of Remediation Activities – View Northwest

EOG Resources
Ophelia Riser
Lea County, New Mexico



View of Remediation Activities – View South



View of Remediation Activities – View South



Appendix A

C-141 Document

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

State of New Mexico
Energy Minerals and Natural
Resources Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

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

Incident ID	NAPP2118258685
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party EOG Resources	OGRID 7377
Contact Name Todd Wells	Contact Telephone (432) 686-3613
Contact email Todd_Wells@eogresources.com	Incident # (assigned by OCD) NAPP2118258685
Contact mailing address 5509 Champions Drive Midland, TX 79706	

Location of Release Source

Latitude 32.016839° Longitude -103.550998°
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Ophelia Riser	Site Type Lay Flat Reuse Water Line
Date Release Discovered 6/8/21	API# (if applicable)

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

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name: Oliver Kiehne)

Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 350	Volume Recovered (bbls) 25
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: The lay flat reuse water line developed a hole at the connection at the Ophelia Riser. Approximately 350 bbls of produced water was released on the ROW and into the field with 25 bbls recovered.

Incident ID	NAPP2118258685
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? More than 25 bbls.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Email notification to the District 1 Spills Inbox on 6/15/21.	

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Todd Wells</u>	Title: <u>Environmental Specialist</u>
Signature: <u>Todd Wells</u>	Date: <u>7-1-21</u>
email: <u>Todd Wells@eogresources.com</u>	Telephone: <u>(432) 686-3613</u>
<u>OCD Only</u>	
Received by: <u>Ramona Marcus</u>	Date: <u>7/7/2021</u>

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	_____ (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input type="checkbox"/> 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?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input type="checkbox"/> No

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

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

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

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

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature: Todd Wells Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

Printed Name: _____ Title: _____

Signature: Todd Wells Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____



Appendix B

Site Characterization Documents



USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface


USGS Water Resources

Data Category: Groundwater

Geographic Area: New Mexico

GO

Click to hide News Bulletins

- Explore the *NEW* [USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.
- [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 =

- 320056103333501

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 320056103333501 26S.33E.27.21132

Lea County, New Mexico

Latitude 32°00'56", Longitude 103°33'35" NAD27

Land-surface elevation 3,273 feet above NAVD88

This well is completed in the Other aquifers (N9999OTHER) national aquifer.

This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) 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 measu
1970-12-07		D	62610		3195.49	NGVD29	1	Z		
1970-12-07		D	62611		3197.07	NAVD88	1	Z		
1970-12-07		D	72019	75.93			1	Z		
1976-01-08		D	62610		3195.65	NGVD29	1	Z		
1976-01-08		D	62611		3197.23	NAVD88	1	Z		
1976-01-08		D	72019	75.77			1	Z		
1981-03-25		D	62610		3191.25	NGVD29	1	Z		
1981-03-25		D	62611		3192.83	NAVD88	1	Z		
1981-03-25		D	72019	80.17			1	Z		

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

Section	Code	Description
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	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?>**Page Contact Information: [New Mexico Water Data Maintainer](#)

Page Last Modified: 2021-08-02 17:57:43 EDT

0.28 0.24 nadww01



New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
C	02270	1	1	2	27	26S	33E	636063	3543722

x

Driller License: 208 **Driller Company:** VAN NOY, W.L.

Driller Name: UNKNOWN

Drill Start Date: 08/28/1992	Drill Finish Date: 12/31/1910	Plug Date:
Log File Date: 10/28/1992	PCW Rev Date:	Source: Shallow
Pump Type:	Pipe Discharge Size:	Estimated Yield: 15 GPM
Casing Size: 8.00	Depth Well: 150 feet	Depth Water: 125 feet

x

Water Bearing Stratifications:	Top	Bottom	Description
	225	265	Sandstone/Gravel/Conglomerate

x

Casing Perforations:	Top	Bottom
	205	265

x

Meter Number: 16561	Meter Make: MASTERMETER
Meter Serial Number: 8112517	Meter Multiplier: 100.0000
Number of Dials: 6	Meter Type: Diversion
Unit of Measure: Gallons	Return Flow Percent:
Usage Multiplier:	Reading Frequency:

x

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount Online
04/01/2014	2014	132970	A	RPT		0
07/01/2014	2014	145195	A	RPT		3.752
10/01/2014	2014	153126	A	RPT		2.434
12/31/2014	2014	153126	A	RPT		0
02/01/2015	2015	153126	A	RPT		0
03/01/2015	2015	153126	A	RPT		0
04/01/2015	2015	153126	A	RPT		0
05/01/2015	2015	153126	A	RPT		0
05/31/2015	2015	153126	A	RPT		0
07/01/2015	2015	153126	A	RPT		0
08/01/2015	2015	153126	A	RPT		0
10/01/2015	2015	153216	A	RPT		0.028

x

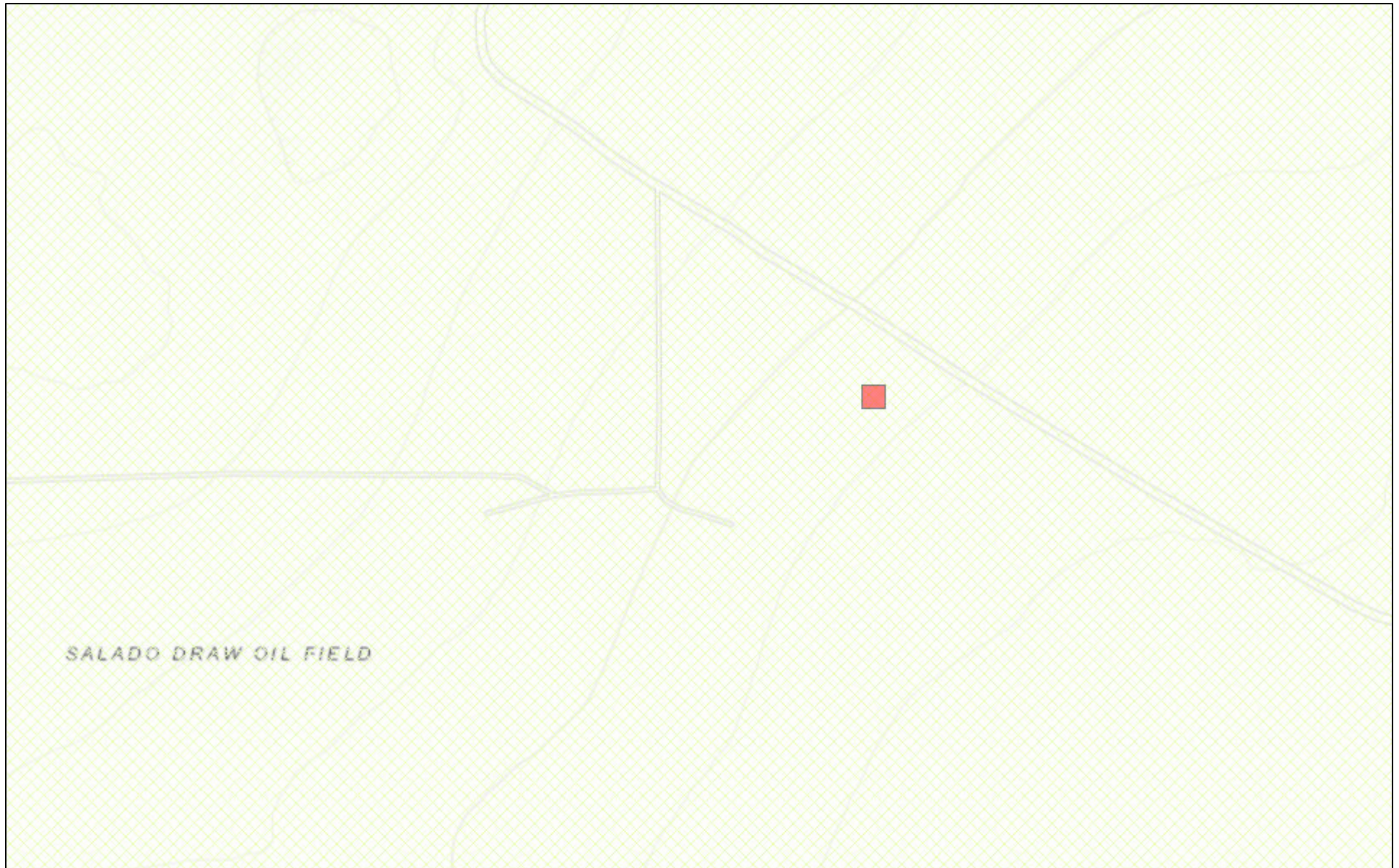
**YTD Meter Amounts:	Year	Amount
	2014	6.186
	2015	0.028

x

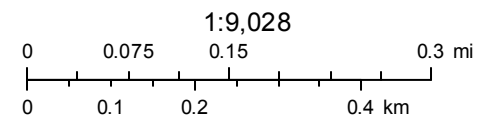
The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



New Mexico NFHL Data







August 2, 2021



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

Low Karst
OG Resources
Ophelia Riser Spill CU

Legend

-  High
-  Low
-  Medium
-  Ophelia Riser Spill CU


Ophelia Riser Spill CU

Water Well Data
Average Depth to Groundwater (ft)
EOG Resources
Ophelia Riser Spill
Lea County, New Mexico

25 South			32 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36
	290				

25 South			33 East		
6	5	4	3	172	2
7	118	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36
190					

25 South			34 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36
					260

26 South			32 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36
295					

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

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

88 New Mexico State Engineers Well Reports

105 USGS Well Reports

90 Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6)

Geology and Groundwater Resources of Eddy County, NM (Report 3)

34 NMOCD - Groundwater Data

123 Tetra Tech installed temporary wells and field water level

143 NMOCD Groundwater map well location



Appendix C

Laboratory Reports



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-4537-1

Laboratory Sample Delivery Group: Lea County, New Mexico
Client Project/Site: Ophelia Riser Spill

For:

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

Attn: Brittany Long

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

Authorized for release by:
8/2/2021 10:53:19 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: Ophelia Riser Spill

Laboratory Job ID: 880-4537-1
SDG: Lea 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	37
QC Sample Results	41
QC Association Summary	55
Lab Chronicle	64
Certification Summary	76
Method Summary	77
Sample Summary	78
Chain of Custody	79
Receipt Checklists	82

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

Definitions/Glossary

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery 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
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
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
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: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Job ID: 880-4537-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative
880-4537-1

Receipt

The samples were received on 7/30/2021 1:28 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 2.5°C

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: AH-2 (2-2.5') (880-4537-8). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following samples were outside control limits: AH-5 (1-1.5') (880-4537-22) and AH-5 (2-2.5') (880-4537-23). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Toluene The continuing calibration verification (CCV) associated with batch 880-5899 recovered above the upper control limit for Toluene The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-1 (0-1')

Lab Sample ID: 880-4537-1

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 13:58	07/30/21 21:01	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/30/21 13:58	07/30/21 21:01	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/30/21 13:58	07/30/21 21:01	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/30/21 13:58	07/30/21 21:01	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/30/21 13:58	07/30/21 21:01	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/30/21 13:58	07/30/21 21:01	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		07/30/21 13:58	07/30/21 21:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130	07/30/21 13:58	07/30/21 21:01	1
1,4-Difluorobenzene (Surr)	85		70 - 130	07/30/21 13:58	07/30/21 21:01	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		07/31/21 11:14	07/31/21 22:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/31/21 11:14	07/31/21 22:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/21 11:14	07/31/21 22:31	1
Total TPH	<50.0	U	50.0		mg/Kg		07/31/21 11:14	07/31/21 22:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	07/31/21 11:14	07/31/21 22:31	1
o-Terphenyl	99		70 - 130	07/31/21 11:14	07/31/21 22:31	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.90		5.00		mg/Kg			08/01/21 00:48	1

Client Sample ID: AH-1 (1-1.5')

Lab Sample ID: 880-4537-2

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 13:58	07/30/21 21:26	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/30/21 21:26	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/30/21 21:26	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/30/21 13:58	07/30/21 21:26	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/30/21 21:26	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/30/21 13:58	07/30/21 21:26	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		07/30/21 13:58	07/30/21 21:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	07/30/21 13:58	07/30/21 21:26	1
1,4-Difluorobenzene (Surr)	92		70 - 130	07/30/21 13:58	07/30/21 21:26	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		07/31/21 11:14	07/31/21 23:34	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-1 (1-1.5')

Lab Sample ID: 880-4537-2

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/31/21 11:14	07/31/21 23:34	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/31/21 11:14	07/31/21 23:34	1
Total TPH	<49.9	U	49.9		mg/Kg		07/31/21 11:14	07/31/21 23:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				07/31/21 11:14	07/31/21 23:34	1
o-Terphenyl	88		70 - 130				07/31/21 11:14	07/31/21 23:34	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.22		4.98		mg/Kg			08/01/21 01:04	1

Client Sample ID: AH-1 (2-2.5')

Lab Sample ID: 880-4537-3

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 13:58	07/30/21 21:51	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/30/21 13:58	07/30/21 21:51	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/30/21 13:58	07/30/21 21:51	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/30/21 13:58	07/30/21 21:51	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/30/21 13:58	07/30/21 21:51	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/30/21 13:58	07/30/21 21:51	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		07/30/21 13:58	07/30/21 21:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130				07/30/21 13:58	07/30/21 21:51	1
1,4-Difluorobenzene (Surr)	98		70 - 130				07/30/21 13:58	07/30/21 21:51	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	<50.0	U	50.0		mg/Kg		07/31/21 11:14	07/31/21 23:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/31/21 11:14	07/31/21 23:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/21 11:14	07/31/21 23:55	1
Total TPH	<50.0	U	50.0		mg/Kg		07/31/21 11:14	07/31/21 23:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130				07/31/21 11:14	07/31/21 23:55	1
o-Terphenyl	97		70 - 130				07/31/21 11:14	07/31/21 23:55	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.0		4.96		mg/Kg			08/01/21 01:09	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-1 (3-3.5')

Lab Sample ID: 880-4537-4

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 13:58	07/30/21 22:16	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/30/21 22:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/30/21 22:16	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/30/21 13:58	07/30/21 22:16	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/30/21 22:16	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/30/21 13:58	07/30/21 22:16	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		07/30/21 13:58	07/30/21 22:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	07/30/21 13:58	07/30/21 22:16	1
1,4-Difluorobenzene (Surr)	97		70 - 130	07/30/21 13:58	07/30/21 22:16	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		07/31/21 11:14	08/01/21 00:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/31/21 11:14	08/01/21 00:15	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/21 11:14	08/01/21 00:15	1
Total TPH	<50.0	U	50.0		mg/Kg		07/31/21 11:14	08/01/21 00:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130	07/31/21 11:14	08/01/21 00:15	1
o-Terphenyl	101		70 - 130	07/31/21 11:14	08/01/21 00:15	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	34.7		4.95		mg/Kg			08/01/21 01:15	1

Client Sample ID: AH-1 (4-4.5')

Lab Sample ID: 880-4537-5

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 13:58	07/30/21 22:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/30/21 22:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/30/21 22:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/30/21 13:58	07/30/21 22:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/30/21 22:41	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/30/21 13:58	07/30/21 22:41	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		07/30/21 13:58	07/30/21 22:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	07/30/21 13:58	07/30/21 22:41	1
1,4-Difluorobenzene (Surr)	103		70 - 130	07/30/21 13:58	07/30/21 22:41	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		07/31/21 11:14	08/01/21 00:36	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-1 (4-4.5')

Lab Sample ID: 880-4537-5

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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)	<49.8	U	49.8		mg/Kg		07/31/21 11:14	08/01/21 00:36	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		07/31/21 11:14	08/01/21 00:36	1
Total TPH	<49.8	U	49.8		mg/Kg		07/31/21 11:14	08/01/21 00:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130				07/31/21 11:14	08/01/21 00:36	1
o-Terphenyl	95		70 - 130				07/31/21 11:14	08/01/21 00:36	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	33.8		5.05		mg/Kg			08/01/21 01:20	1

Client Sample ID: AH-2 (0-1')

Lab Sample ID: 880-4537-6

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 13:58	07/30/21 23:06	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/30/21 23:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/30/21 23:06	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/30/21 13:58	07/30/21 23:06	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/30/21 23:06	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/30/21 13:58	07/30/21 23:06	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		07/30/21 13:58	07/30/21 23:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130				07/30/21 13:58	07/30/21 23:06	1
1,4-Difluorobenzene (Surr)	100		70 - 130				07/30/21 13:58	07/30/21 23:06	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	<49.7	U	49.7		mg/Kg		07/31/21 11:14	08/01/21 00:57	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		07/31/21 11:14	08/01/21 00:57	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		07/31/21 11:14	08/01/21 00:57	1
Total TPH	<49.7	U	49.7		mg/Kg		07/31/21 11:14	08/01/21 00:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130				07/31/21 11:14	08/01/21 00:57	1
o-Terphenyl	90		70 - 130				07/31/21 11:14	08/01/21 00:57	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.2		4.98		mg/Kg			08/01/21 01:36	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-2 (1-1.5')

Lab Sample ID: 880-4537-7

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 13:58	07/30/21 23:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/30/21 23:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/30/21 23:31	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/30/21 13:58	07/30/21 23:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/30/21 23:31	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/30/21 13:58	07/30/21 23:31	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		07/30/21 13:58	07/30/21 23:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130	07/30/21 13:58	07/30/21 23:31	1
1,4-Difluorobenzene (Surr)	101		70 - 130	07/30/21 13:58	07/30/21 23:31	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		07/31/21 11:14	08/01/21 01:17	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/31/21 11:14	08/01/21 01:17	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/31/21 11:14	08/01/21 01:17	1
Total TPH	<49.9	U	49.9		mg/Kg		07/31/21 11:14	08/01/21 01:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130	07/31/21 11:14	08/01/21 01:17	1
o-Terphenyl	96		70 - 130	07/31/21 11:14	08/01/21 01:17	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.4		5.00		mg/Kg			08/01/21 01:42	1

Client Sample ID: AH-2 (2-2.5')

Lab Sample ID: 880-4537-8

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 13:58	07/30/21 23:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/30/21 23:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/30/21 23:56	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		07/30/21 13:58	07/30/21 23:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/30/21 23:56	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		07/30/21 13:58	07/30/21 23:56	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		07/30/21 13:58	07/30/21 23:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	07/30/21 13:58	07/30/21 23:56	1
1,4-Difluorobenzene (Surr)	81		70 - 130	07/30/21 13:58	07/30/21 23:56	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		07/31/21 11:14	08/01/21 01:38	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-2 (2-2.5')

Lab Sample ID: 880-4537-8

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/31/21 11:14	08/01/21 01:38	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/21 11:14	08/01/21 01:38	1
Total TPH	<50.0	U	50.0		mg/Kg		07/31/21 11:14	08/01/21 01:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130				07/31/21 11:14	08/01/21 01:38	1
o-Terphenyl	91		70 - 130				07/31/21 11:14	08/01/21 01:38	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.2		4.95		mg/Kg			08/01/21 01:47	1

Client Sample ID: AH-2 (3-3.5')

Lab Sample ID: 880-4537-9

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 13:58	07/31/21 00:21	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/31/21 00:21	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/31/21 00:21	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/30/21 13:58	07/31/21 00:21	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/31/21 00:21	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/30/21 13:58	07/31/21 00:21	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		07/30/21 13:58	07/31/21 00:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130				07/30/21 13:58	07/31/21 00:21	1
1,4-Difluorobenzene (Surr)	97		70 - 130				07/30/21 13:58	07/31/21 00:21	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		07/31/21 11:14	08/01/21 01:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/31/21 11:14	08/01/21 01:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/21 11:14	08/01/21 01:59	1
Total TPH	<50.0	U	50.0		mg/Kg		07/31/21 11:14	08/01/21 01:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130				07/31/21 11:14	08/01/21 01:59	1
o-Terphenyl	99		70 - 130				07/31/21 11:14	08/01/21 01:59	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	64.1		5.04		mg/Kg			08/01/21 01:52	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-2 (4-4.5')

Lab Sample ID: 880-4537-10

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 13:58	07/31/21 00:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/31/21 00:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/31/21 00:46	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		07/30/21 13:58	07/31/21 00:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/31/21 00:46	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		07/30/21 13:58	07/31/21 00:46	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		07/30/21 13:58	07/31/21 00:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	07/30/21 13:58	07/31/21 00:46	1
1,4-Difluorobenzene (Surr)	100		70 - 130	07/30/21 13:58	07/31/21 00:46	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	<49.9	U	49.9		mg/Kg		07/31/21 11:14	08/01/21 02:20	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/31/21 11:14	08/01/21 02:20	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/31/21 11:14	08/01/21 02:20	1
Total TPH	<49.9	U	49.9		mg/Kg		07/31/21 11:14	08/01/21 02:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130	07/31/21 11:14	08/01/21 02:20	1
o-Terphenyl	100		70 - 130	07/31/21 11:14	08/01/21 02:20	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	41.2		4.98		mg/Kg			08/01/21 01:58	1

Client Sample ID: AH-3 (0-1')

Lab Sample ID: 880-4537-11

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 13:58	07/31/21 02:27	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/30/21 13:58	07/31/21 02:27	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/30/21 13:58	07/31/21 02:27	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		07/30/21 13:58	07/31/21 02:27	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/30/21 13:58	07/31/21 02:27	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		07/30/21 13:58	07/31/21 02:27	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		07/30/21 13:58	07/31/21 02:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130	07/30/21 13:58	07/31/21 02:27	1
1,4-Difluorobenzene (Surr)	82		70 - 130	07/30/21 13:58	07/31/21 02:27	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		07/31/21 11:14	08/01/21 03:01	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-3 (0-1')

Lab Sample ID: 880-4537-11

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/31/21 11:14	08/01/21 03:01	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/21 11:14	08/01/21 03:01	1
Total TPH	<50.0	U	50.0		mg/Kg		07/31/21 11:14	08/01/21 03:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				07/31/21 11:14	08/01/21 03:01	1
o-Terphenyl	109		70 - 130				07/31/21 11:14	08/01/21 03:01	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	64.4		4.95		mg/Kg			08/01/21 02:03	1

Client Sample ID: AH-3 (1-1.5')

Lab Sample ID: 880-4537-12

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 13:58	07/31/21 02:52	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/30/21 13:58	07/31/21 02:52	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/30/21 13:58	07/31/21 02:52	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		07/30/21 13:58	07/31/21 02:52	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/30/21 13:58	07/31/21 02:52	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		07/30/21 13:58	07/31/21 02:52	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		07/30/21 13:58	07/31/21 02:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130				07/30/21 13:58	07/31/21 02:52	1
1,4-Difluorobenzene (Surr)	98		70 - 130				07/30/21 13:58	07/31/21 02:52	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	<50.0	U	50.0		mg/Kg		07/31/21 11:14	08/01/21 03:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/31/21 11:14	08/01/21 03:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/21 11:14	08/01/21 03:22	1
Total TPH	<50.0	U	50.0		mg/Kg		07/31/21 11:14	08/01/21 03:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130				07/31/21 11:14	08/01/21 03:22	1
o-Terphenyl	98		70 - 130				07/31/21 11:14	08/01/21 03:22	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27.2		5.04		mg/Kg			08/01/21 02:19	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-3 (2-2.5')

Lab Sample ID: 880-4537-13

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 13:58	07/31/21 03:17	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/30/21 13:58	07/31/21 03:17	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/30/21 13:58	07/31/21 03:17	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/30/21 13:58	07/31/21 03:17	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/30/21 13:58	07/31/21 03:17	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/30/21 13:58	07/31/21 03:17	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		07/30/21 13:58	07/31/21 03:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	07/30/21 13:58	07/31/21 03:17	1
1,4-Difluorobenzene (Surr)	97		70 - 130	07/30/21 13:58	07/31/21 03:17	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		07/31/21 11:14	08/01/21 03:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/31/21 11:14	08/01/21 03:43	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/31/21 11:14	08/01/21 03:43	1
Total TPH	<49.9	U	49.9		mg/Kg		07/31/21 11:14	08/01/21 03:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	07/31/21 11:14	08/01/21 03:43	1
o-Terphenyl	101		70 - 130	07/31/21 11:14	08/01/21 03:43	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	57.3		5.02		mg/Kg			08/01/21 02:25	1

Client Sample ID: AH-3 (3-3.5')

Lab Sample ID: 880-4537-14

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 13:58	07/31/21 03:42	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/30/21 13:58	07/31/21 03:42	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/30/21 13:58	07/31/21 03:42	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/30/21 13:58	07/31/21 03:42	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/30/21 13:58	07/31/21 03:42	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/30/21 13:58	07/31/21 03:42	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		07/30/21 13:58	07/31/21 03:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	07/30/21 13:58	07/31/21 03:42	1
1,4-Difluorobenzene (Surr)	102		70 - 130	07/30/21 13:58	07/31/21 03:42	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		07/31/21 11:14	08/01/21 04:04	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-3 (3-3.5')

Lab Sample ID: 880-4537-14

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/31/21 11:14	08/01/21 04:04	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/31/21 11:14	08/01/21 04:04	1
Total TPH	<49.9	U	49.9		mg/Kg		07/31/21 11:14	08/01/21 04:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130				07/31/21 11:14	08/01/21 04:04	1
o-Terphenyl	99		70 - 130				07/31/21 11:14	08/01/21 04:04	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	255		4.99		mg/Kg			08/01/21 02:41	1

Client Sample ID: AH-3 (4-4.5')

Lab Sample ID: 880-4537-15

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 13:58	07/31/21 04:07	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/31/21 04:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/31/21 04:07	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/30/21 13:58	07/31/21 04:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/31/21 04:07	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/30/21 13:58	07/31/21 04:07	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		07/30/21 13:58	07/31/21 04:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130				07/30/21 13:58	07/31/21 04:07	1
1,4-Difluorobenzene (Surr)	97		70 - 130				07/30/21 13:58	07/31/21 04:07	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		07/31/21 11:14	08/01/21 04:24	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/31/21 11:14	08/01/21 04:24	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/31/21 11:14	08/01/21 04:24	1
Total TPH	<49.9	U	49.9		mg/Kg		07/31/21 11:14	08/01/21 04:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130				07/31/21 11:14	08/01/21 04:24	1
o-Terphenyl	100		70 - 130				07/31/21 11:14	08/01/21 04:24	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1020		5.00		mg/Kg			08/01/21 02:46	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-4 (0-1')

Lab Sample ID: 880-4537-16

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 13:58	07/31/21 04:32	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/31/21 04:32	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/31/21 04:32	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/30/21 13:58	07/31/21 04:32	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/31/21 04:32	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/30/21 13:58	07/31/21 04:32	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		07/30/21 13:58	07/31/21 04:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	07/30/21 13:58	07/31/21 04:32	1
1,4-Difluorobenzene (Surr)	97		70 - 130	07/30/21 13:58	07/31/21 04:32	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		07/31/21 11:14	08/01/21 04:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/31/21 11:14	08/01/21 04:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/21 11:14	08/01/21 04:45	1
Total TPH	<50.0	U	50.0		mg/Kg		07/31/21 11:14	08/01/21 04:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	07/31/21 11:14	08/01/21 04:45	1
o-Terphenyl	106		70 - 130	07/31/21 11:14	08/01/21 04:45	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.4		4.98		mg/Kg			08/01/21 02:52	1

Client Sample ID: AH-4 (1-1.5')

Lab Sample ID: 880-4537-17

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 13:58	07/31/21 04:57	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/30/21 13:58	07/31/21 04:57	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/30/21 13:58	07/31/21 04:57	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/30/21 13:58	07/31/21 04:57	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/30/21 13:58	07/31/21 04:57	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/30/21 13:58	07/31/21 04:57	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		07/30/21 13:58	07/31/21 04:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	07/30/21 13:58	07/31/21 04:57	1
1,4-Difluorobenzene (Surr)	98		70 - 130	07/30/21 13:58	07/31/21 04:57	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	<50.0	U	50.0		mg/Kg		07/31/21 11:14	08/01/21 05:06	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-4 (1-1.5')

Lab Sample ID: 880-4537-17

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/31/21 11:14	08/01/21 05:06	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/21 11:14	08/01/21 05:06	1
Total TPH	<50.0	U	50.0		mg/Kg		07/31/21 11:14	08/01/21 05:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130				07/31/21 11:14	08/01/21 05:06	1
o-Terphenyl	102		70 - 130				07/31/21 11:14	08/01/21 05:06	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.0		4.98		mg/Kg			08/01/21 02:57	1

Client Sample ID: AH-4 (2-2.5')

Lab Sample ID: 880-4537-18

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 13:58	07/31/21 05:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/31/21 05:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/31/21 05:23	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/30/21 13:58	07/31/21 05:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/31/21 05:23	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/30/21 13:58	07/31/21 05:23	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		07/30/21 13:58	07/31/21 05:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130				07/30/21 13:58	07/31/21 05:23	1
1,4-Difluorobenzene (Surr)	99		70 - 130				07/30/21 13:58	07/31/21 05:23	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		07/31/21 11:14	08/01/21 05:27	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/31/21 11:14	08/01/21 05:27	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/31/21 11:14	08/01/21 05:27	1
Total TPH	<49.9	U	49.9		mg/Kg		07/31/21 11:14	08/01/21 05:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				07/31/21 11:14	08/01/21 05:27	1
o-Terphenyl	103		70 - 130				07/31/21 11:14	08/01/21 05:27	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.6		4.97		mg/Kg			08/01/21 03:02	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-4 (3-3.5')

Lab Sample ID: 880-4537-19

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 13:58	07/31/21 05:48	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/31/21 05:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/31/21 05:48	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		07/30/21 13:58	07/31/21 05:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/31/21 05:48	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		07/30/21 13:58	07/31/21 05:48	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		07/30/21 13:58	07/31/21 05:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	07/30/21 13:58	07/31/21 05:48	1
1,4-Difluorobenzene (Surr)	102		70 - 130	07/30/21 13:58	07/31/21 05:48	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	<50.0	U	50.0		mg/Kg		07/31/21 11:14	08/01/21 05:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/31/21 11:14	08/01/21 05:48	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/21 11:14	08/01/21 05:48	1
Total TPH	<50.0	U	50.0		mg/Kg		07/31/21 11:14	08/01/21 05:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130	07/31/21 11:14	08/01/21 05:48	1
o-Terphenyl	97		70 - 130	07/31/21 11:14	08/01/21 05:48	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	95.3		4.95		mg/Kg			08/01/21 03:08	1

Client Sample ID: AH-4 (4-4.5')

Lab Sample ID: 880-4537-20

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 13:58	07/31/21 06:13	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/30/21 13:58	07/31/21 06:13	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/30/21 13:58	07/31/21 06:13	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		07/30/21 13:58	07/31/21 06:13	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/30/21 13:58	07/31/21 06:13	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		07/30/21 13:58	07/31/21 06:13	1
Total BTEX	<0.00404	U	0.00404		mg/Kg		07/30/21 13:58	07/31/21 06:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	07/30/21 13:58	07/31/21 06:13	1
1,4-Difluorobenzene (Surr)	97		70 - 130	07/30/21 13:58	07/31/21 06:13	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		07/31/21 11:14	08/01/21 06:08	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-4 (4-4.5')

Lab Sample ID: 880-4537-20

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/31/21 11:14	08/01/21 06:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/21 11:14	08/01/21 06:08	1
Total TPH	<50.0	U	50.0		mg/Kg		07/31/21 11:14	08/01/21 06:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130				07/31/21 11:14	08/01/21 06:08	1
o-Terphenyl	107		70 - 130				07/31/21 11:14	08/01/21 06:08	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	161		5.05		mg/Kg			08/01/21 03:13	1

Client Sample ID: AH-5 (0-1')

Lab Sample ID: 880-4537-21

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 14:01	07/31/21 13:24	1
Toluene	<0.00200	U F1	0.00200		mg/Kg		07/30/21 14:01	07/31/21 13:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:01	07/31/21 13:24	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		07/30/21 14:01	07/31/21 13:24	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:01	07/31/21 13:24	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		07/30/21 14:01	07/31/21 13:24	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		07/30/21 14:01	07/31/21 13:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130				07/30/21 14:01	07/31/21 13:24	1
1,4-Difluorobenzene (Surr)	79		70 - 130				07/30/21 14:01	07/31/21 13:24	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		07/31/21 11:31	07/31/21 22:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/31/21 11:31	07/31/21 22:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/21 11:31	07/31/21 22:31	1
Total TPH	<50.0	U	50.0		mg/Kg		07/31/21 11:31	07/31/21 22:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130				07/31/21 11:31	07/31/21 22:31	1
o-Terphenyl	106		70 - 130				07/31/21 11:31	07/31/21 22:31	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.95	F1	4.95		mg/Kg			08/01/21 03:56	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-5 (1-1.5')

Lab Sample ID: 880-4537-22

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 14:01	07/31/21 13:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:01	07/31/21 13:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:01	07/31/21 13:49	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/30/21 14:01	07/31/21 13:49	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:01	07/31/21 13:49	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/30/21 14:01	07/31/21 13:49	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		07/30/21 14:01	07/31/21 13:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		70 - 130	07/30/21 14:01	07/31/21 13:49	1
1,4-Difluorobenzene (Surr)	72		70 - 130	07/30/21 14:01	07/31/21 13:49	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		07/31/21 11:31	07/31/21 23:34	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/31/21 11:31	07/31/21 23:34	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/31/21 11:31	07/31/21 23:34	1
Total TPH	<49.9	U	49.9		mg/Kg		07/31/21 11:31	07/31/21 23:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	07/31/21 11:31	07/31/21 23:34	1
o-Terphenyl	99		70 - 130	07/31/21 11:31	07/31/21 23:34	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.5		4.98		mg/Kg			08/01/21 04:12	1

Client Sample ID: AH-5 (2-2.5')

Lab Sample ID: 880-4537-23

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 14:01	07/31/21 14:14	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/30/21 14:01	07/31/21 14:14	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/30/21 14:01	07/31/21 14:14	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/30/21 14:01	07/31/21 14:14	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/30/21 14:01	07/31/21 14:14	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/30/21 14:01	07/31/21 14:14	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		07/30/21 14:01	07/31/21 14:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	07/30/21 14:01	07/31/21 14:14	1
1,4-Difluorobenzene (Surr)	78		70 - 130	07/30/21 14:01	07/31/21 14:14	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		07/31/21 11:31	07/31/21 23:55	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-5 (2-2.5')

Lab Sample ID: 880-4537-23

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/31/21 11:31	07/31/21 23:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/21 11:31	07/31/21 23:55	1
Total TPH	<50.0	U	50.0		mg/Kg		07/31/21 11:31	07/31/21 23:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130				07/31/21 11:31	07/31/21 23:55	1
o-Terphenyl	103		70 - 130				07/31/21 11:31	07/31/21 23:55	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	54.1		5.04		mg/Kg			08/01/21 04:18	1

Client Sample ID: AH-5 (3-3.5')

Lab Sample ID: 880-4537-24

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 14:01	07/31/21 14:39	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:01	07/31/21 14:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:01	07/31/21 14:39	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/30/21 14:01	07/31/21 14:39	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:01	07/31/21 14:39	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/30/21 14:01	07/31/21 14:39	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		07/30/21 14:01	07/31/21 14:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130				07/30/21 14:01	07/31/21 14:39	1
1,4-Difluorobenzene (Surr)	96		70 - 130				07/30/21 14:01	07/31/21 14:39	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		07/31/21 11:31	08/01/21 00:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/31/21 11:31	08/01/21 00:15	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/21 11:31	08/01/21 00:15	1
Total TPH	<50.0	U	50.0		mg/Kg		07/31/21 11:31	08/01/21 00:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130				07/31/21 11:31	08/01/21 00:15	1
o-Terphenyl	113		70 - 130				07/31/21 11:31	08/01/21 00:15	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	222		4.99		mg/Kg			08/01/21 04:23	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-5 (4-4.5')

Lab Sample ID: 880-4537-25

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 14:01	07/31/21 15:04	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/30/21 14:01	07/31/21 15:04	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/30/21 14:01	07/31/21 15:04	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/30/21 14:01	07/31/21 15:04	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/30/21 14:01	07/31/21 15:04	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/30/21 14:01	07/31/21 15:04	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		07/30/21 14:01	07/31/21 15:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	07/30/21 14:01	07/31/21 15:04	1
1,4-Difluorobenzene (Surr)	101		70 - 130	07/30/21 14:01	07/31/21 15:04	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	<49.8	U	49.8		mg/Kg		07/31/21 11:31	08/01/21 00:36	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		07/31/21 11:31	08/01/21 00:36	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		07/31/21 11:31	08/01/21 00:36	1
Total TPH	<49.8	U	49.8		mg/Kg		07/31/21 11:31	08/01/21 00:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130	07/31/21 11:31	08/01/21 00:36	1
o-Terphenyl	94		70 - 130	07/31/21 11:31	08/01/21 00:36	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	210		4.97		mg/Kg			08/01/21 04:28	1

Client Sample ID: AH-6 (0-1')

Lab Sample ID: 880-4537-26

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 14:01	07/31/21 15:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:01	07/31/21 15:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:01	07/31/21 15:29	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		07/30/21 14:01	07/31/21 15:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:01	07/31/21 15:29	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		07/30/21 14:01	07/31/21 15:29	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		07/30/21 14:01	07/31/21 15:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130	07/30/21 14:01	07/31/21 15:29	1
1,4-Difluorobenzene (Surr)	105		70 - 130	07/30/21 14:01	07/31/21 15:29	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	<49.7	U	49.7		mg/Kg		07/31/21 11:31	08/01/21 00:57	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-6 (0-1')

Lab Sample ID: 880-4537-26

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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)	<49.7	U	49.7		mg/Kg		07/31/21 11:31	08/01/21 00:57	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		07/31/21 11:31	08/01/21 00:57	1
Total TPH	<49.7	U	49.7		mg/Kg		07/31/21 11:31	08/01/21 00:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130				07/31/21 11:31	08/01/21 00:57	1
o-Terphenyl	95		70 - 130				07/31/21 11:31	08/01/21 00:57	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.65		4.98		mg/Kg			08/01/21 04:45	1

Client Sample ID: AH-6 (1-1.5')

Lab Sample ID: 880-4537-27

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 14:01	07/31/21 15:54	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:01	07/31/21 15:54	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:01	07/31/21 15:54	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/30/21 14:01	07/31/21 15:54	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:01	07/31/21 15:54	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/30/21 14:01	07/31/21 15:54	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		07/30/21 14:01	07/31/21 15:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130				07/30/21 14:01	07/31/21 15:54	1
1,4-Difluorobenzene (Surr)	101		70 - 130				07/30/21 14:01	07/31/21 15:54	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	<49.9	U	49.9		mg/Kg		07/31/21 11:31	08/01/21 01:17	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/31/21 11:31	08/01/21 01:17	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/31/21 11:31	08/01/21 01:17	1
Total TPH	<49.9	U	49.9		mg/Kg		07/31/21 11:31	08/01/21 01:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130				07/31/21 11:31	08/01/21 01:17	1
o-Terphenyl	97		70 - 130				07/31/21 11:31	08/01/21 01:17	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.58		4.99		mg/Kg			08/01/21 04:50	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-6 (2-2.5')

Lab Sample ID: 880-4537-28

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 14:01	07/31/21 16:19	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/30/21 14:01	07/31/21 16:19	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/30/21 14:01	07/31/21 16:19	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/30/21 14:01	07/31/21 16:19	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/30/21 14:01	07/31/21 16:19	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/30/21 14:01	07/31/21 16:19	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		07/30/21 14:01	07/31/21 16:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	07/30/21 14:01	07/31/21 16:19	1
1,4-Difluorobenzene (Surr)	93		70 - 130	07/30/21 14:01	07/31/21 16:19	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	<50.0	U	50.0		mg/Kg		07/31/21 11:31	08/01/21 01:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/31/21 11:31	08/01/21 01:38	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/21 11:31	08/01/21 01:38	1
Total TPH	<50.0	U	50.0		mg/Kg		07/31/21 11:31	08/01/21 01:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	07/31/21 11:31	08/01/21 01:38	1
o-Terphenyl	101		70 - 130	07/31/21 11:31	08/01/21 01:38	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.5		5.00		mg/Kg			08/01/21 04:55	1

Client Sample ID: AH-6 (3-3.5')

Lab Sample ID: 880-4537-29

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 14:01	07/31/21 16:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:01	07/31/21 16:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:01	07/31/21 16:44	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/30/21 14:01	07/31/21 16:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:01	07/31/21 16:44	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/30/21 14:01	07/31/21 16:44	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		07/30/21 14:01	07/31/21 16:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130	07/30/21 14:01	07/31/21 16:44	1
1,4-Difluorobenzene (Surr)	103		70 - 130	07/30/21 14:01	07/31/21 16:44	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		07/31/21 11:31	08/01/21 01:59	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-6 (3-3.5')

Lab Sample ID: 880-4537-29

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/31/21 11:31	08/01/21 01:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/21 11:31	08/01/21 01:59	1
Total TPH	<50.0	U	50.0		mg/Kg		07/31/21 11:31	08/01/21 01:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				07/31/21 11:31	08/01/21 01:59	1
o-Terphenyl	104		70 - 130				07/31/21 11:31	08/01/21 01:59	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.4		5.00		mg/Kg			08/01/21 05:01	1

Client Sample ID: AH-6 (4-4.5')

Lab Sample ID: 880-4537-30

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 14:01	07/31/21 17:08	1
Toluene	<0.00198	U	0.00198		mg/Kg		07/30/21 14:01	07/31/21 17:08	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		07/30/21 14:01	07/31/21 17:08	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		07/30/21 14:01	07/31/21 17:08	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		07/30/21 14:01	07/31/21 17:08	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		07/30/21 14:01	07/31/21 17:08	1
Total BTEX	<0.00396	U	0.00396		mg/Kg		07/30/21 14:01	07/31/21 17:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130				07/30/21 14:01	07/31/21 17:08	1
1,4-Difluorobenzene (Surr)	103		70 - 130				07/30/21 14:01	07/31/21 17:08	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		07/31/21 11:31	08/01/21 02:20	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/31/21 11:31	08/01/21 02:20	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/31/21 11:31	08/01/21 02:20	1
Total TPH	<49.9	U	49.9		mg/Kg		07/31/21 11:31	08/01/21 02:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130				07/31/21 11:31	08/01/21 02:20	1
o-Terphenyl	122		70 - 130				07/31/21 11:31	08/01/21 02:20	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.0		5.04		mg/Kg			08/01/21 05:06	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-7 (0-1')

Lab Sample ID: 880-4537-31

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 14:01	07/31/21 18:49	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/30/21 14:01	07/31/21 18:49	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/30/21 14:01	07/31/21 18:49	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/30/21 14:01	07/31/21 18:49	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/30/21 14:01	07/31/21 18:49	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/30/21 14:01	07/31/21 18:49	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		07/30/21 14:01	07/31/21 18:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130	07/30/21 14:01	07/31/21 18:49	1
1,4-Difluorobenzene (Surr)	83		70 - 130	07/30/21 14:01	07/31/21 18:49	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		07/31/21 11:31	08/01/21 03:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/31/21 11:31	08/01/21 03:01	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/21 11:31	08/01/21 03:01	1
Total TPH	<50.0	U	50.0		mg/Kg		07/31/21 11:31	08/01/21 03:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	07/31/21 11:31	08/01/21 03:01	1
o-Terphenyl	112		70 - 130	07/31/21 11:31	08/01/21 03:01	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	38.8		5.00		mg/Kg			08/01/21 05:12	1

Client Sample ID: AH-7 (1-1.5')

Lab Sample ID: 880-4537-32

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 14:01	07/31/21 19:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:01	07/31/21 19:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:01	07/31/21 19:14	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/30/21 14:01	07/31/21 19:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:01	07/31/21 19:14	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/30/21 14:01	07/31/21 19:14	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		07/30/21 14:01	07/31/21 19:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	07/30/21 14:01	07/31/21 19:14	1
1,4-Difluorobenzene (Surr)	96		70 - 130	07/30/21 14:01	07/31/21 19:14	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		07/31/21 11:31	08/01/21 03:22	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-7 (1-1.5')

Lab Sample ID: 880-4537-32

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/31/21 11:31	08/01/21 03:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/21 11:31	08/01/21 03:22	1
Total TPH	<50.0	U	50.0		mg/Kg		07/31/21 11:31	08/01/21 03:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				07/31/21 11:31	08/01/21 03:22	1
o-Terphenyl	105		70 - 130				07/31/21 11:31	08/01/21 03:22	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	755		4.98		mg/Kg			08/01/21 05:28	1

Client Sample ID: AH-7 (2-2.5')

Lab Sample ID: 880-4537-33

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 14:01	07/31/21 19:39	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/30/21 14:01	07/31/21 19:39	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/30/21 14:01	07/31/21 19:39	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		07/30/21 14:01	07/31/21 19:39	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/30/21 14:01	07/31/21 19:39	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		07/30/21 14:01	07/31/21 19:39	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		07/30/21 14:01	07/31/21 19:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130				07/30/21 14:01	07/31/21 19:39	1
1,4-Difluorobenzene (Surr)	101		70 - 130				07/30/21 14:01	07/31/21 19:39	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		07/31/21 11:31	08/01/21 03:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/31/21 11:31	08/01/21 03:43	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/31/21 11:31	08/01/21 03:43	1
Total TPH	<49.9	U	49.9		mg/Kg		07/31/21 11:31	08/01/21 03:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130				07/31/21 11:31	08/01/21 03:43	1
o-Terphenyl	100		70 - 130				07/31/21 11:31	08/01/21 03:43	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1460		4.95		mg/Kg			08/01/21 05:33	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-7 (3-3.5')

Lab Sample ID: 880-4537-34

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		08/01/21 12:00	08/01/21 21:52	1
Toluene	<0.00198	U	0.00198		mg/Kg		08/01/21 12:00	08/01/21 21:52	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/01/21 12:00	08/01/21 21:52	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		08/01/21 12:00	08/01/21 21:52	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/01/21 12:00	08/01/21 21:52	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		08/01/21 12:00	08/01/21 21:52	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		08/01/21 12:00	08/01/21 21:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	08/01/21 12:00	08/01/21 21:52	1
1,4-Difluorobenzene (Surr)	92		70 - 130	08/01/21 12:00	08/01/21 21:52	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		07/31/21 11:31	08/01/21 04:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/31/21 11:31	08/01/21 04:04	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/31/21 11:31	08/01/21 04:04	1
Total TPH	<49.9	U	49.9		mg/Kg		07/31/21 11:31	08/01/21 04:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130	07/31/21 11:31	08/01/21 04:04	1
o-Terphenyl	101		70 - 130	07/31/21 11:31	08/01/21 04:04	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	153		5.04		mg/Kg			08/01/21 05:49	1

Client Sample ID: AH-7 (4-4.5')

Lab Sample ID: 880-4537-35

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 14:01	07/31/21 20:29	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/30/21 14:01	07/31/21 20:29	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/30/21 14:01	07/31/21 20:29	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/30/21 14:01	07/31/21 20:29	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/30/21 14:01	07/31/21 20:29	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/30/21 14:01	07/31/21 20:29	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		07/30/21 14:01	07/31/21 20:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	07/30/21 14:01	07/31/21 20:29	1
1,4-Difluorobenzene (Surr)	104		70 - 130	07/30/21 14:01	07/31/21 20:29	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	<49.9	U	49.9		mg/Kg		07/31/21 11:31	08/01/21 04:24	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-7 (4-4.5')

Lab Sample ID: 880-4537-35

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/31/21 11:31	08/01/21 04:24	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/31/21 11:31	08/01/21 04:24	1
Total TPH	<49.9	U	49.9		mg/Kg		07/31/21 11:31	08/01/21 04:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130				07/31/21 11:31	08/01/21 04:24	1
o-Terphenyl	109		70 - 130				07/31/21 11:31	08/01/21 04:24	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	36.0		5.02		mg/Kg			08/01/21 05:55	1

Client Sample ID: AH-8 (0-1')

Lab Sample ID: 880-4537-36

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 14:01	07/31/21 20:54	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/30/21 14:01	07/31/21 20:54	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/30/21 14:01	07/31/21 20:54	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/30/21 14:01	07/31/21 20:54	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/30/21 14:01	07/31/21 20:54	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/30/21 14:01	07/31/21 20:54	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		07/30/21 14:01	07/31/21 20:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130				07/30/21 14:01	07/31/21 20:54	1
1,4-Difluorobenzene (Surr)	101		70 - 130				07/30/21 14:01	07/31/21 20:54	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		07/31/21 11:31	08/01/21 04:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/31/21 11:31	08/01/21 04:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/21 11:31	08/01/21 04:45	1
Total TPH	<50.0	U	50.0		mg/Kg		07/31/21 11:31	08/01/21 04:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130				07/31/21 11:31	08/01/21 04:45	1
o-Terphenyl	99		70 - 130				07/31/21 11:31	08/01/21 04:45	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	86.7		4.99		mg/Kg			08/01/21 06:00	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-8 (1-1.5')

Lab Sample ID: 880-4537-37

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 14:01	07/31/21 21:18	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:01	07/31/21 21:18	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:01	07/31/21 21:18	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/30/21 14:01	07/31/21 21:18	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:01	07/31/21 21:18	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/30/21 14:01	07/31/21 21:18	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		07/30/21 14:01	07/31/21 21:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	07/30/21 14:01	07/31/21 21:18	1
1,4-Difluorobenzene (Surr)	103		70 - 130	07/30/21 14:01	07/31/21 21:18	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		07/31/21 11:31	08/01/21 05:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/31/21 11:31	08/01/21 05:06	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/21 11:31	08/01/21 05:06	1
Total TPH	<50.0	U	50.0		mg/Kg		07/31/21 11:31	08/01/21 05:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	07/31/21 11:31	08/01/21 05:06	1
o-Terphenyl	100		70 - 130	07/31/21 11:31	08/01/21 05:06	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1480		5.01		mg/Kg			08/01/21 06:05	1

Client Sample ID: AH-8 (2-2.5')

Lab Sample ID: 880-4537-38

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		08/01/21 12:00	08/01/21 22:13	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/01/21 12:00	08/01/21 22:13	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/01/21 12:00	08/01/21 22:13	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/01/21 12:00	08/01/21 22:13	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/01/21 12:00	08/01/21 22:13	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/01/21 12:00	08/01/21 22:13	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		08/01/21 12:00	08/01/21 22:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	08/01/21 12:00	08/01/21 22:13	1
1,4-Difluorobenzene (Surr)	108		70 - 130	08/01/21 12:00	08/01/21 22:13	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	<49.9	U	49.9		mg/Kg		07/31/21 11:31	08/01/21 05:27	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-8 (2-2.5')

Lab Sample ID: 880-4537-38

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/31/21 11:31	08/01/21 05:27	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/31/21 11:31	08/01/21 05:27	1
Total TPH	<49.9	U	49.9		mg/Kg		07/31/21 11:31	08/01/21 05:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				07/31/21 11:31	08/01/21 05:27	1
o-Terphenyl	99		70 - 130				07/31/21 11:31	08/01/21 05:27	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	395		4.98		mg/Kg			08/01/21 06:11	1

Client Sample ID: AH-8 (3-3.5')

Lab Sample ID: 880-4537-39

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 14:01	07/31/21 22:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:01	07/31/21 22:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:01	07/31/21 22:08	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/30/21 14:01	07/31/21 22:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:01	07/31/21 22:08	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/30/21 14:01	07/31/21 22:08	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		07/30/21 14:01	07/31/21 22:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130				07/30/21 14:01	07/31/21 22:08	1
1,4-Difluorobenzene (Surr)	105		70 - 130				07/30/21 14:01	07/31/21 22:08	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		07/31/21 11:31	08/01/21 05:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/31/21 11:31	08/01/21 05:48	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/21 11:31	08/01/21 05:48	1
Total TPH	<50.0	U	50.0		mg/Kg		07/31/21 11:31	08/01/21 05:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				07/31/21 11:31	08/01/21 05:48	1
o-Terphenyl	100		70 - 130				07/31/21 11:31	08/01/21 05:48	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	279		4.95		mg/Kg			08/01/21 06:16	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-8 (4-4.5')

Lab Sample ID: 880-4537-40

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 14:01	07/31/21 22:33	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/30/21 14:01	07/31/21 22:33	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/30/21 14:01	07/31/21 22:33	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/30/21 14:01	07/31/21 22:33	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/30/21 14:01	07/31/21 22:33	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/30/21 14:01	07/31/21 22:33	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		07/30/21 14:01	07/31/21 22:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	07/30/21 14:01	07/31/21 22:33	1
1,4-Difluorobenzene (Surr)	101		70 - 130	07/30/21 14:01	07/31/21 22:33	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		07/31/21 11:31	08/01/21 06:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/31/21 11:31	08/01/21 06:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/21 11:31	08/01/21 06:08	1
Total TPH	<50.0	U	50.0		mg/Kg		07/31/21 11:31	08/01/21 06:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130	07/31/21 11:31	08/01/21 06:08	1
o-Terphenyl	96		70 - 130	07/31/21 11:31	08/01/21 06:08	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	51.3		4.95		mg/Kg			08/01/21 06:22	1

Client Sample ID: H-1

Lab Sample ID: 880-4537-41

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 14:15	07/31/21 22:26	1
Toluene	0.00789		0.00199		mg/Kg		07/30/21 14:15	07/31/21 22:26	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/30/21 14:15	07/31/21 22:26	1
m-Xylene & p-Xylene	0.0142		0.00398		mg/Kg		07/30/21 14:15	07/31/21 22:26	1
o-Xylene	0.00317		0.00199		mg/Kg		07/30/21 14:15	07/31/21 22:26	1
Xylenes, Total	0.0174		0.00398		mg/Kg		07/30/21 14:15	07/31/21 22:26	1
Total BTEX	0.0253		0.00398		mg/Kg		07/30/21 14:15	07/31/21 22:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	07/30/21 14:15	07/31/21 22:26	1
1,4-Difluorobenzene (Surr)	112		70 - 130	07/30/21 14:15	07/31/21 22:26	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		07/31/21 11:55	08/01/21 07:53	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: H-1

Lab Sample ID: 880-4537-41

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/31/21 11:55	08/01/21 07:53	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/21 11:55	08/01/21 07:53	1
Total TPH	<50.0	U	50.0		mg/Kg		07/31/21 11:55	08/01/21 07:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130				07/31/21 11:55	08/01/21 07:53	1
o-Terphenyl	90		70 - 130				07/31/21 11:55	08/01/21 07:53	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.81		4.99		mg/Kg			07/31/21 15:21	1

Client Sample ID: H-2

Lab Sample ID: 880-4537-42

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 14:15	07/31/21 22:46	1
Toluene	<0.00198	U	0.00198		mg/Kg		07/30/21 14:15	07/31/21 22:46	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		07/30/21 14:15	07/31/21 22:46	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		07/30/21 14:15	07/31/21 22:46	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		07/30/21 14:15	07/31/21 22:46	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		07/30/21 14:15	07/31/21 22:46	1
Total BTEX	<0.00396	U	0.00396		mg/Kg		07/30/21 14:15	07/31/21 22:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130				07/30/21 14:15	07/31/21 22:46	1
1,4-Difluorobenzene (Surr)	94		70 - 130				07/30/21 14:15	07/31/21 22:46	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	<49.9	U	49.9		mg/Kg		07/31/21 11:55	08/01/21 09:07	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/31/21 11:55	08/01/21 09:07	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/31/21 11:55	08/01/21 09:07	1
Total TPH	<49.9	U	49.9		mg/Kg		07/31/21 11:55	08/01/21 09:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130				07/31/21 11:55	08/01/21 09:07	1
o-Terphenyl	88		70 - 130				07/31/21 11:55	08/01/21 09:07	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	35.3		5.04		mg/Kg			07/31/21 15:38	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: H-3

Lab Sample ID: 880-4537-43

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 14:15	07/31/21 23:07	1
Toluene	<0.00198	U	0.00198		mg/Kg		07/30/21 14:15	07/31/21 23:07	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		07/30/21 14:15	07/31/21 23:07	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		07/30/21 14:15	07/31/21 23:07	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		07/30/21 14:15	07/31/21 23:07	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		07/30/21 14:15	07/31/21 23:07	1
Total BTEX	<0.00396	U	0.00396		mg/Kg		07/30/21 14:15	07/31/21 23:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	07/30/21 14:15	07/31/21 23:07	1
1,4-Difluorobenzene (Surr)	99		70 - 130	07/30/21 14:15	07/31/21 23:07	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		07/31/21 11:55	08/01/21 09:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/31/21 11:55	08/01/21 09:28	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/21 11:55	08/01/21 09:28	1
Total TPH	<50.0	U	50.0		mg/Kg		07/31/21 11:55	08/01/21 09:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130	07/31/21 11:55	08/01/21 09:28	1
o-Terphenyl	98		70 - 130	07/31/21 11:55	08/01/21 09:28	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	45.2		4.98		mg/Kg			07/31/21 15:43	1

Client Sample ID: H-4

Lab Sample ID: 880-4537-44

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 14:15	07/31/21 23:28	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/30/21 14:15	07/31/21 23:28	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/30/21 14:15	07/31/21 23:28	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/30/21 14:15	07/31/21 23:28	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/30/21 14:15	07/31/21 23:28	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/30/21 14:15	07/31/21 23:28	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		07/30/21 14:15	07/31/21 23:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	07/30/21 14:15	07/31/21 23:28	1
1,4-Difluorobenzene (Surr)	101		70 - 130	07/30/21 14:15	07/31/21 23:28	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		07/31/21 11:55	08/01/21 09:49	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: H-4

Lab Sample ID: 880-4537-44

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/31/21 11:55	08/01/21 09:49	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/21 11:55	08/01/21 09:49	1
Total TPH	<50.0	U	50.0		mg/Kg		07/31/21 11:55	08/01/21 09:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130				07/31/21 11:55	08/01/21 09:49	1
o-Terphenyl	96		70 - 130				07/31/21 11:55	08/01/21 09:49	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.8		4.95		mg/Kg			07/31/21 15:49	1

Client Sample ID: H-5

Lab Sample ID: 880-4537-45

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 14:15	07/31/21 23:48	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:15	07/31/21 23:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:15	07/31/21 23:48	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/30/21 14:15	07/31/21 23:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:15	07/31/21 23:48	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/30/21 14:15	07/31/21 23:48	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		07/30/21 14:15	07/31/21 23:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130				07/30/21 14:15	07/31/21 23:48	1
1,4-Difluorobenzene (Surr)	100		70 - 130				07/30/21 14:15	07/31/21 23:48	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	<49.8	U	49.8		mg/Kg		07/31/21 11:55	08/01/21 10:10	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		07/31/21 11:55	08/01/21 10:10	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		07/31/21 11:55	08/01/21 10:10	1
Total TPH	<49.8	U	49.8		mg/Kg		07/31/21 11:55	08/01/21 10:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130				07/31/21 11:55	08/01/21 10:10	1
o-Terphenyl	93		70 - 130				07/31/21 11:55	08/01/21 10:10	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.38		5.05		mg/Kg			07/31/21 15:54	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: H-6

Lab Sample ID: 880-4537-46

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 14:15	08/01/21 00:09	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/30/21 14:15	08/01/21 00:09	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/30/21 14:15	08/01/21 00:09	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/30/21 14:15	08/01/21 00:09	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/30/21 14:15	08/01/21 00:09	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/30/21 14:15	08/01/21 00:09	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		07/30/21 14:15	08/01/21 00:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	07/30/21 14:15	08/01/21 00:09	1
1,4-Difluorobenzene (Surr)	106		70 - 130	07/30/21 14:15	08/01/21 00:09	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	<49.7	U	49.7		mg/Kg		07/31/21 11:55	08/01/21 10:31	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		07/31/21 11:55	08/01/21 10:31	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		07/31/21 11:55	08/01/21 10:31	1
Total TPH	<49.7	U	49.7		mg/Kg		07/31/21 11:55	08/01/21 10:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130	07/31/21 11:55	08/01/21 10:31	1
o-Terphenyl	99		70 - 130	07/31/21 11:55	08/01/21 10:31	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	33.6		4.98		mg/Kg			07/31/21 16:10	1

Client Sample ID: H-7

Lab Sample ID: 880-4537-47

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/30/21 14:15	08/01/21 00:30	1
Toluene	0.00360		0.00198		mg/Kg		07/30/21 14:15	08/01/21 00:30	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		07/30/21 14:15	08/01/21 00:30	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		07/30/21 14:15	08/01/21 00:30	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		07/30/21 14:15	08/01/21 00:30	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		07/30/21 14:15	08/01/21 00:30	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		07/30/21 14:15	08/01/21 00:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	07/30/21 14:15	08/01/21 00:30	1
1,4-Difluorobenzene (Surr)	100		70 - 130	07/30/21 14:15	08/01/21 00:30	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		07/31/21 11:55	08/01/21 10:53	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: H-7

Lab Sample ID: 880-4537-47

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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		07/31/21 11:55	08/01/21 10:53	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/31/21 11:55	08/01/21 10:53	1
Total TPH	<49.9	U	49.9		mg/Kg		07/31/21 11:55	08/01/21 10:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	78		70 - 130				07/31/21 11:55	08/01/21 10:53	1
o-Terphenyl	82		70 - 130				07/31/21 11:55	08/01/21 10:53	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.66		4.97		mg/Kg			07/31/21 16:16	1

Client Sample ID: H-8

Lab Sample ID: 880-4537-48

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00264		0.00198		mg/Kg		07/30/21 14:15	08/01/21 00:50	1
Toluene	<0.00198	U	0.00198		mg/Kg		07/30/21 14:15	08/01/21 00:50	1
Ethylbenzene	0.00302		0.00198		mg/Kg		07/30/21 14:15	08/01/21 00:50	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		07/30/21 14:15	08/01/21 00:50	1
o-Xylene	0.00328		0.00198		mg/Kg		07/30/21 14:15	08/01/21 00:50	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		07/30/21 14:15	08/01/21 00:50	1
Total BTEX	0.00894		0.00397		mg/Kg		07/30/21 14:15	08/01/21 00:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130				07/30/21 14:15	08/01/21 00:50	1
1,4-Difluorobenzene (Surr)	106		70 - 130				07/30/21 14:15	08/01/21 00:50	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		07/31/21 11:55	08/01/21 11:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/31/21 11:55	08/01/21 11:14	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/21 11:55	08/01/21 11:14	1
Total TPH	<50.0	U	50.0		mg/Kg		07/31/21 11:55	08/01/21 11:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130				07/31/21 11:55	08/01/21 11:14	1
o-Terphenyl	89		70 - 130				07/31/21 11:55	08/01/21 11:14	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19.2		4.95		mg/Kg			07/31/21 16:21	1

Eurofins Xenco, Midland

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
880-4522-A-7-A MS	Matrix Spike	111	106
880-4522-A-7-B MSD	Matrix Spike Duplicate	105	101
880-4537-1	AH-1 (0-1')	128	85
880-4537-1 MS	AH-1 (0-1')	99	107
880-4537-1 MSD	AH-1 (0-1')	103	113
880-4537-2	AH-1 (1-1.5')	102	92
880-4537-3	AH-1 (2-2.5')	104	98
880-4537-4	AH-1 (3-3.5')	102	97
880-4537-5	AH-1 (4-4.5')	112	103
880-4537-6	AH-2 (0-1')	108	100
880-4537-7	AH-2 (1-1.5')	119	101
880-4537-8	AH-2 (2-2.5')	112	81
880-4537-9	AH-2 (3-3.5')	101	97
880-4537-10	AH-2 (4-4.5')	102	100
880-4537-11	AH-3 (0-1')	120	82
880-4537-12	AH-3 (1-1.5')	114	98
880-4537-13	AH-3 (2-2.5')	104	97
880-4537-14	AH-3 (3-3.5')	108	102
880-4537-15	AH-3 (4-4.5')	106	97
880-4537-16	AH-4 (0-1')	100	97
880-4537-17	AH-4 (1-1.5')	107	98
880-4537-18	AH-4 (2-2.5')	111	99
880-4537-19	AH-4 (3-3.5')	114	102
880-4537-20	AH-4 (4-4.5')	105	97
880-4537-21	AH-5 (0-1')	127	79
880-4537-21 MS	AH-5 (0-1')	100	102
880-4537-21 MSD	AH-5 (0-1')	106	101
880-4537-22	AH-5 (1-1.5')	80	72
880-4537-23	AH-5 (2-2.5')	109	78
880-4537-24	AH-5 (3-3.5')	108	96
880-4537-25	AH-5 (4-4.5')	108	101
880-4537-26	AH-6 (0-1')	119	105
880-4537-27	AH-6 (1-1.5')	111	101
880-4537-28	AH-6 (2-2.5')	104	93
880-4537-29	AH-6 (3-3.5')	124	103
880-4537-30	AH-6 (4-4.5')	116	103
880-4537-31	AH-7 (0-1')	131 S1+	83
880-4537-32	AH-7 (1-1.5')	109	96
880-4537-33	AH-7 (2-2.5')	117	101
880-4537-34	AH-7 (3-3.5')	104	92
880-4537-35	AH-7 (4-4.5')	117	104
880-4537-36	AH-8 (0-1')	109	101
880-4537-37	AH-8 (1-1.5')	114	103
880-4537-38	AH-8 (2-2.5')	113	108
880-4537-39	AH-8 (3-3.5')	122	105
880-4537-40	AH-8 (4-4.5')	111	101
880-4537-41	H-1	102	112
880-4537-42	H-2	102	94
880-4537-43	H-3	113	99

Eurofins Xenco, Midland

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-4537-44	H-4	118	101
880-4537-45	H-5	104	100
880-4537-46	H-6	108	106
880-4537-47	H-7	106	100
880-4537-48	H-8	119	106
LCS 880-5878/1-A	Lab Control Sample	89	90
LCS 880-5884/1-A	Lab Control Sample	105	101
LCS 880-5889/1-A	Lab Control Sample	102	104
LCS 880-5901/1-A	Lab Control Sample	103	99
LCSD 880-5878/2-A	Lab Control Sample Dup	93	97
LCSD 880-5884/2-A	Lab Control Sample Dup	103	105
LCSD 880-5889/2-A	Lab Control Sample Dup	98	104
LCSD 880-5901/2-A	Lab Control Sample Dup	100	101
MB 880-5826/5-A	Method Blank	99	98
MB 880-5878/5-A	Method Blank	98	84
MB 880-5884/5-A	Method Blank	70	80
MB 880-5889/5-A	Method Blank	72	81
MB 880-5900/5-A	Method Blank	111	86
MB 880-5901/5-A	Method Blank	100	87
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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
880-4537-34 MS	AH-7 (3-3.5')		
880-4537-34 MSD	AH-7 (3-3.5')		
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)
880-4537-1	AH-1 (0-1')	95	99
880-4537-1 MS	AH-1 (0-1')	79	75
880-4537-1 MSD	AH-1 (0-1')	85	81
880-4537-2	AH-1 (1-1.5')	88	88
880-4537-3	AH-1 (2-2.5')	93	97
880-4537-4	AH-1 (3-3.5')	92	101
880-4537-5	AH-1 (4-4.5')	89	95
880-4537-6	AH-2 (0-1')	85	90
880-4537-7	AH-2 (1-1.5')	89	96

Eurofins Xenco, Midland

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea 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)
880-4537-8	AH-2 (2-2.5')	86	91
880-4537-9	AH-2 (3-3.5')	90	99
880-4537-10	AH-2 (4-4.5')	91	100
880-4537-11	AH-3 (0-1')	99	109
880-4537-12	AH-3 (1-1.5')	89	98
880-4537-13	AH-3 (2-2.5')	93	101
880-4537-14	AH-3 (3-3.5')	89	99
880-4537-15	AH-3 (4-4.5')	90	100
880-4537-16	AH-4 (0-1')	94	106
880-4537-17	AH-4 (1-1.5')	90	102
880-4537-18	AH-4 (2-2.5')	91	103
880-4537-19	AH-4 (3-3.5')	89	97
880-4537-20	AH-4 (4-4.5')	94	107
880-4537-21	AH-5 (0-1')	101	106
880-4537-21 MS	AH-5 (0-1')	92	85
880-4537-21 MSD	AH-5 (0-1')	91	85
880-4537-22	AH-5 (1-1.5')	93	99
880-4537-23	AH-5 (2-2.5')	98	103
880-4537-24	AH-5 (3-3.5')	105	113
880-4537-25	AH-5 (4-4.5')	86	94
880-4537-26	AH-6 (0-1')	87	95
880-4537-27	AH-6 (1-1.5')	92	97
880-4537-28	AH-6 (2-2.5')	93	101
880-4537-29	AH-6 (3-3.5')	97	104
880-4537-30	AH-6 (4-4.5')	109	122
880-4537-31	AH-7 (0-1')	103	112
880-4537-32	AH-7 (1-1.5')	97	105
880-4537-33	AH-7 (2-2.5')	92	100
880-4537-34	AH-7 (3-3.5')	92	101
880-4537-35	AH-7 (4-4.5')	100	109
880-4537-36	AH-8 (0-1')	94	99
880-4537-37	AH-8 (1-1.5')	93	100
880-4537-38	AH-8 (2-2.5')	91	99
880-4537-39	AH-8 (3-3.5')	91	100
880-4537-40	AH-8 (4-4.5')	89	96
880-4537-41	H-1	83	90
880-4537-41 MS	H-1	90	91
880-4537-41 MSD	H-1	90	88
880-4537-42	H-2	83	88
880-4537-43	H-3	87	98
880-4537-44	H-4	85	96
880-4537-45	H-5	84	93
880-4537-46	H-6	88	99
880-4537-47	H-7	78	82
880-4537-48	H-8	83	89
LCS 880-5925/2-A	Lab Control Sample	100	102
LCS 880-5926/2-A	Lab Control Sample	102	101
LCS 880-5927/2-A	Lab Control Sample	107	116
LCSD 880-5925/3-A	Lab Control Sample Dup	101	103
LCSD 880-5926/3-A	Lab Control Sample Dup	112	115

Eurofins Xenco, Midland

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea 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)
LCSD 880-5927/3-A	Lab Control Sample Dup	105	116
MB 880-5925/1-A	Method Blank	103	116
MB 880-5926/1-A	Method Blank	101	114
MB 880-5927/1-A	Method Blank	110	128
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-5826/5-A

Matrix: Solid

Analysis Batch: 5862

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5826

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/30/21 08:00	07/31/21 05:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/30/21 08:00	07/31/21 05:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/30/21 08:00	07/31/21 05:53	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/30/21 08:00	07/31/21 05:53	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/30/21 08:00	07/31/21 05:53	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/30/21 08:00	07/31/21 05:53	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		07/30/21 08:00	07/31/21 05:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	07/30/21 08:00	07/31/21 05:53	1
1,4-Difluorobenzene (Surr)	98		70 - 130	07/30/21 08:00	07/31/21 05:53	1

Lab Sample ID: MB 880-5878/5-A

Matrix: Solid

Analysis Batch: 5862

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5878

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/30/21 11:46	07/31/21 16:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/30/21 11:46	07/31/21 16:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/30/21 11:46	07/31/21 16:53	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/30/21 11:46	07/31/21 16:53	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/30/21 11:46	07/31/21 16:53	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/30/21 11:46	07/31/21 16:53	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		07/30/21 11:46	07/31/21 16:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	07/30/21 11:46	07/31/21 16:53	1
1,4-Difluorobenzene (Surr)	84		70 - 130	07/30/21 11:46	07/31/21 16:53	1

Lab Sample ID: LCS 880-5878/1-A

Matrix: Solid

Analysis Batch: 5862

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 5878

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1014		mg/Kg		101	70 - 130
Toluene	0.100	0.09208		mg/Kg		92	70 - 130
Ethylbenzene	0.100	0.08735		mg/Kg		87	70 - 130
m-Xylene & p-Xylene	0.200	0.1712		mg/Kg		86	70 - 130
o-Xylene	0.100	0.08575		mg/Kg		86	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	89		70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

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

Lab Sample ID: LCSD 880-5878/2-A

Matrix: Solid

Analysis Batch: 5862

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 5878

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.1045		mg/Kg		104	70 - 130	3	35
Toluene	0.100	0.09225		mg/Kg		92	70 - 130	0	35
Ethylbenzene	0.100	0.08413		mg/Kg		84	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1764		mg/Kg		88	70 - 130	3	35
o-Xylene	0.100	0.08947		mg/Kg		89	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: 880-4522-A-7-A MS

Matrix: Solid

Analysis Batch: 5862

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 5878

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.00238		0.0992	0.1018		mg/Kg		100	70 - 130
Toluene	<0.00199	U	0.0992	0.09233		mg/Kg		93	70 - 130
Ethylbenzene	<0.00199	U	0.0992	0.08206		mg/Kg		82	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.198	0.1754		mg/Kg		88	70 - 130
o-Xylene	<0.00199	U	0.0992	0.08019		mg/Kg		80	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: 880-4522-A-7-B MSD

Matrix: Solid

Analysis Batch: 5862

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 5878

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.00238		0.100	0.07835		mg/Kg		76	70 - 130	26	35
Toluene	<0.00199	U	0.100	0.08097		mg/Kg		81	70 - 130	13	35
Ethylbenzene	<0.00199	U	0.100	0.07548		mg/Kg		75	70 - 130	8	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1524		mg/Kg		76	70 - 130	14	35
o-Xylene	<0.00199	U	0.100	0.07306		mg/Kg		72	70 - 130	9	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: MB 880-5884/5-A

Matrix: Solid

Analysis Batch: 5899

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5884

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/30/21 20:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/30/21 20:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/30/21 20:36	1

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

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

Lab Sample ID: MB 880-5884/5-A

Matrix: Solid

Analysis Batch: 5899

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5884

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/30/21 13:58	07/30/21 20:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/30/21 13:58	07/30/21 20:36	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/30/21 13:58	07/30/21 20:36	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		07/30/21 13:58	07/30/21 20:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	70		70 - 130	07/30/21 13:58	07/30/21 20:36	1
1,4-Difluorobenzene (Surr)	80		70 - 130	07/30/21 13:58	07/30/21 20:36	1

Lab Sample ID: LCS 880-5884/1-A

Matrix: Solid

Analysis Batch: 5899

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 5884

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1063		mg/Kg		106	70 - 130
Toluene	0.100	0.1082		mg/Kg		108	70 - 130
Ethylbenzene	0.100	0.1191		mg/Kg		119	70 - 130
m-Xylene & p-Xylene	0.200	0.2369		mg/Kg		118	70 - 130
o-Xylene	0.100	0.09732		mg/Kg		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: LCSD 880-5884/2-A

Matrix: Solid

Analysis Batch: 5899

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 5884

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1029		mg/Kg		103	70 - 130	3	35
Toluene	0.100	0.1042		mg/Kg		104	70 - 130	4	35
Ethylbenzene	0.100	0.1132		mg/Kg		113	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.2249		mg/Kg		112	70 - 130	5	35
o-Xylene	0.100	0.09350		mg/Kg		93	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 880-4537-1 MS

Matrix: Solid

Analysis Batch: 5899

Client Sample ID: AH-1 (0-1')

Prep Type: Total/NA

Prep Batch: 5884

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U	0.0998	0.08300		mg/Kg		83	70 - 130
Toluene	<0.00199	U	0.0998	0.08600		mg/Kg		86	70 - 130
Ethylbenzene	<0.00199	U	0.0998	0.09775		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1855		mg/Kg		93	70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-4537-1 MS

Matrix: Solid

Analysis Batch: 5899

Client Sample ID: AH-1 (0-1')

Prep Type: Total/NA

Prep Batch: 5884

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
o-Xylene	<0.00199	U	0.0998	0.07666		mg/Kg		77	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	99		70 - 130						
1,4-Difluorobenzene (Surr)	107		70 - 130						

Lab Sample ID: 880-4537-1 MSD

Matrix: Solid

Analysis Batch: 5899

Client Sample ID: AH-1 (0-1')

Prep Type: Total/NA

Prep Batch: 5884

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.08384		mg/Kg		84	70 - 130	1	35
Toluene	<0.00199	U	0.100	0.08542		mg/Kg		85	70 - 130	1	35
Ethylbenzene	<0.00199	U	0.100	0.09935		mg/Kg		99	70 - 130	2	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1950		mg/Kg		97	70 - 130	5	35
o-Xylene	<0.00199	U	0.100	0.08121		mg/Kg		81	70 - 130	6	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	103		70 - 130								
1,4-Difluorobenzene (Surr)	113		70 - 130								

Lab Sample ID: MB 880-5889/5-A

Matrix: Solid

Analysis Batch: 5899

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5889

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:01	07/31/21 12:59	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:01	07/31/21 12:59	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:01	07/31/21 12:59	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/30/21 14:01	07/31/21 12:59	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/30/21 14:01	07/31/21 12:59	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/30/21 14:01	07/31/21 12:59	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		07/30/21 14:01	07/31/21 12:59	1
Surrogate	MB %Recovery	MB Qualifier	Limits						
4-Bromofluorobenzene (Surr)	72		70 - 130						
1,4-Difluorobenzene (Surr)	81		70 - 130						

Lab Sample ID: LCS 880-5889/1-A

Matrix: Solid

Analysis Batch: 5899

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 5889

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08967		mg/Kg		90	70 - 130
Toluene	0.100	0.1089		mg/Kg		109	70 - 130
Ethylbenzene	0.100	0.1036		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	0.200	0.2062		mg/Kg		103	70 - 130
o-Xylene	0.100	0.08530		mg/Kg		85	70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

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

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: LCSD 880-5889/2-A

Matrix: Solid

Analysis Batch: 5899

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 5889

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.09030		mg/Kg		90	70 - 130	1	35
Toluene	0.100	0.1076		mg/Kg		108	70 - 130	1	35
Ethylbenzene	0.100	0.09318		mg/Kg		93	70 - 130	11	35
m-Xylene & p-Xylene	0.200	0.1815		mg/Kg		91	70 - 130	13	35
o-Xylene	0.100	0.07649		mg/Kg		76	70 - 130	11	35

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: 880-4537-21 MS

Matrix: Solid

Analysis Batch: 5899

Client Sample ID: AH-5 (0-1')

Prep Type: Total/NA

Prep Batch: 5889

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	<0.00200	U	0.0998	0.09436		mg/Kg		95	70 - 130		
Toluene	<0.00200	U F1	0.0998	0.1255		mg/Kg		124	70 - 130		
Ethylbenzene	<0.00200	U	0.0998	0.1008		mg/Kg		101	70 - 130		
m-Xylene & p-Xylene	<0.00401	U	0.200	0.1977		mg/Kg		99	70 - 130		
o-Xylene	<0.00200	U	0.0998	0.08296		mg/Kg		83	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 880-4537-21 MSD

Matrix: Solid

Analysis Batch: 5899

Client Sample ID: AH-5 (0-1')

Prep Type: Total/NA

Prep Batch: 5889

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	<0.00200	U	0.0994	0.09609		mg/Kg		97	70 - 130	2	35
Toluene	<0.00200	U F1	0.0994	0.1450	F1	mg/Kg		144	70 - 130	14	35
Ethylbenzene	<0.00200	U	0.0994	0.1118		mg/Kg		112	70 - 130	10	35
m-Xylene & p-Xylene	<0.00401	U	0.199	0.2231		mg/Kg		112	70 - 130	12	35
o-Xylene	<0.00200	U	0.0994	0.09117		mg/Kg		92	70 - 130	9	35

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

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

Lab Sample ID: MB 880-5900/5-A

Matrix: Solid

Analysis Batch: 5862

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5900

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/30/21 15:15	08/01/21 03:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/30/21 15:15	08/01/21 03:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/30/21 15:15	08/01/21 03:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/30/21 15:15	08/01/21 03:52	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/30/21 15:15	08/01/21 03:52	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/30/21 15:15	08/01/21 03:52	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		07/30/21 15:15	08/01/21 03:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	07/30/21 15:15	08/01/21 03:52	1
1,4-Difluorobenzene (Surr)	86		70 - 130	07/30/21 15:15	08/01/21 03:52	1

Lab Sample ID: MB 880-5901/5-A

Matrix: Solid

Analysis Batch: 5862

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5901

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/01/21 12:00	08/01/21 21:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/01/21 12:00	08/01/21 21:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/01/21 12:00	08/01/21 21:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/01/21 12:00	08/01/21 21:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/01/21 12:00	08/01/21 21:30	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/01/21 12:00	08/01/21 21:30	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/01/21 12:00	08/01/21 21:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	08/01/21 12:00	08/01/21 21:30	1
1,4-Difluorobenzene (Surr)	87		70 - 130	08/01/21 12:00	08/01/21 21:30	1

Lab Sample ID: LCS 880-5901/1-A

Matrix: Solid

Analysis Batch: 5862

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 5901

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1050		mg/Kg		105	70 - 130
Toluene	0.100	0.1115		mg/Kg		112	70 - 130
Ethylbenzene	0.100	0.1006		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	0.200	0.2064		mg/Kg		103	70 - 130
o-Xylene	0.100	0.09387		mg/Kg		94	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

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

Lab Sample ID: LCSD 880-5901/2-A

Matrix: Solid

Analysis Batch: 5862

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 5901

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.1185		mg/Kg		118	70 - 130	12	35
Toluene	0.100	0.1083		mg/Kg		108	70 - 130	3	35
Ethylbenzene	0.100	0.1007		mg/Kg		101	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.2131		mg/Kg		107	70 - 130	3	35
o-Xylene	0.100	0.09997		mg/Kg		100	70 - 130	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-4537-34 MS

Matrix: Solid

Analysis Batch: 5862

Client Sample ID: AH-7 (3-3.5')

Prep Type: Total/NA

Prep Batch: 5901

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	<0.00198	U	0.100	0.09156		mg/Kg					
Toluene	<0.00198	U	0.100	0.07863		mg/Kg					
Ethylbenzene	<0.00198	U	0.100	0.07389		mg/Kg					
m-Xylene & p-Xylene	<0.00397	U	0.200	0.1547		mg/Kg					
o-Xylene	<0.00198	U	0.100	0.07182		mg/Kg					

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)			
1,4-Difluorobenzene (Surr)			

Lab Sample ID: 880-4537-34 MSD

Matrix: Solid

Analysis Batch: 5862

Client Sample ID: AH-7 (3-3.5')

Prep Type: Total/NA

Prep Batch: 5901

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	<0.00198	U	0.0994	0.1040		mg/Kg					
Toluene	<0.00198	U	0.0994	0.1006		mg/Kg					
Ethylbenzene	<0.00198	U	0.0994	0.09092		mg/Kg					
m-Xylene & p-Xylene	<0.00397	U	0.199	0.1996		mg/Kg					
o-Xylene	<0.00198	U	0.0994	0.08872		mg/Kg					

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)			
1,4-Difluorobenzene (Surr)			

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

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

Lab Sample ID: MB 880-5925/1-A

Matrix: Solid

Analysis Batch: 5915

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5925

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		07/31/21 11:14	07/31/21 21:29	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/31/21 11:14	07/31/21 21:29	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/21 11:14	07/31/21 21:29	1
Total TPH	<50.0	U	50.0		mg/Kg		07/31/21 11:14	07/31/21 21:29	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	07/31/21 11:14	07/31/21 21:29	1
o-Terphenyl	116		70 - 130	07/31/21 11:14	07/31/21 21:29	1

Lab Sample ID: LCS 880-5925/2-A

Matrix: Solid

Analysis Batch: 5915

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 5925

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	892.5		mg/Kg		89	70 - 130
Diesel Range Organics (Over C10-C28)	1000	968.9		mg/Kg		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	102		70 - 130

Lab Sample ID: LCSD 880-5925/3-A

Matrix: Solid

Analysis Batch: 5915

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 5925

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	940.5		mg/Kg		94	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	1000	990.5		mg/Kg		99	70 - 130	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	103		70 - 130

Lab Sample ID: 880-4537-1 MS

Matrix: Solid

Analysis Batch: 5915

Client Sample ID: AH-1 (0-1')

Prep Type: Total/NA

Prep Batch: 5925

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	996	803.0		mg/Kg		81	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	996	916.5		mg/Kg		92	70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-4537-1 MS

Matrix: Solid

Analysis Batch: 5915

Client Sample ID: AH-1 (0-1')

Prep Type: Total/NA

Prep Batch: 5925

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	79		70 - 130
o-Terphenyl	75		70 - 130

Lab Sample ID: 880-4537-1 MSD

Matrix: Solid

Analysis Batch: 5915

Client Sample ID: AH-1 (0-1')

Prep Type: Total/NA

Prep Batch: 5925

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	996	846.1		mg/Kg		85	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	<50.0	U	996	1007		mg/Kg		101	70 - 130	9	20
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	85		70 - 130								
o-Terphenyl	81		70 - 130								

Lab Sample ID: MB 880-5926/1-A

Matrix: Solid

Analysis Batch: 5917

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5926

	MB	MB									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/31/21 11:31	07/31/21 21:29	1		
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/31/21 11:31	07/31/21 21:29	1		
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/21 11:31	07/31/21 21:29	1		
Total TPH	<50.0	U	50.0		mg/Kg		07/31/21 11:31	07/31/21 21:29	1		
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac		
1-Chlorooctane	101		70 - 130				07/31/21 11:31	07/31/21 21:29	1		
o-Terphenyl	114		70 - 130				07/31/21 11:31	07/31/21 21:29	1		

Lab Sample ID: LCS 880-5926/2-A

Matrix: Solid

Analysis Batch: 5917

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 5926

	Spike	LCS	LCS						%Rec.		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits				
Gasoline Range Organics (GRO)-C6-C10	1000	933.8		mg/Kg		93	70 - 130				
Diesel Range Organics (Over C10-C28)	1000	993.7		mg/Kg		99	70 - 130				
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	102		70 - 130								
o-Terphenyl	101		70 - 130								

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

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

Lab Sample ID: LCSD 880-5926/3-A

Matrix: Solid

Analysis Batch: 5917

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 5926

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	916.5		mg/Kg		92	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	1114		mg/Kg		111	70 - 130	11	20
	LCSD	LCSD							
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	112		70 - 130						
o-Terphenyl	115		70 - 130						

Lab Sample ID: 880-4537-21 MS

Matrix: Solid

Analysis Batch: 5917

Client Sample ID: AH-5 (0-1')

Prep Type: Total/NA

Prep Batch: 5926

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	996	925.5		mg/Kg		91	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	996	980.0		mg/Kg		98	70 - 130		
	MS	MS									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	92		70 - 130								
o-Terphenyl	85		70 - 130								

Lab Sample ID: 880-4537-21 MSD

Matrix: Solid

Analysis Batch: 5917

Client Sample ID: AH-5 (0-1')

Prep Type: Total/NA

Prep Batch: 5926

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	<50.0	U	996	903.8		mg/Kg		89	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<50.0	U	996	980.6		mg/Kg		98	70 - 130	0	20
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	91		70 - 130								
o-Terphenyl	85		70 - 130								

Lab Sample ID: MB 880-5927/1-A

Matrix: Solid

Analysis Batch: 5915

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5927

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		07/31/21 11:55	08/01/21 06:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/31/21 11:55	08/01/21 06:50	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/21 11:55	08/01/21 06:50	1
Total TPH	<50.0	U	50.0		mg/Kg		07/31/21 11:55	08/01/21 06:50	1

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

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

Lab Sample ID: MB 880-5927/1-A

Matrix: Solid

Analysis Batch: 5915

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5927

	MB	MB								
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil	Fac			
1-Chlorooctane	110		70 - 130	07/31/21 11:55	08/01/21 06:50	1				
o-Terphenyl	128		70 - 130	07/31/21 11:55	08/01/21 06:50	1				

Lab Sample ID: LCS 880-5927/2-A

Matrix: Solid

Analysis Batch: 5915

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 5927

			Spike	LCS	LCS				%Rec.		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	935.8		mg/Kg		94	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1086		mg/Kg		109	70 - 130		

	LCS	LCS									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	107		70 - 130								
o-Terphenyl	116		70 - 130								

Lab Sample ID: LCSD 880-5927/3-A

Matrix: Solid

Analysis Batch: 5915

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 5927

			Spike	LCSD	LCSD				%Rec.		RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10			1000	909.4		mg/Kg		91	70 - 130	3	20	
Diesel Range Organics (Over C10-C28)			1000	1089		mg/Kg		109	70 - 130	0	20	

	LCSD	LCSD										
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	105		70 - 130									
o-Terphenyl	116		70 - 130									

Lab Sample ID: 880-4537-41 MS

Matrix: Solid

Analysis Batch: 5915

Client Sample ID: H-1

Prep Type: Total/NA

Prep Batch: 5927

	Sample	Sample	Spike	MS	MS				%Rec.			
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits			
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	996	807.7		mg/Kg		81	70 - 130			
Diesel Range Organics (Over C10-C28)	<50.0	U	996	921.2		mg/Kg		92	70 - 130			

	MS	MS										
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	90		70 - 130									
o-Terphenyl	91		70 - 130									

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

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

Lab Sample ID: 880-4537-41 MSD

Matrix: Solid

Analysis Batch: 5915

Client Sample ID: H-1

Prep Type: Total/NA

Prep Batch: 5927

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	<50.0	U	996	870.0		mg/Kg		87	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	<50.0	U	996	904.6		mg/Kg		91	70 - 130	2	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	90		70 - 130								
o-Terphenyl	88		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-5883/1-A

Matrix: Solid

Analysis Batch: 5908

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			08/01/21 00:31	1

Lab Sample ID: LCS 880-5883/2-A

Matrix: Solid

Analysis Batch: 5908

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	257.8		mg/Kg		103	90 - 110

Lab Sample ID: LCSD 880-5883/3-A

Matrix: Solid

Analysis Batch: 5908

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	257.8		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 880-4537-1 MS

Matrix: Solid

Analysis Batch: 5908

Client Sample ID: AH-1 (0-1')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	7.90		250	261.2		mg/Kg		101	90 - 110

Lab Sample ID: 880-4537-1 MSD

Matrix: Solid

Analysis Batch: 5908

Client Sample ID: AH-1 (0-1')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	7.90		250	261.1		mg/Kg		101	90 - 110	0	20

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-4537-11 MS

Matrix: Solid

Analysis Batch: 5908

Client Sample ID: AH-3 (0-1')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	64.4		248	296.1		mg/Kg		94	90 - 110

Lab Sample ID: 880-4537-11 MSD

Matrix: Solid

Analysis Batch: 5908

Client Sample ID: AH-3 (0-1')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	64.4		248	296.4		mg/Kg		94	90 - 110	0	20

Lab Sample ID: MB 880-5885/1-A

Matrix: Solid

Analysis Batch: 5909

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			08/01/21 03:40	1

Lab Sample ID: LCS 880-5885/2-A

Matrix: Solid

Analysis Batch: 5909

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	259.2		mg/Kg		104	90 - 110

Lab Sample ID: LCSD 880-5885/3-A

Matrix: Solid

Analysis Batch: 5909

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	259.8		mg/Kg		104	90 - 110	0	20

Lab Sample ID: 880-4537-21 MS

Matrix: Solid

Analysis Batch: 5909

Client Sample ID: AH-5 (0-1')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	8.95	F1	248	175.6	F1	mg/Kg		67	90 - 110

Lab Sample ID: 880-4537-21 MSD

Matrix: Solid

Analysis Batch: 5909

Client Sample ID: AH-5 (0-1')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	8.95	F1	248	175.8	F1	mg/Kg		67	90 - 110	0	20

Lab Sample ID: 880-4537-31 MS

Matrix: Solid

Analysis Batch: 5909

Client Sample ID: AH-7 (0-1')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	38.8		250	274.5		mg/Kg		94	90 - 110

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-4537-31 MSD

Matrix: Solid

Analysis Batch: 5909

Client Sample ID: AH-7 (0-1')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	38.8		250	275.2		mg/Kg		95	90 - 110	0	20

Lab Sample ID: MB 880-5886/1-A

Matrix: Solid

Analysis Batch: 5944

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			07/31/21 15:05	1

Lab Sample ID: LCS 880-5886/2-A

Matrix: Solid

Analysis Batch: 5944

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	238.6		mg/Kg		95	90 - 110

Lab Sample ID: LCSD 880-5886/3-A

Matrix: Solid

Analysis Batch: 5944

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	239.0		mg/Kg		96	90 - 110	0	20

Lab Sample ID: 880-4537-41 MS

Matrix: Solid

Analysis Batch: 5944

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	8.81		250	247.8		mg/Kg		96	90 - 110

Lab Sample ID: 880-4537-41 MSD

Matrix: Solid

Analysis Batch: 5944

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	8.81		250	246.5		mg/Kg		95	90 - 110	1	20

Eurofins Xenco, Midland

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

GC VOA

Prep Batch: 5826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-5826/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 5862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4537-34	AH-7 (3-3.5')	Total/NA	Solid	8021B	5901
880-4537-38	AH-8 (2-2.5')	Total/NA	Solid	8021B	5901
880-4537-41	H-1	Total/NA	Solid	8021B	5878
880-4537-42	H-2	Total/NA	Solid	8021B	5878
880-4537-43	H-3	Total/NA	Solid	8021B	5878
880-4537-44	H-4	Total/NA	Solid	8021B	5878
880-4537-45	H-5	Total/NA	Solid	8021B	5878
880-4537-46	H-6	Total/NA	Solid	8021B	5878
880-4537-47	H-7	Total/NA	Solid	8021B	5878
880-4537-48	H-8	Total/NA	Solid	8021B	5878
MB 880-5826/5-A	Method Blank	Total/NA	Solid	8021B	5826
MB 880-5878/5-A	Method Blank	Total/NA	Solid	8021B	5878
MB 880-5900/5-A	Method Blank	Total/NA	Solid	8021B	5900
MB 880-5901/5-A	Method Blank	Total/NA	Solid	8021B	5901
LCS 880-5878/1-A	Lab Control Sample	Total/NA	Solid	8021B	5878
LCS 880-5901/1-A	Lab Control Sample	Total/NA	Solid	8021B	5901
LCSD 880-5878/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	5878
LCSD 880-5901/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	5901
880-4522-A-7-A MS	Matrix Spike	Total/NA	Solid	8021B	5878
880-4522-A-7-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	5878
880-4537-34 MS	AH-7 (3-3.5')	Total/NA	Solid	8021B	5901
880-4537-34 MSD	AH-7 (3-3.5')	Total/NA	Solid	8021B	5901

Prep Batch: 5878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4537-41	H-1	Total/NA	Solid	5035	
880-4537-42	H-2	Total/NA	Solid	5035	
880-4537-43	H-3	Total/NA	Solid	5035	
880-4537-44	H-4	Total/NA	Solid	5035	
880-4537-45	H-5	Total/NA	Solid	5035	
880-4537-46	H-6	Total/NA	Solid	5035	
880-4537-47	H-7	Total/NA	Solid	5035	
880-4537-48	H-8	Total/NA	Solid	5035	
MB 880-5878/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-5878/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-5878/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-4522-A-7-A MS	Matrix Spike	Total/NA	Solid	5035	
880-4522-A-7-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 5884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4537-1	AH-1 (0-1')	Total/NA	Solid	5035	
880-4537-2	AH-1 (1-1.5')	Total/NA	Solid	5035	
880-4537-3	AH-1 (2-2.5')	Total/NA	Solid	5035	
880-4537-4	AH-1 (3-3.5')	Total/NA	Solid	5035	
880-4537-5	AH-1 (4-4.5')	Total/NA	Solid	5035	
880-4537-6	AH-2 (0-1')	Total/NA	Solid	5035	

Eurofins Xenco, Midland

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

GC VOA (Continued)

Prep Batch: 5884 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4537-7	AH-2 (1-1.5')	Total/NA	Solid	5035	
880-4537-8	AH-2 (2-2.5')	Total/NA	Solid	5035	
880-4537-9	AH-2 (3-3.5')	Total/NA	Solid	5035	
880-4537-10	AH-2 (4-4.5')	Total/NA	Solid	5035	
880-4537-11	AH-3 (0-1')	Total/NA	Solid	5035	
880-4537-12	AH-3 (1-1.5')	Total/NA	Solid	5035	
880-4537-13	AH-3 (2-2.5')	Total/NA	Solid	5035	
880-4537-14	AH-3 (3-3.5')	Total/NA	Solid	5035	
880-4537-15	AH-3 (4-4.5')	Total/NA	Solid	5035	
880-4537-16	AH-4 (0-1')	Total/NA	Solid	5035	
880-4537-17	AH-4 (1-1.5')	Total/NA	Solid	5035	
880-4537-18	AH-4 (2-2.5')	Total/NA	Solid	5035	
880-4537-19	AH-4 (3-3.5')	Total/NA	Solid	5035	
880-4537-20	AH-4 (4-4.5')	Total/NA	Solid	5035	
MB 880-5884/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-5884/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-5884/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-4537-1 MS	AH-1 (0-1')	Total/NA	Solid	5035	
880-4537-1 MSD	AH-1 (0-1')	Total/NA	Solid	5035	

Prep Batch: 5889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4537-21	AH-5 (0-1')	Total/NA	Solid	5035	
880-4537-22	AH-5 (1-1.5')	Total/NA	Solid	5035	
880-4537-23	AH-5 (2-2.5')	Total/NA	Solid	5035	
880-4537-24	AH-5 (3-3.5')	Total/NA	Solid	5035	
880-4537-25	AH-5 (4-4.5')	Total/NA	Solid	5035	
880-4537-26	AH-6 (0-1')	Total/NA	Solid	5035	
880-4537-27	AH-6 (1-1.5')	Total/NA	Solid	5035	
880-4537-28	AH-6 (2-2.5')	Total/NA	Solid	5035	
880-4537-29	AH-6 (3-3.5')	Total/NA	Solid	5035	
880-4537-30	AH-6 (4-4.5')	Total/NA	Solid	5035	
880-4537-31	AH-7 (0-1')	Total/NA	Solid	5035	
880-4537-32	AH-7 (1-1.5')	Total/NA	Solid	5035	
880-4537-33	AH-7 (2-2.5')	Total/NA	Solid	5035	
880-4537-35	AH-7 (4-4.5')	Total/NA	Solid	5035	
880-4537-36	AH-8 (0-1')	Total/NA	Solid	5035	
880-4537-37	AH-8 (1-1.5')	Total/NA	Solid	5035	
880-4537-39	AH-8 (3-3.5')	Total/NA	Solid	5035	
880-4537-40	AH-8 (4-4.5')	Total/NA	Solid	5035	
MB 880-5889/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-5889/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-5889/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-4537-21 MS	AH-5 (0-1')	Total/NA	Solid	5035	
880-4537-21 MSD	AH-5 (0-1')	Total/NA	Solid	5035	

Analysis Batch: 5899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4537-1	AH-1 (0-1')	Total/NA	Solid	8021B	5884
880-4537-2	AH-1 (1-1.5')	Total/NA	Solid	8021B	5884
880-4537-3	AH-1 (2-2.5')	Total/NA	Solid	8021B	5884

Eurofins Xenco, Midland

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

GC VOA (Continued)

Analysis Batch: 5899 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4537-4	AH-1 (3-3.5')	Total/NA	Solid	8021B	5884
880-4537-5	AH-1 (4-4.5')	Total/NA	Solid	8021B	5884
880-4537-6	AH-2 (0-1')	Total/NA	Solid	8021B	5884
880-4537-7	AH-2 (1-1.5')	Total/NA	Solid	8021B	5884
880-4537-8	AH-2 (2-2.5')	Total/NA	Solid	8021B	5884
880-4537-9	AH-2 (3-3.5')	Total/NA	Solid	8021B	5884
880-4537-10	AH-2 (4-4.5')	Total/NA	Solid	8021B	5884
880-4537-11	AH-3 (0-1')	Total/NA	Solid	8021B	5884
880-4537-12	AH-3 (1-1.5')	Total/NA	Solid	8021B	5884
880-4537-13	AH-3 (2-2.5')	Total/NA	Solid	8021B	5884
880-4537-14	AH-3 (3-3.5')	Total/NA	Solid	8021B	5884
880-4537-15	AH-3 (4-4.5')	Total/NA	Solid	8021B	5884
880-4537-16	AH-4 (0-1')	Total/NA	Solid	8021B	5884
880-4537-17	AH-4 (1-1.5')	Total/NA	Solid	8021B	5884
880-4537-18	AH-4 (2-2.5')	Total/NA	Solid	8021B	5884
880-4537-19	AH-4 (3-3.5')	Total/NA	Solid	8021B	5884
880-4537-20	AH-4 (4-4.5')	Total/NA	Solid	8021B	5884
880-4537-21	AH-5 (0-1')	Total/NA	Solid	8021B	5889
880-4537-22	AH-5 (1-1.5')	Total/NA	Solid	8021B	5889
880-4537-23	AH-5 (2-2.5')	Total/NA	Solid	8021B	5889
880-4537-24	AH-5 (3-3.5')	Total/NA	Solid	8021B	5889
880-4537-25	AH-5 (4-4.5')	Total/NA	Solid	8021B	5889
880-4537-26	AH-6 (0-1')	Total/NA	Solid	8021B	5889
880-4537-27	AH-6 (1-1.5')	Total/NA	Solid	8021B	5889
880-4537-28	AH-6 (2-2.5')	Total/NA	Solid	8021B	5889
880-4537-29	AH-6 (3-3.5')	Total/NA	Solid	8021B	5889
880-4537-30	AH-6 (4-4.5')	Total/NA	Solid	8021B	5889
880-4537-31	AH-7 (0-1')	Total/NA	Solid	8021B	5889
880-4537-32	AH-7 (1-1.5')	Total/NA	Solid	8021B	5889
880-4537-33	AH-7 (2-2.5')	Total/NA	Solid	8021B	5889
880-4537-35	AH-7 (4-4.5')	Total/NA	Solid	8021B	5889
880-4537-36	AH-8 (0-1')	Total/NA	Solid	8021B	5889
880-4537-37	AH-8 (1-1.5')	Total/NA	Solid	8021B	5889
880-4537-39	AH-8 (3-3.5')	Total/NA	Solid	8021B	5889
880-4537-40	AH-8 (4-4.5')	Total/NA	Solid	8021B	5889
MB 880-5884/5-A	Method Blank	Total/NA	Solid	8021B	5884
MB 880-5889/5-A	Method Blank	Total/NA	Solid	8021B	5889
LCS 880-5884/1-A	Lab Control Sample	Total/NA	Solid	8021B	5884
LCS 880-5889/1-A	Lab Control Sample	Total/NA	Solid	8021B	5889
LCSD 880-5884/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	5884
LCSD 880-5889/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	5889
880-4537-1 MS	AH-1 (0-1')	Total/NA	Solid	8021B	5884
880-4537-1 MSD	AH-1 (0-1')	Total/NA	Solid	8021B	5884
880-4537-21 MS	AH-5 (0-1')	Total/NA	Solid	8021B	5889
880-4537-21 MSD	AH-5 (0-1')	Total/NA	Solid	8021B	5889

Prep Batch: 5900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-5900/5-A	Method Blank	Total/NA	Solid	5035	

Eurofins Xenco, Midland

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

GC VOA

Prep Batch: 5901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4537-34	AH-7 (3-3.5')	Total/NA	Solid	5035	
880-4537-38	AH-8 (2-2.5')	Total/NA	Solid	5035	
MB 880-5901/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-5901/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-5901/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-4537-34 MS	AH-7 (3-3.5')	Total/NA	Solid	5035	
880-4537-34 MSD	AH-7 (3-3.5')	Total/NA	Solid	5035	

GC Semi VOA

Analysis Batch: 5915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4537-1	AH-1 (0-1')	Total/NA	Solid	8015B NM	5925
880-4537-2	AH-1 (1-1.5')	Total/NA	Solid	8015B NM	5925
880-4537-3	AH-1 (2-2.5')	Total/NA	Solid	8015B NM	5925
880-4537-4	AH-1 (3-3.5')	Total/NA	Solid	8015B NM	5925
880-4537-5	AH-1 (4-4.5')	Total/NA	Solid	8015B NM	5925
880-4537-6	AH-2 (0-1')	Total/NA	Solid	8015B NM	5925
880-4537-7	AH-2 (1-1.5')	Total/NA	Solid	8015B NM	5925
880-4537-8	AH-2 (2-2.5')	Total/NA	Solid	8015B NM	5925
880-4537-9	AH-2 (3-3.5')	Total/NA	Solid	8015B NM	5925
880-4537-10	AH-2 (4-4.5')	Total/NA	Solid	8015B NM	5925
880-4537-11	AH-3 (0-1')	Total/NA	Solid	8015B NM	5925
880-4537-12	AH-3 (1-1.5')	Total/NA	Solid	8015B NM	5925
880-4537-13	AH-3 (2-2.5')	Total/NA	Solid	8015B NM	5925
880-4537-14	AH-3 (3-3.5')	Total/NA	Solid	8015B NM	5925
880-4537-15	AH-3 (4-4.5')	Total/NA	Solid	8015B NM	5925
880-4537-16	AH-4 (0-1')	Total/NA	Solid	8015B NM	5925
880-4537-17	AH-4 (1-1.5')	Total/NA	Solid	8015B NM	5925
880-4537-18	AH-4 (2-2.5')	Total/NA	Solid	8015B NM	5925
880-4537-19	AH-4 (3-3.5')	Total/NA	Solid	8015B NM	5925
880-4537-20	AH-4 (4-4.5')	Total/NA	Solid	8015B NM	5925
880-4537-41	H-1	Total/NA	Solid	8015B NM	5927
880-4537-42	H-2	Total/NA	Solid	8015B NM	5927
880-4537-43	H-3	Total/NA	Solid	8015B NM	5927
880-4537-44	H-4	Total/NA	Solid	8015B NM	5927
880-4537-45	H-5	Total/NA	Solid	8015B NM	5927
880-4537-46	H-6	Total/NA	Solid	8015B NM	5927
880-4537-47	H-7	Total/NA	Solid	8015B NM	5927
880-4537-48	H-8	Total/NA	Solid	8015B NM	5927
MB 880-5925/1-A	Method Blank	Total/NA	Solid	8015B NM	5925
MB 880-5927/1-A	Method Blank	Total/NA	Solid	8015B NM	5927
LCS 880-5925/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	5925
LCS 880-5927/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	5927
LCSD 880-5925/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	5925
LCSD 880-5927/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	5927
880-4537-1 MS	AH-1 (0-1')	Total/NA	Solid	8015B NM	5925
880-4537-1 MSD	AH-1 (0-1')	Total/NA	Solid	8015B NM	5925
880-4537-41 MS	H-1	Total/NA	Solid	8015B NM	5927
880-4537-41 MSD	H-1	Total/NA	Solid	8015B NM	5927

Eurofins Xenco, Midland

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

GC Semi VOA

Analysis Batch: 5917

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4537-21	AH-5 (0-1')	Total/NA	Solid	8015B NM	5926
880-4537-22	AH-5 (1-1.5')	Total/NA	Solid	8015B NM	5926
880-4537-23	AH-5 (2-2.5')	Total/NA	Solid	8015B NM	5926
880-4537-24	AH-5 (3-3.5')	Total/NA	Solid	8015B NM	5926
880-4537-25	AH-5 (4-4.5')	Total/NA	Solid	8015B NM	5926
880-4537-26	AH-6 (0-1')	Total/NA	Solid	8015B NM	5926
880-4537-27	AH-6 (1-1.5')	Total/NA	Solid	8015B NM	5926
880-4537-28	AH-6 (2-2.5')	Total/NA	Solid	8015B NM	5926
880-4537-29	AH-6 (3-3.5')	Total/NA	Solid	8015B NM	5926
880-4537-30	AH-6 (4-4.5')	Total/NA	Solid	8015B NM	5926
880-4537-31	AH-7 (0-1')	Total/NA	Solid	8015B NM	5926
880-4537-32	AH-7 (1-1.5')	Total/NA	Solid	8015B NM	5926
880-4537-33	AH-7 (2-2.5')	Total/NA	Solid	8015B NM	5926
880-4537-34	AH-7 (3-3.5')	Total/NA	Solid	8015B NM	5926
880-4537-35	AH-7 (4-4.5')	Total/NA	Solid	8015B NM	5926
880-4537-36	AH-8 (0-1')	Total/NA	Solid	8015B NM	5926
880-4537-37	AH-8 (1-1.5')	Total/NA	Solid	8015B NM	5926
880-4537-38	AH-8 (2-2.5')	Total/NA	Solid	8015B NM	5926
880-4537-39	AH-8 (3-3.5')	Total/NA	Solid	8015B NM	5926
880-4537-40	AH-8 (4-4.5')	Total/NA	Solid	8015B NM	5926
MB 880-5926/1-A	Method Blank	Total/NA	Solid	8015B NM	5926
LCS 880-5926/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	5926
LCSD 880-5926/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	5926
880-4537-21 MS	AH-5 (0-1')	Total/NA	Solid	8015B NM	5926
880-4537-21 MSD	AH-5 (0-1')	Total/NA	Solid	8015B NM	5926

Prep Batch: 5925

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4537-1	AH-1 (0-1')	Total/NA	Solid	8015NM Prep	
880-4537-2	AH-1 (1-1.5')	Total/NA	Solid	8015NM Prep	
880-4537-3	AH-1 (2-2.5')	Total/NA	Solid	8015NM Prep	
880-4537-4	AH-1 (3-3.5')	Total/NA	Solid	8015NM Prep	
880-4537-5	AH-1 (4-4.5')	Total/NA	Solid	8015NM Prep	
880-4537-6	AH-2 (0-1')	Total/NA	Solid	8015NM Prep	
880-4537-7	AH-2 (1-1.5')	Total/NA	Solid	8015NM Prep	
880-4537-8	AH-2 (2-2.5')	Total/NA	Solid	8015NM Prep	
880-4537-9	AH-2 (3-3.5')	Total/NA	Solid	8015NM Prep	
880-4537-10	AH-2 (4-4.5')	Total/NA	Solid	8015NM Prep	
880-4537-11	AH-3 (0-1')	Total/NA	Solid	8015NM Prep	
880-4537-12	AH-3 (1-1.5')	Total/NA	Solid	8015NM Prep	
880-4537-13	AH-3 (2-2.5')	Total/NA	Solid	8015NM Prep	
880-4537-14	AH-3 (3-3.5')	Total/NA	Solid	8015NM Prep	
880-4537-15	AH-3 (4-4.5')	Total/NA	Solid	8015NM Prep	
880-4537-16	AH-4 (0-1')	Total/NA	Solid	8015NM Prep	
880-4537-17	AH-4 (1-1.5')	Total/NA	Solid	8015NM Prep	
880-4537-18	AH-4 (2-2.5')	Total/NA	Solid	8015NM Prep	
880-4537-19	AH-4 (3-3.5')	Total/NA	Solid	8015NM Prep	
880-4537-20	AH-4 (4-4.5')	Total/NA	Solid	8015NM Prep	
MB 880-5925/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-5925/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-5925/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Eurofins Xenco, Midland

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

GC Semi VOA (Continued)

Prep Batch: 5925 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4537-1 MS	AH-1 (0-1')	Total/NA	Solid	8015NM Prep	
880-4537-1 MSD	AH-1 (0-1')	Total/NA	Solid	8015NM Prep	

Prep Batch: 5926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4537-21	AH-5 (0-1')	Total/NA	Solid	8015NM Prep	
880-4537-22	AH-5 (1-1.5')	Total/NA	Solid	8015NM Prep	
880-4537-23	AH-5 (2-2.5')	Total/NA	Solid	8015NM Prep	
880-4537-24	AH-5 (3-3.5')	Total/NA	Solid	8015NM Prep	
880-4537-25	AH-5 (4-4.5')	Total/NA	Solid	8015NM Prep	
880-4537-26	AH-6 (0-1')	Total/NA	Solid	8015NM Prep	
880-4537-27	AH-6 (1-1.5')	Total/NA	Solid	8015NM Prep	
880-4537-28	AH-6 (2-2.5')	Total/NA	Solid	8015NM Prep	
880-4537-29	AH-6 (3-3.5')	Total/NA	Solid	8015NM Prep	
880-4537-30	AH-6 (4-4.5')	Total/NA	Solid	8015NM Prep	
880-4537-31	AH-7 (0-1')	Total/NA	Solid	8015NM Prep	
880-4537-32	AH-7 (1-1.5')	Total/NA	Solid	8015NM Prep	
880-4537-33	AH-7 (2-2.5')	Total/NA	Solid	8015NM Prep	
880-4537-34	AH-7 (3-3.5')	Total/NA	Solid	8015NM Prep	
880-4537-35	AH-7 (4-4.5')	Total/NA	Solid	8015NM Prep	
880-4537-36	AH-8 (0-1')	Total/NA	Solid	8015NM Prep	
880-4537-37	AH-8 (1-1.5')	Total/NA	Solid	8015NM Prep	
880-4537-38	AH-8 (2-2.5')	Total/NA	Solid	8015NM Prep	
880-4537-39	AH-8 (3-3.5')	Total/NA	Solid	8015NM Prep	
880-4537-40	AH-8 (4-4.5')	Total/NA	Solid	8015NM Prep	
MB 880-5926/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-5926/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-5926/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-4537-21 MS	AH-5 (0-1')	Total/NA	Solid	8015NM Prep	
880-4537-21 MSD	AH-5 (0-1')	Total/NA	Solid	8015NM Prep	

Prep Batch: 5927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4537-41	H-1	Total/NA	Solid	8015NM Prep	
880-4537-42	H-2	Total/NA	Solid	8015NM Prep	
880-4537-43	H-3	Total/NA	Solid	8015NM Prep	
880-4537-44	H-4	Total/NA	Solid	8015NM Prep	
880-4537-45	H-5	Total/NA	Solid	8015NM Prep	
880-4537-46	H-6	Total/NA	Solid	8015NM Prep	
880-4537-47	H-7	Total/NA	Solid	8015NM Prep	
880-4537-48	H-8	Total/NA	Solid	8015NM Prep	
MB 880-5927/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-5927/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-5927/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-4537-41 MS	H-1	Total/NA	Solid	8015NM Prep	
880-4537-41 MSD	H-1	Total/NA	Solid	8015NM Prep	

Eurofins Xenco, Midland

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

HPLC/IC

Leach Batch: 5883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4537-1	AH-1 (0-1')	Soluble	Solid	DI Leach	
880-4537-2	AH-1 (1-1.5')	Soluble	Solid	DI Leach	
880-4537-3	AH-1 (2-2.5')	Soluble	Solid	DI Leach	
880-4537-4	AH-1 (3-3.5')	Soluble	Solid	DI Leach	
880-4537-5	AH-1 (4-4.5')	Soluble	Solid	DI Leach	
880-4537-6	AH-2 (0-1')	Soluble	Solid	DI Leach	
880-4537-7	AH-2 (1-1.5')	Soluble	Solid	DI Leach	
880-4537-8	AH-2 (2-2.5')	Soluble	Solid	DI Leach	
880-4537-9	AH-2 (3-3.5')	Soluble	Solid	DI Leach	
880-4537-10	AH-2 (4-4.5')	Soluble	Solid	DI Leach	
880-4537-11	AH-3 (0-1')	Soluble	Solid	DI Leach	
880-4537-12	AH-3 (1-1.5')	Soluble	Solid	DI Leach	
880-4537-13	AH-3 (2-2.5')	Soluble	Solid	DI Leach	
880-4537-14	AH-3 (3-3.5')	Soluble	Solid	DI Leach	
880-4537-15	AH-3 (4-4.5')	Soluble	Solid	DI Leach	
880-4537-16	AH-4 (0-1')	Soluble	Solid	DI Leach	
880-4537-17	AH-4 (1-1.5')	Soluble	Solid	DI Leach	
880-4537-18	AH-4 (2-2.5')	Soluble	Solid	DI Leach	
880-4537-19	AH-4 (3-3.5')	Soluble	Solid	DI Leach	
880-4537-20	AH-4 (4-4.5')	Soluble	Solid	DI Leach	
MB 880-5883/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-5883/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-5883/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-4537-1 MS	AH-1 (0-1')	Soluble	Solid	DI Leach	
880-4537-1 MSD	AH-1 (0-1')	Soluble	Solid	DI Leach	
880-4537-11 MS	AH-3 (0-1')	Soluble	Solid	DI Leach	
880-4537-11 MSD	AH-3 (0-1')	Soluble	Solid	DI Leach	

Leach Batch: 5885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4537-21	AH-5 (0-1')	Soluble	Solid	DI Leach	
880-4537-22	AH-5 (1-1.5')	Soluble	Solid	DI Leach	
880-4537-23	AH-5 (2-2.5')	Soluble	Solid	DI Leach	
880-4537-24	AH-5 (3-3.5')	Soluble	Solid	DI Leach	
880-4537-25	AH-5 (4-4.5')	Soluble	Solid	DI Leach	
880-4537-26	AH-6 (0-1')	Soluble	Solid	DI Leach	
880-4537-27	AH-6 (1-1.5')	Soluble	Solid	DI Leach	
880-4537-28	AH-6 (2-2.5')	Soluble	Solid	DI Leach	
880-4537-29	AH-6 (3-3.5')	Soluble	Solid	DI Leach	
880-4537-30	AH-6 (4-4.5')	Soluble	Solid	DI Leach	
880-4537-31	AH-7 (0-1')	Soluble	Solid	DI Leach	
880-4537-32	AH-7 (1-1.5')	Soluble	Solid	DI Leach	
880-4537-33	AH-7 (2-2.5')	Soluble	Solid	DI Leach	
880-4537-34	AH-7 (3-3.5')	Soluble	Solid	DI Leach	
880-4537-35	AH-7 (4-4.5')	Soluble	Solid	DI Leach	
880-4537-36	AH-8 (0-1')	Soluble	Solid	DI Leach	
880-4537-37	AH-8 (1-1.5')	Soluble	Solid	DI Leach	
880-4537-38	AH-8 (2-2.5')	Soluble	Solid	DI Leach	
880-4537-39	AH-8 (3-3.5')	Soluble	Solid	DI Leach	
880-4537-40	AH-8 (4-4.5')	Soluble	Solid	DI Leach	
MB 880-5885/1-A	Method Blank	Soluble	Solid	DI Leach	

Eurofins Xenco, Midland

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

HPLC/IC (Continued)

Leach Batch: 5885 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-5885/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-5885/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-4537-21 MS	AH-5 (0-1')	Soluble	Solid	DI Leach	
880-4537-21 MSD	AH-5 (0-1')	Soluble	Solid	DI Leach	
880-4537-31 MS	AH-7 (0-1')	Soluble	Solid	DI Leach	
880-4537-31 MSD	AH-7 (0-1')	Soluble	Solid	DI Leach	

Leach Batch: 5886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4537-41	H-1	Soluble	Solid	DI Leach	
880-4537-42	H-2	Soluble	Solid	DI Leach	
880-4537-43	H-3	Soluble	Solid	DI Leach	
880-4537-44	H-4	Soluble	Solid	DI Leach	
880-4537-45	H-5	Soluble	Solid	DI Leach	
880-4537-46	H-6	Soluble	Solid	DI Leach	
880-4537-47	H-7	Soluble	Solid	DI Leach	
880-4537-48	H-8	Soluble	Solid	DI Leach	
MB 880-5886/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-5886/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-5886/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-4537-41 MS	H-1	Soluble	Solid	DI Leach	
880-4537-41 MSD	H-1	Soluble	Solid	DI Leach	

Analysis Batch: 5908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4537-1	AH-1 (0-1')	Soluble	Solid	300.0	5883
880-4537-2	AH-1 (1-1.5')	Soluble	Solid	300.0	5883
880-4537-3	AH-1 (2-2.5')	Soluble	Solid	300.0	5883
880-4537-4	AH-1 (3-3.5')	Soluble	Solid	300.0	5883
880-4537-5	AH-1 (4-4.5')	Soluble	Solid	300.0	5883
880-4537-6	AH-2 (0-1')	Soluble	Solid	300.0	5883
880-4537-7	AH-2 (1-1.5')	Soluble	Solid	300.0	5883
880-4537-8	AH-2 (2-2.5')	Soluble	Solid	300.0	5883
880-4537-9	AH-2 (3-3.5')	Soluble	Solid	300.0	5883
880-4537-10	AH-2 (4-4.5')	Soluble	Solid	300.0	5883
880-4537-11	AH-3 (0-1')	Soluble	Solid	300.0	5883
880-4537-12	AH-3 (1-1.5')	Soluble	Solid	300.0	5883
880-4537-13	AH-3 (2-2.5')	Soluble	Solid	300.0	5883
880-4537-14	AH-3 (3-3.5')	Soluble	Solid	300.0	5883
880-4537-15	AH-3 (4-4.5')	Soluble	Solid	300.0	5883
880-4537-16	AH-4 (0-1')	Soluble	Solid	300.0	5883
880-4537-17	AH-4 (1-1.5')	Soluble	Solid	300.0	5883
880-4537-18	AH-4 (2-2.5')	Soluble	Solid	300.0	5883
880-4537-19	AH-4 (3-3.5')	Soluble	Solid	300.0	5883
880-4537-20	AH-4 (4-4.5')	Soluble	Solid	300.0	5883
MB 880-5883/1-A	Method Blank	Soluble	Solid	300.0	5883
LCS 880-5883/2-A	Lab Control Sample	Soluble	Solid	300.0	5883
LCSD 880-5883/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	5883
880-4537-1 MS	AH-1 (0-1')	Soluble	Solid	300.0	5883
880-4537-1 MSD	AH-1 (0-1')	Soluble	Solid	300.0	5883
880-4537-11 MS	AH-3 (0-1')	Soluble	Solid	300.0	5883

Eurofins Xenco, Midland

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

HPLC/IC (Continued)

Analysis Batch: 5908 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4537-11 MSD	AH-3 (0-1')	Soluble	Solid	300.0	5883

Analysis Batch: 5909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4537-21	AH-5 (0-1')	Soluble	Solid	300.0	5885
880-4537-22	AH-5 (1-1.5')	Soluble	Solid	300.0	5885
880-4537-23	AH-5 (2-2.5')	Soluble	Solid	300.0	5885
880-4537-24	AH-5 (3-3.5')	Soluble	Solid	300.0	5885
880-4537-25	AH-5 (4-4.5')	Soluble	Solid	300.0	5885
880-4537-26	AH-6 (0-1')	Soluble	Solid	300.0	5885
880-4537-27	AH-6 (1-1.5')	Soluble	Solid	300.0	5885
880-4537-28	AH-6 (2-2.5')	Soluble	Solid	300.0	5885
880-4537-29	AH-6 (3-3.5')	Soluble	Solid	300.0	5885
880-4537-30	AH-6 (4-4.5')	Soluble	Solid	300.0	5885
880-4537-31	AH-7 (0-1')	Soluble	Solid	300.0	5885
880-4537-32	AH-7 (1-1.5')	Soluble	Solid	300.0	5885
880-4537-33	AH-7 (2-2.5')	Soluble	Solid	300.0	5885
880-4537-34	AH-7 (3-3.5')	Soluble	Solid	300.0	5885
880-4537-35	AH-7 (4-4.5')	Soluble	Solid	300.0	5885
880-4537-36	AH-8 (0-1')	Soluble	Solid	300.0	5885
880-4537-37	AH-8 (1-1.5')	Soluble	Solid	300.0	5885
880-4537-38	AH-8 (2-2.5')	Soluble	Solid	300.0	5885
880-4537-39	AH-8 (3-3.5')	Soluble	Solid	300.0	5885
880-4537-40	AH-8 (4-4.5')	Soluble	Solid	300.0	5885
MB 880-5885/1-A	Method Blank	Soluble	Solid	300.0	5885
LCS 880-5885/2-A	Lab Control Sample	Soluble	Solid	300.0	5885
LCSD 880-5885/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	5885
880-4537-21 MS	AH-5 (0-1')	Soluble	Solid	300.0	5885
880-4537-21 MSD	AH-5 (0-1')	Soluble	Solid	300.0	5885
880-4537-31 MS	AH-7 (0-1')	Soluble	Solid	300.0	5885
880-4537-31 MSD	AH-7 (0-1')	Soluble	Solid	300.0	5885

Analysis Batch: 5944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4537-41	H-1	Soluble	Solid	300.0	5886
880-4537-42	H-2	Soluble	Solid	300.0	5886
880-4537-43	H-3	Soluble	Solid	300.0	5886
880-4537-44	H-4	Soluble	Solid	300.0	5886
880-4537-45	H-5	Soluble	Solid	300.0	5886
880-4537-46	H-6	Soluble	Solid	300.0	5886
880-4537-47	H-7	Soluble	Solid	300.0	5886
880-4537-48	H-8	Soluble	Solid	300.0	5886
MB 880-5886/1-A	Method Blank	Soluble	Solid	300.0	5886
LCS 880-5886/2-A	Lab Control Sample	Soluble	Solid	300.0	5886
LCSD 880-5886/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	5886
880-4537-41 MS	H-1	Soluble	Solid	300.0	5886
880-4537-41 MSD	H-1	Soluble	Solid	300.0	5886

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-1 (0-1')

Lab Sample ID: 880-4537-1

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	5884	07/30/21 13:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/30/21 21:01	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5925	07/31/21 11:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5915	07/31/21 22:31	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	5883	07/30/21 13:56	CH	XEN MID
Soluble	Analysis	300.0		1			5908	08/01/21 00:48	CH	XEN MID

Client Sample ID: AH-1 (1-1.5')

Lab Sample ID: 880-4537-2

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	5884	07/30/21 13:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/30/21 21:26	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	5925	07/31/21 11:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5915	07/31/21 23:34	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	5883	07/30/21 13:56	CH	XEN MID
Soluble	Analysis	300.0		1			5908	08/01/21 01:04	CH	XEN MID

Client Sample ID: AH-1 (2-2.5')

Lab Sample ID: 880-4537-3

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	5884	07/30/21 13:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/30/21 21:51	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5925	07/31/21 11:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5915	07/31/21 23:55	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	5883	07/30/21 13:56	CH	XEN MID
Soluble	Analysis	300.0		1			5908	08/01/21 01:09	CH	XEN MID

Client Sample ID: AH-1 (3-3.5')

Lab Sample ID: 880-4537-4

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	5884	07/30/21 13:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/30/21 22:16	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5925	07/31/21 11:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5915	08/01/21 00:15	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	5883	07/30/21 13:56	CH	XEN MID
Soluble	Analysis	300.0		1			5908	08/01/21 01:15	CH	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-1 (4-4.5')

Lab Sample ID: 880-4537-5

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	5884	07/30/21 13:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/30/21 22:41	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	5925	07/31/21 11:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5915	08/01/21 00:36	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	5883	07/30/21 13:56	CH	XEN MID
Soluble	Analysis	300.0		1			5908	08/01/21 01:20	CH	XEN MID

Client Sample ID: AH-2 (0-1')

Lab Sample ID: 880-4537-6

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	5884	07/30/21 13:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/30/21 23:06	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	5925	07/31/21 11:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5915	08/01/21 00:57	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	5883	07/30/21 13:56	CH	XEN MID
Soluble	Analysis	300.0		1			5908	08/01/21 01:36	CH	XEN MID

Client Sample ID: AH-2 (1-1.5')

Lab Sample ID: 880-4537-7

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	5884	07/30/21 13:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/30/21 23:31	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	5925	07/31/21 11:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5915	08/01/21 01:17	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	5883	07/30/21 13:56	CH	XEN MID
Soluble	Analysis	300.0		1			5908	08/01/21 01:42	CH	XEN MID

Client Sample ID: AH-2 (2-2.5')

Lab Sample ID: 880-4537-8

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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	5884	07/30/21 13:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/30/21 23:56	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	5925	07/31/21 11:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5915	08/01/21 01:38	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	5883	07/30/21 13:56	CH	XEN MID
Soluble	Analysis	300.0		1			5908	08/01/21 01:47	CH	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-2 (3-3.5')

Lab Sample ID: 880-4537-9

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	5884	07/30/21 13:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/31/21 00:21	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	5925	07/31/21 11:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5915	08/01/21 01:59	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	5883	07/30/21 13:56	CH	XEN MID
Soluble	Analysis	300.0		1			5908	08/01/21 01:52	CH	XEN MID

Client Sample ID: AH-2 (4-4.5')

Lab Sample ID: 880-4537-10

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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	5884	07/30/21 13:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/31/21 00:46	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	5925	07/31/21 11:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5915	08/01/21 02:20	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	5883	07/30/21 13:56	CH	XEN MID
Soluble	Analysis	300.0		1			5908	08/01/21 01:58	CH	XEN MID

Client Sample ID: AH-3 (0-1')

Lab Sample ID: 880-4537-11

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	5884	07/30/21 13:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/31/21 02:27	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5925	07/31/21 11:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5915	08/01/21 03:01	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	5883	07/30/21 13:56	CH	XEN MID
Soluble	Analysis	300.0		1			5908	08/01/21 02:03	CH	XEN MID

Client Sample ID: AH-3 (1-1.5')

Lab Sample ID: 880-4537-12

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	5884	07/30/21 13:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/31/21 02:52	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5925	07/31/21 11:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5915	08/01/21 03:22	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	5883	07/30/21 13:56	CH	XEN MID
Soluble	Analysis	300.0		1			5908	08/01/21 02:19	CH	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-3 (2-2.5')

Lab Sample ID: 880-4537-13

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	5884	07/30/21 13:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/31/21 03:17	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	5925	07/31/21 11:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5915	08/01/21 03:43	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	5883	07/30/21 13:56	CH	XEN MID
Soluble	Analysis	300.0		1			5908	08/01/21 02:25	CH	XEN MID

Client Sample ID: AH-3 (3-3.5')

Lab Sample ID: 880-4537-14

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	5884	07/30/21 13:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/31/21 03:42	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	5925	07/31/21 11:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5915	08/01/21 04:04	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	5883	07/30/21 13:56	CH	XEN MID
Soluble	Analysis	300.0		1			5908	08/01/21 02:41	CH	XEN MID

Client Sample ID: AH-3 (4-4.5')

Lab Sample ID: 880-4537-15

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	5884	07/30/21 13:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/31/21 04:07	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	5925	07/31/21 11:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5915	08/01/21 04:24	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	5883	07/30/21 13:56	CH	XEN MID
Soluble	Analysis	300.0		1			5908	08/01/21 02:46	CH	XEN MID

Client Sample ID: AH-4 (0-1')

Lab Sample ID: 880-4537-16

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	5884	07/30/21 13:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/31/21 04:32	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	5925	07/31/21 11:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5915	08/01/21 04:45	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	5883	07/30/21 13:56	CH	XEN MID
Soluble	Analysis	300.0		1			5908	08/01/21 02:52	CH	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-4 (1-1.5')

Lab Sample ID: 880-4537-17

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	5884	07/30/21 13:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/31/21 04:57	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5925	07/31/21 11:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5915	08/01/21 05:06	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	5883	07/30/21 13:56	CH	XEN MID
Soluble	Analysis	300.0		1			5908	08/01/21 02:57	CH	XEN MID

Client Sample ID: AH-4 (2-2.5')

Lab Sample ID: 880-4537-18

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	5884	07/30/21 13:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/31/21 05:23	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	5925	07/31/21 11:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5915	08/01/21 05:27	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	5883	07/30/21 13:56	CH	XEN MID
Soluble	Analysis	300.0		1			5908	08/01/21 03:02	CH	XEN MID

Client Sample ID: AH-4 (3-3.5')

Lab Sample ID: 880-4537-19

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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	5884	07/30/21 13:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/31/21 05:48	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	5925	07/31/21 11:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5915	08/01/21 05:48	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	5883	07/30/21 13:56	CH	XEN MID
Soluble	Analysis	300.0		1			5908	08/01/21 03:08	CH	XEN MID

Client Sample ID: AH-4 (4-4.5')

Lab Sample ID: 880-4537-20

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	5884	07/30/21 13:58	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/31/21 06:13	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5925	07/31/21 11:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5915	08/01/21 06:08	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	5883	07/30/21 13:56	CH	XEN MID
Soluble	Analysis	300.0		1			5908	08/01/21 03:13	CH	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-5 (0-1')

Lab Sample ID: 880-4537-21

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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	5889	07/30/21 14:01	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/31/21 13:24	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5926	07/31/21 11:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5917	07/31/21 22:31	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	5885	07/30/21 13:58	CH	XEN MID
Soluble	Analysis	300.0		1			5909	08/01/21 03:56	CH	XEN MID

Client Sample ID: AH-5 (1-1.5')

Lab Sample ID: 880-4537-22

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	5889	07/30/21 14:01	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/31/21 13:49	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	5926	07/31/21 11:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5917	07/31/21 23:34	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	5885	07/30/21 13:58	CH	XEN MID
Soluble	Analysis	300.0		1			5909	08/01/21 04:12	CH	XEN MID

Client Sample ID: AH-5 (2-2.5')

Lab Sample ID: 880-4537-23

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	5889	07/30/21 14:01	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/31/21 14:14	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5926	07/31/21 11:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5917	07/31/21 23:55	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	5885	07/30/21 13:58	CH	XEN MID
Soluble	Analysis	300.0		1			5909	08/01/21 04:18	CH	XEN MID

Client Sample ID: AH-5 (3-3.5')

Lab Sample ID: 880-4537-24

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	5889	07/30/21 14:01	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/31/21 14:39	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5926	07/31/21 11:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5917	08/01/21 00:15	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	5885	07/30/21 13:58	CH	XEN MID
Soluble	Analysis	300.0		1			5909	08/01/21 04:23	CH	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-5 (4-4.5')

Lab Sample ID: 880-4537-25

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	5889	07/30/21 14:01	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/31/21 15:04	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	5926	07/31/21 11:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5917	08/01/21 00:36	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	5885	07/30/21 13:58	CH	XEN MID
Soluble	Analysis	300.0		1			5909	08/01/21 04:28	CH	XEN MID

Client Sample ID: AH-6 (0-1')

Lab Sample ID: 880-4537-26

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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	5889	07/30/21 14:01	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/31/21 15:29	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	5926	07/31/21 11:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5917	08/01/21 00:57	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	5885	07/30/21 13:58	CH	XEN MID
Soluble	Analysis	300.0		1			5909	08/01/21 04:45	CH	XEN MID

Client Sample ID: AH-6 (1-1.5')

Lab Sample ID: 880-4537-27

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	5889	07/30/21 14:01	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/31/21 15:54	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	5926	07/31/21 11:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5917	08/01/21 01:17	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	5885	07/30/21 13:58	CH	XEN MID
Soluble	Analysis	300.0		1			5909	08/01/21 04:50	CH	XEN MID

Client Sample ID: AH-6 (2-2.5')

Lab Sample ID: 880-4537-28

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	5889	07/30/21 14:01	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/31/21 16:19	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	5926	07/31/21 11:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5917	08/01/21 01:38	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	5885	07/30/21 13:58	CH	XEN MID
Soluble	Analysis	300.0		1			5909	08/01/21 04:55	CH	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-6 (3-3.5')

Lab Sample ID: 880-4537-29

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	5889	07/30/21 14:01	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/31/21 16:44	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	5926	07/31/21 11:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5917	08/01/21 01:59	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	5885	07/30/21 13:58	CH	XEN MID
Soluble	Analysis	300.0		1			5909	08/01/21 05:01	CH	XEN MID

Client Sample ID: AH-6 (4-4.5')

Lab Sample ID: 880-4537-30

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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	5889	07/30/21 14:01	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/31/21 17:08	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	5926	07/31/21 11:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5917	08/01/21 02:20	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	5885	07/30/21 13:58	CH	XEN MID
Soluble	Analysis	300.0		1			5909	08/01/21 05:06	CH	XEN MID

Client Sample ID: AH-7 (0-1')

Lab Sample ID: 880-4537-31

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	5889	07/30/21 14:01	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/31/21 18:49	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5926	07/31/21 11:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5917	08/01/21 03:01	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	5885	07/30/21 13:58	CH	XEN MID
Soluble	Analysis	300.0		1			5909	08/01/21 05:12	CH	XEN MID

Client Sample ID: AH-7 (1-1.5')

Lab Sample ID: 880-4537-32

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	5889	07/30/21 14:01	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/31/21 19:14	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5926	07/31/21 11:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5917	08/01/21 03:22	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	5885	07/30/21 13:58	CH	XEN MID
Soluble	Analysis	300.0		1			5909	08/01/21 05:28	CH	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-7 (2-2.5')

Lab Sample ID: 880-4537-33

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	5889	07/30/21 14:01	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/31/21 19:39	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	5926	07/31/21 11:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5917	08/01/21 03:43	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	5885	07/30/21 13:58	CH	XEN MID
Soluble	Analysis	300.0		1			5909	08/01/21 05:33	CH	XEN MID

Client Sample ID: AH-7 (3-3.5')

Lab Sample ID: 880-4537-34

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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	5901	08/01/21 12:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5862	08/01/21 21:52	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	5926	07/31/21 11:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5917	08/01/21 04:04	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	5885	07/30/21 13:58	CH	XEN MID
Soluble	Analysis	300.0		1			5909	08/01/21 05:49	CH	XEN MID

Client Sample ID: AH-7 (4-4.5')

Lab Sample ID: 880-4537-35

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	5889	07/30/21 14:01	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/31/21 20:29	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	5926	07/31/21 11:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5917	08/01/21 04:24	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	5885	07/30/21 13:58	CH	XEN MID
Soluble	Analysis	300.0		1			5909	08/01/21 05:55	CH	XEN MID

Client Sample ID: AH-8 (0-1')

Lab Sample ID: 880-4537-36

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	5889	07/30/21 14:01	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/31/21 20:54	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	5926	07/31/21 11:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5917	08/01/21 04:45	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	5885	07/30/21 13:58	CH	XEN MID
Soluble	Analysis	300.0		1			5909	08/01/21 06:00	CH	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: AH-8 (1-1.5')

Lab Sample ID: 880-4537-37

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	5889	07/30/21 14:01	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/31/21 21:18	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5926	07/31/21 11:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5917	08/01/21 05:06	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	5885	07/30/21 13:58	CH	XEN MID
Soluble	Analysis	300.0		1			5909	08/01/21 06:05	CH	XEN MID

Client Sample ID: AH-8 (2-2.5')

Lab Sample ID: 880-4537-38

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	5901	08/01/21 12:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5862	08/01/21 22:13	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	5926	07/31/21 11:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5917	08/01/21 05:27	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	5885	07/30/21 13:58	CH	XEN MID
Soluble	Analysis	300.0		1			5909	08/01/21 06:11	CH	XEN MID

Client Sample ID: AH-8 (3-3.5')

Lab Sample ID: 880-4537-39

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	5889	07/30/21 14:01	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/31/21 22:08	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	5926	07/31/21 11:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5917	08/01/21 05:48	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	5885	07/30/21 13:58	CH	XEN MID
Soluble	Analysis	300.0		1			5909	08/01/21 06:16	CH	XEN MID

Client Sample ID: AH-8 (4-4.5')

Lab Sample ID: 880-4537-40

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	5889	07/30/21 14:01	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5899	07/31/21 22:33	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5926	07/31/21 11:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5917	08/01/21 06:08	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	5885	07/30/21 13:58	CH	XEN MID
Soluble	Analysis	300.0		1			5909	08/01/21 06:22	CH	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: H-1

Lab Sample ID: 880-4537-41

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	5878	07/30/21 14:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5862	07/31/21 22:26	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5927	07/31/21 11:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5915	08/01/21 07:53	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	5886	07/30/21 14:00	CH	XEN MID
Soluble	Analysis	300.0		1			5944	07/31/21 15:21	CH	XEN MID

Client Sample ID: H-2

Lab Sample ID: 880-4537-42

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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	5878	07/30/21 14:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5862	07/31/21 22:46	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	5927	07/31/21 11:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5915	08/01/21 09:07	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	5886	07/30/21 14:00	CH	XEN MID
Soluble	Analysis	300.0		1			5944	07/31/21 15:38	CH	XEN MID

Client Sample ID: H-3

Lab Sample ID: 880-4537-43

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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	5878	07/30/21 14:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5862	07/31/21 23:07	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5927	07/31/21 11:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5915	08/01/21 09:28	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	5886	07/30/21 14:00	CH	XEN MID
Soluble	Analysis	300.0		1			5944	07/31/21 15:43	CH	XEN MID

Client Sample ID: H-4

Lab Sample ID: 880-4537-44

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	5878	07/30/21 14:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5862	07/31/21 23:28	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5927	07/31/21 11:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5915	08/01/21 09:49	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	5886	07/30/21 14:00	CH	XEN MID
Soluble	Analysis	300.0		1			5944	07/31/21 15:49	CH	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Client Sample ID: H-5

Lab Sample ID: 880-4537-45

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	5878	07/30/21 14:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5862	07/31/21 23:48	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	5927	07/31/21 11:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5915	08/01/21 10:10	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	5886	07/30/21 14:00	CH	XEN MID
Soluble	Analysis	300.0		1			5944	07/31/21 15:54	CH	XEN MID

Client Sample ID: H-6

Lab Sample ID: 880-4537-46

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	5878	07/30/21 14:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5862	08/01/21 00:09	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	5927	07/31/21 11:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5915	08/01/21 10:31	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	5886	07/30/21 14:00	CH	XEN MID
Soluble	Analysis	300.0		1			5944	07/31/21 16:10	CH	XEN MID

Client Sample ID: H-7

Lab Sample ID: 880-4537-47

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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	5878	07/30/21 14:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5862	08/01/21 00:30	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	5927	07/31/21 11:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5915	08/01/21 10:53	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	5886	07/30/21 14:00	CH	XEN MID
Soluble	Analysis	300.0		1			5944	07/31/21 16:16	CH	XEN MID

Client Sample ID: H-8

Lab Sample ID: 880-4537-48

Date Collected: 07/28/21 00:00

Matrix: Solid

Date Received: 07/30/21 13:28

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	5878	07/30/21 14:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5862	08/01/21 00:50	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	5927	07/31/21 11:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5915	08/01/21 11:14	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	5886	07/30/21 14:00	CH	XEN MID
Soluble	Analysis	300.0		1			5944	07/31/21 16:21	CH	XEN MID

Laboratory References:

XEN MID = 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: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea 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	06-30-22

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: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

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: Ophelia Riser Spill

Job ID: 880-4537-1
SDG: Lea County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-4537-1	AH-1 (0-1')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-2	AH-1 (1-1.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-3	AH-1 (2-2.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-4	AH-1 (3-3.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-5	AH-1 (4-4.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-6	AH-2 (0-1')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-7	AH-2 (1-1.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-8	AH-2 (2-2.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-9	AH-2 (3-3.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-10	AH-2 (4-4.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-11	AH-3 (0-1')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-12	AH-3 (1-1.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-13	AH-3 (2-2.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-14	AH-3 (3-3.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-15	AH-3 (4-4.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-16	AH-4 (0-1')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-17	AH-4 (1-1.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-18	AH-4 (2-2.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-19	AH-4 (3-3.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-20	AH-4 (4-4.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-21	AH-5 (0-1')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-22	AH-5 (1-1.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-23	AH-5 (2-2.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-24	AH-5 (3-3.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-25	AH-5 (4-4.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-26	AH-6 (0-1')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-27	AH-6 (1-1.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-28	AH-6 (2-2.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-29	AH-6 (3-3.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-30	AH-6 (4-4.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-31	AH-7 (0-1')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-32	AH-7 (1-1.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-33	AH-7 (2-2.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-34	AH-7 (3-3.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-35	AH-7 (4-4.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-36	AH-8 (0-1')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-37	AH-8 (1-1.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-38	AH-8 (2-2.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-39	AH-8 (3-3.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-40	AH-8 (4-4.5')	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-41	H-1	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-42	H-2	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-43	H-3	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-44	H-4	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-45	H-5	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-46	H-6	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-47	H-7	Solid	07/28/21 00:00	07/30/21 13:28
880-4537-48	H-8	Solid	07/28/21 00:00	07/30/21 13:28

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

880-4537 Chain of Custody



00-4537

je 1 of 5

8/2/2021

Client Name		EOG Resources		Site Manager		Brittany Long	
Project Name		Ophelia Riser Spill		Project #		212C-MD-02563	
Project Location (county, state)		Lea County, New Mexico		Invoice to		Galan Kelley	
Receiving Laboratory		Eurofins		Sampler Signature		Marvin Dunbar	
Comments							

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION		SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
	DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE			
								YEAR		
AH-1 (0-1')	7/28/2021		X						1	
AH-1 (1-1.5')	7/28/2021		X						1	
AH-1 (2-2.5')	7/28/2021		X						1	
AH-1 (3-3.5')	7/28/2021		X						1	
AH-1 (4-4.5')	7/28/2021		X						1	
AH-2 (0-1')	7/28/2021		X						1	
AH-2 (1-1.5')	7/28/2021		X						1	
AH-2 (2-2.5')	7/28/2021		X						1	
AH-2 (3-3.5')	7/28/2021		X						1	
AH-2 (4-4.5')	7/28/2021		X						1	

Relinquished by	Date	Time	Received by	Date	Time
Marvin Dunbar	7/30/21	1315	KGH	7/30/21	1315
Relinquished by	Date	Time	Received by	Date	Time

LAB USE ONLY	LAB USE ONLY	REMARKS.
Sample Temperature 20.2, 2.5 +0.5		<input checked="" type="checkbox"/> RUSH Same Day <input type="checkbox"/> Rush Charges Authorized <input type="checkbox"/> Special Report Limits or TRRP Report

ORIGINAL COPY

Tetra Tech, Inc.

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

Page 2 of 2

080-4537

8/2/2021

Project Name		EOG Resources		Site Manager		Brittany Long																					
Project Location (county, state)		Ophelia Riser Spill		Project #:		212C-MD-02563																					
Invoice to:		Lea County, New Mexico		Project #:		212C-MD-02563																					
Receiving Laboratory		Galan Kelley		Sampler Signature:		Marvin Dunbar																					
Comments:		Eurofins		Sampler Signature:		Marvin Dunbar																					
LAB # (LAB USE ONLY)		SAMPLE IDENTIFICATION		SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS		FILTERED (Y/N)															
				YEAR																							
				DATE		TIME		WATER		SOIL		HCL		HNO ₃		ICE											
		AH-3 (0-1')		7/28/2021				X		X		X		X		X		1		1		X		X			
		AH-3 (1-1.5')		7/28/2021				X		X		X		X		X		1		1		X		X			
		AH-3 (2-2.5')		7/28/2021				X		X		X		X		X		1		1		X		X			
		AH-3 (3-3.5')		7/28/2021				X		X		X		X		X		1		1		X		X			
		AH-3 (4-4.5')		7/28/2021				X		X		X		X		X		1		1		X		X			
		AH-4 (0-1')		7/28/2021				X		X		X		X		X		1		1		X		X			
		AH-4 (1-1.5')		7/28/2021				X		X		X		X		X		1		1		X		X			
		AH-4 (2-2.5')		7/28/2021				X		X		X		X		X		1		1		X		X			
		AH-4 (3-3.5')		7/28/2021				X		X		X		X		X		1		1		X		X			
		AH-4 (4-4.5')		7/28/2021				X		X		X		X		X		1		1		X		X			
Relinquished by:		Date		Time		Received by:		Date		Time		LAB USE ONLY		REMARKS:													
Relinquished by:		Date		Time		Received by:		Date		Time		LAB USE ONLY		REMARKS:													
Relinquished by:		Date		Time		Received by:		Date		Time		LAB USE ONLY		REMARKS:													
Relinquished by:		Date		Time		Received by:		Date		Time		LAB USE ONLY		REMARKS:													
Relinquished by:		Date		Time		Received by:		Date		Time		LAB USE ONLY		REMARKS:													
Relinquished by:		Date		Time		Received by:		Date		Time		LAB USE ONLY		REMARKS:													
Relinquished by:		Date		Time		Received by:		Date		Time		LAB USE ONLY		REMARKS:													
Relinquished by:		Date		Time		Received by:		Date		Time		LAB USE ONLY		REMARKS:													
Relinquished by:		Date		Time		Received by:		Date		Time		LAB USE ONLY		REMARKS:													
Relinquished by:		Date		Time		Received by:		Date		Time		LAB USE ONLY		REMARKS:													
Relinquished by:		Date		Time		Received by:		Date		Time		LAB USE ONLY		REMARKS:													
Relinquished by:		Date		Time		Received by:		Date		Time		LAB USE ONLY		REMARKS:													
Relinquished by:		Date		Time		Received by:		Date		Time		LAB USE ONLY		REMARKS:													
Relinquished by:		Date		Time		Received by:		Date		Time		LAB USE ONLY		REMARKS:													
Relinquished by:		Date		Time		Received by:		Date		Time		LAB USE ONLY		REMARKS:													
Relinquished by:		Date		Time		Received by:		Date		Time		LAB USE ONLY		REMARKS:													
Relinquished by:		Date		Time		Received by:		Date		Time		LAB USE ONLY		REMARKS:													
Relinquished by:		Date		Time		Received by:		Date		Time		LAB USE ONLY		REMARKS:													

Analysis Request of Custody Record



Tetra Tech, Inc.

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

Page 3 of 5

880-4537

Client Name EOG Resources Site Manager Brittany Long

Project Name Ophelia Riser Spill

Project Location Lea County, New Mexico Project # 212C-MD-02563

Invoice to Galan Kelley

Receiving Laboratory Eurofins Sampler Signature Marvin Dunbar

Comments

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD				# CONTAINERS	FILTERED (Y/N)	REMARKS:	
		YEAR	DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE				
										LAB USE ONLY			
	AH-5 (0-1')		7/28/2021		X			X			1		BTEx 8021B BTEx 8021C TPH TX1005 (Ext to 100 ft) TPH 8015M (GRO) PAH 8270C Total Metals Ag As Ba TCLP Metals Ag As B TCLP Volatiles TCLP Semi Volatiles RCI GC/MS Vol 8260B / 8260C GC/MS Semi Vol 8260B / 8260C PCBs 8082 / 608 NORM PLM (Asbestos) Chloride Chloride Sulfate General Water Chem Anion/Cation Balance
	AH-5 (1-1.5')		7/28/2021		X			X			1		
	AH-5 (2-2.5')		7/28/2021		X			X			1		
	AH-5 (3-3.5')		7/28/2021		X			X			1		
	AH-5 (4-4.5')		7/28/2021		X			X			1		
	AH-6 (0-1')		7/28/2021		X			X			1		
	AH-6 (1-1.5')		7/28/2021		X			X			1		
	AH-6 (2-2.5')		7/28/2021		X			X			1		
	AH-6 (3-3.5')		7/28/2021		X			X			1		
	AH-6 (4-4.5')		7/28/2021		X			X			1		
Relinquished by		Date	Time	Received by	Date	Time							
Relinquished by		Date	Time	Received by	Date	Time							
Relinquished by		Date	Time	Received by	Date	Time							

LAB USE ONLY

☒ RUSH Same Day

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

24 hr

48 hr

72 hr

ANALYSIS REQUEST
(Circle or Specify Method No.)

BTEX 8021B	BTEX 8020B
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	
PCBs 8082 / 608	
NORM	
PLM (Asbestos)	
Chloride	
Chloride Sulfate TDS	
General Water Chemistry (see attached list)	
Anion/Cation Balance	
Hold	

LAB USE ONLY

REMARKS:

- ☒ RUSH Same Day ☒ 24 hr ☐ 48 hr ☐ 72 hr
- ☐ Rush Charges Authorized
- ☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #

ORIGINAL COPY

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 880-4537-1

SDG Number: Lea County, New Mexico

Login Number: 4537

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.	True	
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	



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

August 27, 2021

BRITTANY LONG

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: OPHELIA RISER SPILL

Enclosed are the results of analyses for samples received by the laboratory on 08/26/21 16:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/26/2021	Sampling Date:	08/26/2021
Reported:	08/27/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: BH - 20 (5.5') (H212304-01)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/26/2021	ND	1.87	93.4	2.00	0.295		
Toluene*	<0.050	0.050	08/26/2021	ND	2.01	101	2.00	0.289		
Ethylbenzene*	<0.050	0.050	08/26/2021	ND	1.94	97.1	2.00	0.266		
Total Xylenes*	<0.150	0.150	08/26/2021	ND	5.86	97.6	6.00	0.487		
Total BTEX	<0.300	0.300	08/26/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.6 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	464	16.0	08/27/2021	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/27/2021	ND	194	96.8	200	1.17	
DRO >C10-C28*	<10.0	10.0	08/27/2021	ND	203	101	200	3.75	
EXT DRO >C28-C36	<10.0	10.0	08/27/2021	ND					

Surrogate: 1-Chlorooctane 86.0 % 44.3-133

Surrogate: 1-Chlorooctadecane 78.8 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/26/2021	Sampling Date:	08/26/2021
Reported:	08/27/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: BH - 17 (3') (H212304-02)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/26/2021	ND	1.87	93.4	2.00	0.295	
Toluene*	<0.050	0.050	08/26/2021	ND	2.01	101	2.00	0.289	
Ethylbenzene*	<0.050	0.050	08/26/2021	ND	1.94	97.1	2.00	0.266	
Total Xylenes*	<0.150	0.150	08/26/2021	ND	5.86	97.6	6.00	0.487	
Total BTEX	<0.300	0.300	08/26/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.3 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	08/27/2021	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/27/2021	ND	194	96.8	200	1.17	
DRO >C10-C28*	<10.0	10.0	08/27/2021	ND	203	101	200	3.75	
EXT DRO >C28-C36	<10.0	10.0	08/27/2021	ND					

Surrogate: 1-Chlorooctane 85.8 % 44.3-133

Surrogate: 1-Chlorooctadecane 79.8 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/26/2021	Sampling Date:	08/26/2021
Reported:	08/27/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: BH - 22 (2') (H212304-03)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/26/2021	ND	1.87	93.4	2.00	0.295	
Toluene*	<0.050	0.050	08/26/2021	ND	2.01	101	2.00	0.289	
Ethylbenzene*	<0.050	0.050	08/26/2021	ND	1.94	97.1	2.00	0.266	
Total Xylenes*	<0.150	0.150	08/26/2021	ND	5.86	97.6	6.00	0.487	
Total BTX	<0.300	0.300	08/26/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	08/27/2021	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/27/2021	ND	194	96.8	200	1.17	
DRO >C10-C28*	<10.0	10.0	08/27/2021	ND	203	101	200	3.75	
EXT DRO >C28-C36	<10.0	10.0	08/27/2021	ND					

Surrogate: 1-Chlorooctane 79.6 % 44.3-133

Surrogate: 1-Chlorooctadecane 70.1 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/26/2021	Sampling Date:	08/25/2021
Reported:	08/27/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: BH - 8 (2') (H212304-04)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/26/2021	ND	1.87	93.4	2.00	0.295		
Toluene*	<0.050	0.050	08/26/2021	ND	2.01	101	2.00	0.289		
Ethylbenzene*	<0.050	0.050	08/26/2021	ND	1.94	97.1	2.00	0.266		
Total Xylenes*	<0.150	0.150	08/26/2021	ND	5.86	97.6	6.00	0.487		
Total BTEx	<0.300	0.300	08/26/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.7 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	08/27/2021	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/27/2021	ND	194	96.8	200	1.17	
DRO >C10-C28*	<10.0	10.0	08/27/2021	ND	203	101	200	3.75	
EXT DRO >C28-C36	<10.0	10.0	08/27/2021	ND					

Surrogate: 1-Chlorooctane 75.0 % 44.3-133

Surrogate: 1-Chlorooctadecane 71.4 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
 BRITTANY LONG
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	08/26/2021	Sampling Date:	08/25/2021
Reported:	08/27/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: BH - 16 (2') (H212304-05)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/26/2021	ND	1.87	93.4	2.00	0.295		
Toluene*	<0.050	0.050	08/26/2021	ND	2.01	101	2.00	0.289		
Ethylbenzene*	<0.050	0.050	08/26/2021	ND	1.94	97.1	2.00	0.266		
Total Xylenes*	<0.150	0.150	08/26/2021	ND	5.86	97.6	6.00	0.487		
Total BTEx	<0.300	0.300	08/26/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.8 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	288	16.0	08/27/2021	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/27/2021	ND	194	96.8	200	1.17	
DRO >C10-C28*	<10.0	10.0	08/27/2021	ND	203	101	200	3.75	
EXT DRO >C28-C36	<10.0	10.0	08/27/2021	ND					

Surrogate: 1-Chlorooctane 83.4 % 44.3-133

Surrogate: 1-Chlorooctadecane 76.2 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/26/2021	Sampling Date:	08/25/2021
Reported:	08/27/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: BH - 18 (2') (H212304-06)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/26/2021	ND	1.87	93.4	2.00	0.295	
Toluene*	<0.050	0.050	08/26/2021	ND	2.01	101	2.00	0.289	
Ethylbenzene*	<0.050	0.050	08/26/2021	ND	1.94	97.1	2.00	0.266	
Total Xylenes*	<0.150	0.150	08/26/2021	ND	5.86	97.6	6.00	0.487	
Total BTX	<0.300	0.300	08/26/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.1 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	08/27/2021	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/27/2021	ND	194	96.8	200	1.17	
DRO >C10-C28*	<10.0	10.0	08/27/2021	ND	203	101	200	3.75	
EXT DRO >C28-C36	<10.0	10.0	08/27/2021	ND					

Surrogate: 1-Chlorooctane 83.6 % 44.3-133

Surrogate: 1-Chlorooctadecane 74.7 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/26/2021	Sampling Date:	08/25/2021
Reported:	08/27/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: BH - 19 (4.5') (H212304-07)

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/26/2021	ND	1.87	93.4	2.00	0.295		
Toluene*	<0.050	0.050	08/26/2021	ND	2.01	101	2.00	0.289		
Ethylbenzene*	<0.050	0.050	08/26/2021	ND	1.94	97.1	2.00	0.266		
Total Xylenes*	<0.150	0.150	08/26/2021	ND	5.86	97.6	6.00	0.487		
Total BTX	<0.300	0.300	08/26/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.7 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	08/27/2021	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/27/2021	ND	194	96.8	200	1.17	
DRO >C10-C28*	<10.0	10.0	08/27/2021	ND	203	101	200	3.75	
EXT DRO >C28-C36	<10.0	10.0	08/27/2021	ND					

Surrogate: 1-Chlorooctane 86.5 % 44.3-133

Surrogate: 1-Chlorooctadecane 79.5 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/26/2021	Sampling Date:	08/25/2021
Reported:	08/27/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: BH - 21 (4.5') (H212304-08)

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/26/2021	ND	1.87	93.4	2.00	0.295		
Toluene*	<0.050	0.050	08/26/2021	ND	2.01	101	2.00	0.289		
Ethylbenzene*	<0.050	0.050	08/26/2021	ND	1.94	97.1	2.00	0.266		
Total Xylenes*	<0.150	0.150	08/26/2021	ND	5.86	97.6	6.00	0.487		
Total BTX	<0.300	0.300	08/26/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	272	16.0	08/27/2021	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/27/2021	ND	194	96.8	200	1.17	
DRO >C10-C28*	<10.0	10.0	08/27/2021	ND	203	101	200	3.75	
EXT DRO >C28-C36	<10.0	10.0	08/27/2021	ND					

Surrogate: 1-Chlorooctane 85.4 % 44.3-133

Surrogate: 1-Chlorooctadecane 77.7 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/26/2021	Sampling Date:	08/26/2021
Reported:	08/27/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 3 (H212304-09)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/26/2021	ND	1.99	99.5	2.00	5.84		
Toluene*	<0.050	0.050	08/26/2021	ND	1.99	99.4	2.00	5.28		
Ethylbenzene*	<0.050	0.050	08/26/2021	ND	2.00	100	2.00	3.50		
Total Xylenes*	<0.150	0.150	08/26/2021	ND	6.05	101	6.00	3.43		
Total BTEx	<0.300	0.300	08/26/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	08/27/2021	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/27/2021	ND	199	99.5	200	1.74	
DRO >C10-C28*	<10.0	10.0	08/27/2021	ND	217	108	200	1.98	
EXT DRO >C28-C36	<10.0	10.0	08/27/2021	ND					

Surrogate: 1-Chlorooctane 85.8 % 44.3-133

Surrogate: 1-Chlorooctadecane 77.3 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
 BRITTANY LONG
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	08/26/2021	Sampling Date:	08/26/2021
Reported:	08/27/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 10 (H212304-10)

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/26/2021	ND	1.99	99.5	2.00	5.84	
Toluene*	<0.050	0.050	08/26/2021	ND	1.99	99.4	2.00	5.28	
Ethylbenzene*	<0.050	0.050	08/26/2021	ND	2.00	100	2.00	3.50	
Total Xylenes*	<0.150	0.150	08/26/2021	ND	6.05	101	6.00	3.43	
Total BTX	<0.300	0.300	08/26/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	08/27/2021	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/27/2021	ND	199	99.5	200	1.74	
DRO >C10-C28*	<10.0	10.0	08/27/2021	ND	217	108	200	1.98	
EXT DRO >C28-C36	<10.0	10.0	08/27/2021	ND					

Surrogate: 1-Chlorooctane 85.5 % 44.3-133

Surrogate: 1-Chlorooctadecane 74.9 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/26/2021	Sampling Date:	08/25/2021
Reported:	08/27/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 19 (H212304-11)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/26/2021	ND	1.99	99.5	2.00	5.84		
Toluene*	<0.050	0.050	08/26/2021	ND	1.99	99.4	2.00	5.28		
Ethylbenzene*	<0.050	0.050	08/26/2021	ND	2.00	100	2.00	3.50		
Total Xylenes*	<0.150	0.150	08/26/2021	ND	6.05	101	6.00	3.43		
Total BTEx	<0.300	0.300	08/26/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	08/27/2021	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/27/2021	ND	199	99.5	200	1.74	
DRO >C10-C28*	<10.0	10.0	08/27/2021	ND	217	108	200	1.98	
EXT DRO >C28-C36	<10.0	10.0	08/27/2021	ND					

Surrogate: 1-Chlorooctane 85.7 % 44.3-133

Surrogate: 1-Chlorooctadecane 74.8 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/26/2021	Sampling Date:	08/25/2021
Reported:	08/27/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 1 (H212304-12)

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/26/2021	ND	1.99	99.5	2.00	5.84	
Toluene*	<0.050	0.050	08/26/2021	ND	1.99	99.4	2.00	5.28	
Ethylbenzene*	<0.050	0.050	08/26/2021	ND	2.00	100	2.00	3.50	
Total Xylenes*	<0.150	0.150	08/26/2021	ND	6.05	101	6.00	3.43	
Total BTX	<0.300	0.300	08/26/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	208	16.0	08/27/2021	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/27/2021	ND	199	99.5	200	1.74	
DRO >C10-C28*	<10.0	10.0	08/27/2021	ND	217	108	200	1.98	
EXT DRO >C28-C36	<10.0	10.0	08/27/2021	ND					

Surrogate: 1-Chlorooctane 86.6 % 44.3-133

Surrogate: 1-Chlorooctadecane 74.1 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/26/2021	Sampling Date:	08/25/2021
Reported:	08/27/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 2 (H212304-13)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/26/2021	ND	1.99	99.5	2.00	5.84		
Toluene*	<0.050	0.050	08/26/2021	ND	1.99	99.4	2.00	5.28		
Ethylbenzene*	<0.050	0.050	08/26/2021	ND	2.00	100	2.00	3.50		
Total Xylenes*	<0.150	0.150	08/26/2021	ND	6.05	101	6.00	3.43		
Total BTEx	<0.300	0.300	08/26/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	304	16.0	08/27/2021	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/27/2021	ND	199	99.5	200	1.74	
DRO >C10-C28*	<10.0	10.0	08/27/2021	ND	217	108	200	1.98	
EXT DRO >C28-C36	<10.0	10.0	08/27/2021	ND					

Surrogate: 1-Chlorooctane 79.2 % 44.3-133

Surrogate: 1-Chlorooctadecane 71.0 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/26/2021	Sampling Date:	08/25/2021
Reported:	08/27/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 8 (H212304-14)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/26/2021	ND	1.99	99.5	2.00	5.84		
Toluene*	<0.050	0.050	08/26/2021	ND	1.99	99.4	2.00	5.28		
Ethylbenzene*	<0.050	0.050	08/26/2021	ND	2.00	100	2.00	3.50		
Total Xylenes*	<0.150	0.150	08/26/2021	ND	6.05	101	6.00	3.43		
Total BTEx	<0.300	0.300	08/26/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/27/2021	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/27/2021	ND	199	99.5	200	1.74	
DRO >C10-C28*	<10.0	10.0	08/27/2021	ND	217	108	200	1.98	
EXT DRO >C28-C36	<10.0	10.0	08/27/2021	ND					

Surrogate: 1-Chlorooctane 81.4 % 44.3-133

Surrogate: 1-Chlorooctadecane 73.3 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/26/2021	Sampling Date:	08/25/2021
Reported:	08/27/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 9 (H212304-15)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/26/2021	ND	1.99	99.5	2.00	5.84		
Toluene*	<0.050	0.050	08/26/2021	ND	1.99	99.4	2.00	5.28		
Ethylbenzene*	<0.050	0.050	08/26/2021	ND	2.00	100	2.00	3.50		
Total Xylenes*	<0.150	0.150	08/26/2021	ND	6.05	101	6.00	3.43		
Total BTEx	<0.300	0.300	08/26/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	08/27/2021	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/27/2021	ND	199	99.5	200	1.74	
DRO >C10-C28*	<10.0	10.0	08/27/2021	ND	217	108	200	1.98	
EXT DRO >C28-C36	<10.0	10.0	08/27/2021	ND					

Surrogate: 1-Chlorooctane 88.5 % 44.3-133

Surrogate: 1-Chlorooctadecane 78.9 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/26/2021	Sampling Date:	08/25/2021
Reported:	08/27/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 11 (H212304-16)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/26/2021	ND	1.99	99.5	2.00	5.84		
Toluene*	<0.050	0.050	08/26/2021	ND	1.99	99.4	2.00	5.28		
Ethylbenzene*	<0.050	0.050	08/26/2021	ND	2.00	100	2.00	3.50		
Total Xylenes*	<0.150	0.150	08/26/2021	ND	6.05	101	6.00	3.43		
Total BTEx	<0.300	0.300	08/26/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	08/27/2021	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/27/2021	ND	199	99.5	200	1.74	
DRO >C10-C28*	<10.0	10.0	08/27/2021	ND	217	108	200	1.98	
EXT DRO >C28-C36	<10.0	10.0	08/27/2021	ND					

Surrogate: 1-Chlorooctane 82.0 % 44.3-133

Surrogate: 1-Chlorooctadecane 79.8 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/26/2021	Sampling Date:	08/25/2021
Reported:	08/27/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 12 (H212304-17)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/26/2021	ND	1.99	99.5	2.00	5.84		
Toluene*	<0.050	0.050	08/26/2021	ND	1.99	99.4	2.00	5.28		
Ethylbenzene*	<0.050	0.050	08/26/2021	ND	2.00	100	2.00	3.50		
Total Xylenes*	<0.150	0.150	08/26/2021	ND	6.05	101	6.00	3.43		
Total BTEx	<0.300	0.300	08/26/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	08/27/2021	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/27/2021	ND	199	99.5	200	1.74	
DRO >C10-C28*	<10.0	10.0	08/27/2021	ND	217	108	200	1.98	
EXT DRO >C28-C36	<10.0	10.0	08/27/2021	ND					

Surrogate: 1-Chlorooctane 87.6 % 44.3-133

Surrogate: 1-Chlorooctadecane 76.0 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/26/2021	Sampling Date:	08/25/2021
Reported:	08/27/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 14 (H212304-18)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/26/2021	ND	1.99	99.5	2.00	5.84		
Toluene*	<0.050	0.050	08/26/2021	ND	1.99	99.4	2.00	5.28		
Ethylbenzene*	<0.050	0.050	08/26/2021	ND	2.00	100	2.00	3.50		
Total Xylenes*	<0.150	0.150	08/26/2021	ND	6.05	101	6.00	3.43		
Total BTEx	<0.300	0.300	08/26/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	08/27/2021	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/27/2021	ND	199	99.5	200	1.74	
DRO >C10-C28*	<10.0	10.0	08/27/2021	ND	217	108	200	1.98	
EXT DRO >C28-C36	<10.0	10.0	08/27/2021	ND					

Surrogate: 1-Chlorooctane 86.5 % 44.3-133

Surrogate: 1-Chlorooctadecane 78.5 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/26/2021	Sampling Date:	08/25/2021
Reported:	08/27/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 15 (H212304-19)

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/26/2021	ND	1.99	99.5	2.00	5.84	
Toluene*	<0.050	0.050	08/26/2021	ND	1.99	99.4	2.00	5.28	
Ethylbenzene*	<0.050	0.050	08/26/2021	ND	2.00	100	2.00	3.50	
Total Xylenes*	<0.150	0.150	08/26/2021	ND	6.05	101	6.00	3.43	
Total BTX	<0.300	0.300	08/26/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	08/27/2021	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/27/2021	ND	199	99.5	200	1.74	
DRO >C10-C28*	<10.0	10.0	08/27/2021	ND	217	108	200	1.98	
EXT DRO >C28-C36	<10.0	10.0	08/27/2021	ND					

Surrogate: 1-Chlorooctane 83.4 % 44.3-133

Surrogate: 1-Chlorooctadecane 76.0 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
 BRITTANY LONG
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	08/26/2021	Sampling Date:	08/25/2021
Reported:	08/27/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 16 (H212304-20)

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/26/2021	ND	1.99	99.5	2.00	5.84	
Toluene*	<0.050	0.050	08/26/2021	ND	1.99	99.4	2.00	5.28	
Ethylbenzene*	<0.050	0.050	08/26/2021	ND	2.00	100	2.00	3.50	
Total Xylenes*	<0.150	0.150	08/26/2021	ND	6.05	101	6.00	3.43	
Total BTX	<0.300	0.300	08/26/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	08/27/2021	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/27/2021	ND	199	99.5	200	1.74	
DRO >C10-C28*	<10.0	10.0	08/27/2021	ND	217	108	200	1.98	
EXT DRO >C28-C36	<10.0	10.0	08/27/2021	ND					

Surrogate: 1-Chlorooctane 83.5 % 44.3-133

Surrogate: 1-Chlorooctadecane 74.2 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/26/2021	Sampling Date:	08/25/2021
Reported:	08/27/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 17 (H212304-21)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/26/2021	ND	1.99	99.5	2.00	5.84		
Toluene*	<0.050	0.050	08/26/2021	ND	1.99	99.4	2.00	5.28		
Ethylbenzene*	<0.050	0.050	08/26/2021	ND	2.00	100	2.00	3.50		
Total Xylenes*	<0.150	0.150	08/26/2021	ND	6.05	101	6.00	3.43		
Total BTEx	<0.300	0.300	08/26/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	08/27/2021	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/27/2021	ND	199	99.5	200	1.74	
DRO >C10-C28*	<10.0	10.0	08/27/2021	ND	217	108	200	1.98	
EXT DRO >C28-C36	<10.0	10.0	08/27/2021	ND					

Surrogate: 1-Chlorooctane 75.0 % 44.3-133

Surrogate: 1-Chlorooctadecane 65.8 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/26/2021	Sampling Date:	08/25/2021
Reported:	08/27/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 18 (H212304-22)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/27/2021	ND	1.99	99.5	2.00	5.84		
Toluene*	<0.050	0.050	08/27/2021	ND	1.99	99.4	2.00	5.28		
Ethylbenzene*	<0.050	0.050	08/27/2021	ND	2.00	100	2.00	3.50		
Total Xylenes*	<0.150	0.150	08/27/2021	ND	6.05	101	6.00	3.43		
Total BTEx	<0.300	0.300	08/27/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	08/27/2021	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/27/2021	ND	199	99.5	200	1.74	
DRO >C10-C28*	<10.0	10.0	08/27/2021	ND	217	108	200	1.98	
EXT DRO >C28-C36	<10.0	10.0	08/27/2021	ND					

Surrogate: 1-Chlorooctane 79.3 % 44.3-133

Surrogate: 1-Chlorooctadecane 76.6 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager

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

Notes and Definitions

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

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

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

Client Name:

EOG Resources

Site Manager:

Brittany Long

432-741-5813

Project Name:

Ophelia Riser Spill

Project Location:

Lea County, New Mexico

Project #:

212C-MD-02563

Invoice to:

EOG Resources/Kevin Black

Receiving Laboratory:

Cardinal Laboratory

Sampler Signature:

Myles Taylor

Comments:

LAB #

LAB USE ONLY

SAMPLE IDENTIFICATION

SAMPLING

YEAR

DATE

TIME

MATRIX

PRESERVATIVE METHOD

WATER
SOIL
HCL
HNO₃
ICE

CONTAINERS

FILTERED (Y/N)

ANALYSIS REQUEST

(Circle or Specify Method No.)

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

Hold

Relinquished by:

Date:

Time:

Received by:

Date:

Time:

Relinquished by:

Date:

Time:

Received by:

Date:

Time:

Relinquished by:

Date:

Time:

Received by:

Date:

Time:

LAB USE ONLY

REMARKS:

☒ RUSH: Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

Sample Temperature

3.1°C
#113
T.O.

(Circle) HAND DELIVERED FEDEX UPS Tracking #

ORIGINAL COPY

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

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

Page 2 of

Page 26 of 27

Client Name: EOG Resources		Site Manager: Brittany Long	
Project Name: Ophelia Riser Spill			
Project Location: Lea County, New Mexico		Project #: 212C-MD-02563	
Invoice to: EOG Resources/Kevin Black			
Receiving Laboratory: Cardinal Laboratory		Sampler Signature: Myles Taylor	
Comments:			
LAB USE ONLY			
SAMPLE IDENTIFICATION			
LAB # H21334			
DATE			
TIME			
WATER			
SOIL			
HCL			
HNO3			
ICE			
# 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			
Chloride Sulfate TDS			
General Water Chemistry (see attached list)			
Anion/Cation Balance			
Hold			

ORIGINAL COPY

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

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

Page 3 of 3

Page 27 of 27

Client Name:		EOG Resources		Site Manager:		Brittany Long	
Project Name:		Ophelia Riser Spill		Project #:		212C-MD-02563	
Project Location: (county, state)		Lea County, New Mexico		Invoice to:		EOG Resources/Kevin Black	
Receiving Laboratory:		Cardinal Laboratory		Sampler Signature:		Myles Taylor	
Comments:							

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION		SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)	ANALYSIS REQUEST (Circle or Specify Method No.)
	YEAR	DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE			
26 #1	SW-16	8/25/2021		X			X		1		BTEX 8021B BTEX 8260B
21 #2	SW-17	8/25/2021		X			X		1		TPH TX1005 (Ext to C35)
22 #3	SW-18	8/25/2021		X			X		1		TPH 8015M (GRO - DRO - ORO - MRO)
											PAH 8270C
											Total Metals Ag As Ba Cd Cr Pb Se Hg
											TCLP Metals Ag As Ba Cd Cr Pb Se Hg
											TCLP Volatiles
											TCLP Semi Volatiles
											RCI
											GC/MS Vol. 8260B / 624
											GC/MS Semi. Vol. 8270C/625
											PCB's 8082 / 608
											NORM
											PLM (Asbestos)
											Chloride
											Chloride Sulfate TDS
											General Water Chemistry (see attached list)
											Anion/Cation Balance
											Hold

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Myles Taylor	8/26/21	1600	Brittany Long	8/26/21	1400
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

LAB USE ONLY	REMARKS:
3.1c	<input checked="" type="checkbox"/> RUSH: Same Day 24 hr 48 hr 72 hr
#113	<input type="checkbox"/> Rush Charges Authorized
TE	<input type="checkbox"/> Special Report Limits or TRRP Report

ORIGINAL COPY



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

August 30, 2021

BRITTANY LONG

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: OPHELIA RISER SPILL

Enclosed are the results of analyses for samples received by the laboratory on 08/27/21 16:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/27/2021	Sampling Date:	08/27/2021
Reported:	08/30/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: BH - 13 (4.5') (H212330-01)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/27/2021	ND	2.03	102	2.00	4.07	
Toluene*	<0.050	0.050	08/27/2021	ND	2.21	110	2.00	3.61	
Ethylbenzene*	<0.050	0.050	08/27/2021	ND	2.04	102	2.00	3.98	
Total Xylenes*	<0.150	0.150	08/27/2021	ND	6.31	105	6.00	3.41	
Total BTEX	<0.300	0.300	08/27/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	08/30/2021	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2021	ND	209	105	200	0.555	
DRO >C10-C28*	<10.0	10.0	08/28/2021	ND	211	105	200	3.44	
EXT DRO >C28-C36	<10.0	10.0	08/28/2021	ND					

Surrogate: 1-Chlorooctane 80.3 % 44.3-133

Surrogate: 1-Chlorooctadecane 77.7 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/27/2021	Sampling Date:	08/27/2021
Reported:	08/30/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: BH - 14 (4.5') (H212330-02)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/27/2021	ND	2.03	102	2.00	4.07	
Toluene*	<0.050	0.050	08/27/2021	ND	2.21	110	2.00	3.61	
Ethylbenzene*	<0.050	0.050	08/27/2021	ND	2.04	102	2.00	3.98	
Total Xylenes*	<0.150	0.150	08/27/2021	ND	6.31	105	6.00	3.41	
Total BTX	<0.300	0.300	08/27/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	08/30/2021	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2021	ND	209	105	200	0.555	
DRO >C10-C28*	<10.0	10.0	08/28/2021	ND	211	105	200	3.44	
EXT DRO >C28-C36	<10.0	10.0	08/28/2021	ND					

Surrogate: 1-Chlorooctane 67.8 % 44.3-133

Surrogate: 1-Chlorooctadecane 65.5 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/27/2021	Sampling Date:	08/27/2021
Reported:	08/30/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: BH - 15 (4.5') (H212330-03)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/27/2021	ND	2.03	102	2.00	4.07	
Toluene*	<0.050	0.050	08/27/2021	ND	2.21	110	2.00	3.61	
Ethylbenzene*	<0.050	0.050	08/27/2021	ND	2.04	102	2.00	3.98	
Total Xylenes*	<0.150	0.150	08/27/2021	ND	6.31	105	6.00	3.41	
Total BTEx	<0.300	0.300	08/27/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	08/30/2021	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2021	ND	209	105	200	0.555	
DRO >C10-C28*	<10.0	10.0	08/28/2021	ND	211	105	200	3.44	
EXT DRO >C28-C36	<10.0	10.0	08/28/2021	ND					

Surrogate: 1-Chlorooctane 66.1 % 44.3-133

Surrogate: 1-Chlorooctadecane 63.0 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/27/2021	Sampling Date:	08/27/2021
Reported:	08/30/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: BH - 12 (3.0') (H212330-04)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/27/2021	ND	2.03	102	2.00	4.07	
Toluene*	<0.050	0.050	08/27/2021	ND	2.21	110	2.00	3.61	
Ethylbenzene*	<0.050	0.050	08/27/2021	ND	2.04	102	2.00	3.98	
Total Xylenes*	<0.150	0.150	08/27/2021	ND	6.31	105	6.00	3.41	
Total BTX	<0.300	0.300	08/27/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	08/30/2021	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2021	ND	209	105	200	0.555	
DRO >C10-C28*	<10.0	10.0	08/28/2021	ND	211	105	200	3.44	
EXT DRO >C28-C36	<10.0	10.0	08/28/2021	ND					

Surrogate: 1-Chlorooctane 64.3 % 44.3-133

Surrogate: 1-Chlorooctadecane 61.2 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/27/2021	Sampling Date:	08/27/2021
Reported:	08/30/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: BH - 11 (3.5') (H212330-05)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/27/2021	ND	2.03	102	2.00	4.07		
Toluene*	<0.050	0.050	08/27/2021	ND	2.21	110	2.00	3.61		
Ethylbenzene*	<0.050	0.050	08/27/2021	ND	2.04	102	2.00	3.98		
Total Xylenes*	<0.150	0.150	08/27/2021	ND	6.31	105	6.00	3.41		
Total BTEX	<0.300	0.300	08/27/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	08/30/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/29/2021	ND	209	105	200	0.555	
DRO >C10-C28*	<10.0	10.0	08/29/2021	ND	211	105	200	3.44	
EXT DRO >C28-C36	<10.0	10.0	08/29/2021	ND					

Surrogate: 1-Chlorooctane 110 % 44.3-133

Surrogate: 1-Chlorooctadecane 105 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/27/2021	Sampling Date:	08/27/2021
Reported:	08/30/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: BH - 10 (3.0') (H212330-06)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/27/2021	ND	2.03	102	2.00	4.07	
Toluene*	<0.050	0.050	08/27/2021	ND	2.21	110	2.00	3.61	
Ethylbenzene*	<0.050	0.050	08/27/2021	ND	2.04	102	2.00	3.98	
Total Xylenes*	<0.150	0.150	08/27/2021	ND	6.31	105	6.00	3.41	
Total BTX	<0.300	0.300	08/27/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	08/30/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2021	ND	209	105	200	0.555	
DRO >C10-C28*	<10.0	10.0	08/28/2021	ND	211	105	200	3.44	
EXT DRO >C28-C36	<10.0	10.0	08/28/2021	ND					

Surrogate: 1-Chlorooctane 57.5 % 44.3-133

Surrogate: 1-Chlorooctadecane 55.2 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/27/2021	Sampling Date:	08/27/2021
Reported:	08/30/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: BH - 5 (4.0') (H212330-07)

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/27/2021	ND	2.03	102	2.00	4.07		
Toluene*	<0.050	0.050	08/27/2021	ND	2.21	110	2.00	3.61		
Ethylbenzene*	<0.050	0.050	08/27/2021	ND	2.04	102	2.00	3.98		
Total Xylenes*	<0.150	0.150	08/27/2021	ND	6.31	105	6.00	3.41		
Total BTX	<0.300	0.300	08/27/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	08/30/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2021	ND	209	105	200	0.555	
DRO >C10-C28*	<10.0	10.0	08/28/2021	ND	211	105	200	3.44	
EXT DRO >C28-C36	<10.0	10.0	08/28/2021	ND					

Surrogate: 1-Chlorooctane 60.8 % 44.3-133

Surrogate: 1-Chlorooctadecane 58.4 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/27/2021	Sampling Date:	08/27/2021
Reported:	08/30/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: BH - 6 (4.0') (H212330-08)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/27/2021	ND	2.03	102	2.00	4.07	
Toluene*	<0.050	0.050	08/27/2021	ND	2.21	110	2.00	3.61	
Ethylbenzene*	<0.050	0.050	08/27/2021	ND	2.04	102	2.00	3.98	
Total Xylenes*	<0.150	0.150	08/27/2021	ND	6.31	105	6.00	3.41	
Total BTEx	<0.300	0.300	08/27/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	08/30/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2021	ND	209	105	200	0.555	
DRO >C10-C28*	<10.0	10.0	08/28/2021	ND	211	105	200	3.44	
EXT DRO >C28-C36	<10.0	10.0	08/28/2021	ND					

Surrogate: 1-Chlorooctane 67.0 % 44.3-133

Surrogate: 1-Chlorooctadecane 64.4 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
 BRITTANY LONG
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	08/27/2021	Sampling Date:	08/27/2021
Reported:	08/30/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: BH - 7 (4.0') (H212330-09)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/27/2021	ND	2.03	102	2.00	4.07		
Toluene*	<0.050	0.050	08/27/2021	ND	2.21	110	2.00	3.61		
Ethylbenzene*	<0.050	0.050	08/27/2021	ND	2.04	102	2.00	3.98		
Total Xylenes*	<0.150	0.150	08/27/2021	ND	6.31	105	6.00	3.41		
Total BTEx	<0.300	0.300	08/27/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	08/30/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2021	ND	209	105	200	0.555	
DRO >C10-C28*	<10.0	10.0	08/28/2021	ND	211	105	200	3.44	
EXT DRO >C28-C36	<10.0	10.0	08/28/2021	ND					

Surrogate: 1-Chlorooctane 62.9 % 44.3-133

Surrogate: 1-Chlorooctadecane 60.8 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/27/2021	Sampling Date:	08/27/2021
Reported:	08/30/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: BH - 4 (4.0') (H212330-10)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/27/2021	ND	2.03	102	2.00	4.07	
Toluene*	<0.050	0.050	08/27/2021	ND	2.21	110	2.00	3.61	
Ethylbenzene*	<0.050	0.050	08/27/2021	ND	2.04	102	2.00	3.98	
Total Xylenes*	<0.150	0.150	08/27/2021	ND	6.31	105	6.00	3.41	
Total BTEx	<0.300	0.300	08/27/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	08/30/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2021	ND	209	105	200	0.555	
DRO >C10-C28*	<10.0	10.0	08/28/2021	ND	211	105	200	3.44	
EXT DRO >C28-C36	<10.0	10.0	08/28/2021	ND					

Surrogate: 1-Chlorooctane 58.0 % 44.3-133

Surrogate: 1-Chlorooctadecane 55.9 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/27/2021	Sampling Date:	08/27/2021
Reported:	08/30/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: BH - 3 (4.0') (H212330-11)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/27/2021	ND	2.03	102	2.00	4.07	
Toluene*	<0.050	0.050	08/27/2021	ND	2.21	110	2.00	3.61	
Ethylbenzene*	<0.050	0.050	08/27/2021	ND	2.04	102	2.00	3.98	
Total Xylenes*	<0.150	0.150	08/27/2021	ND	6.31	105	6.00	3.41	
Total BTEx	<0.300	0.300	08/27/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/30/2021	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2021	ND	209	105	200	0.555	
DRO >C10-C28*	<10.0	10.0	08/28/2021	ND	211	105	200	3.44	
EXT DRO >C28-C36	<10.0	10.0	08/28/2021	ND					

Surrogate: 1-Chlorooctane 77.0 % 44.3-133

Surrogate: 1-Chlorooctadecane 73.5 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
 BRITTANY LONG
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	08/27/2021	Sampling Date:	08/27/2021
Reported:	08/30/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: BH - 2 (4.0') (H212330-12)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/27/2021	ND	2.03	102	2.00	4.07	
Toluene*	<0.050	0.050	08/27/2021	ND	2.21	110	2.00	3.61	
Ethylbenzene*	<0.050	0.050	08/27/2021	ND	2.04	102	2.00	3.98	
Total Xylenes*	<0.150	0.150	08/27/2021	ND	6.31	105	6.00	3.41	
Total BTEx	<0.300	0.300	08/27/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	08/30/2021	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2021	ND	209	105	200	0.555	
DRO >C10-C28*	<10.0	10.0	08/28/2021	ND	211	105	200	3.44	
EXT DRO >C28-C36	<10.0	10.0	08/28/2021	ND					

Surrogate: 1-Chlorooctane 79.9 % 44.3-133

Surrogate: 1-Chlorooctadecane 76.8 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
 BRITTANY LONG
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	08/27/2021	Sampling Date:	08/27/2021
Reported:	08/30/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: BH - 1 (4.0') (H212330-13)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/28/2021	ND	2.03	102	2.00	4.07		
Toluene*	<0.050	0.050	08/28/2021	ND	2.21	110	2.00	3.61		
Ethylbenzene*	<0.050	0.050	08/28/2021	ND	2.04	102	2.00	3.98		
Total Xylenes*	<0.150	0.150	08/28/2021	ND	6.31	105	6.00	3.41		
Total BTEx	<0.300	0.300	08/28/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	08/30/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2021	ND	209	105	200	0.555	
DRO >C10-C28*	<10.0	10.0	08/28/2021	ND	211	105	200	3.44	
EXT DRO >C28-C36	<10.0	10.0	08/28/2021	ND					

Surrogate: 1-Chlorooctane 81.6 % 44.3-133

Surrogate: 1-Chlorooctadecane 78.5 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/27/2021	Sampling Date:	08/27/2021
Reported:	08/30/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: BH - 9 (6.0') (H212330-14)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/28/2021	ND	2.03	102	2.00	4.07	
Toluene*	<0.050	0.050	08/28/2021	ND	2.21	110	2.00	3.61	
Ethylbenzene*	<0.050	0.050	08/28/2021	ND	2.04	102	2.00	3.98	
Total Xylenes*	<0.150	0.150	08/28/2021	ND	6.31	105	6.00	3.41	
Total BTEx	<0.300	0.300	08/28/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/30/2021	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2021	ND	209	105	200	0.555	
DRO >C10-C28*	<10.0	10.0	08/28/2021	ND	211	105	200	3.44	
EXT DRO >C28-C36	<10.0	10.0	08/28/2021	ND					

Surrogate: 1-Chlorooctane 80.9 % 44.3-133

Surrogate: 1-Chlorooctadecane 77.5 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/27/2021	Sampling Date:	08/27/2021
Reported:	08/30/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 13 (H212330-15)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/28/2021	ND	2.03	102	2.00	4.07	
Toluene*	<0.050	0.050	08/28/2021	ND	2.21	110	2.00	3.61	
Ethylbenzene*	<0.050	0.050	08/28/2021	ND	2.04	102	2.00	3.98	
Total Xylenes*	<0.150	0.150	08/28/2021	ND	6.31	105	6.00	3.41	
Total BTX	<0.300	0.300	08/28/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.0 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	08/30/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2021	ND	209	105	200	0.555	
DRO >C10-C28*	<10.0	10.0	08/28/2021	ND	211	105	200	3.44	
EXT DRO >C28-C36	<10.0	10.0	08/28/2021	ND					

Surrogate: 1-Chlorooctane 104 % 44.3-133

Surrogate: 1-Chlorooctadecane 99.8 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/27/2021	Sampling Date:	08/27/2021
Reported:	08/30/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 5 (H212330-16)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/28/2021	ND	2.03	102	2.00	4.07		
Toluene*	<0.050	0.050	08/28/2021	ND	2.21	110	2.00	3.61		
Ethylbenzene*	<0.050	0.050	08/28/2021	ND	2.04	102	2.00	3.98		
Total Xylenes*	<0.150	0.150	08/28/2021	ND	6.31	105	6.00	3.41		
Total BTEx	<0.300	0.300	08/28/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	08/30/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2021	ND	209	105	200	0.555	
DRO >C10-C28*	<10.0	10.0	08/28/2021	ND	211	105	200	3.44	
EXT DRO >C28-C36	<10.0	10.0	08/28/2021	ND					

Surrogate: 1-Chlorooctane 77.3 % 44.3-133

Surrogate: 1-Chlorooctadecane 74.2 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/27/2021	Sampling Date:	08/27/2021
Reported:	08/30/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 4 (H212330-17)

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/28/2021	ND	2.03	102	2.00	4.07		
Toluene*	<0.050	0.050	08/28/2021	ND	2.21	110	2.00	3.61		
Ethylbenzene*	<0.050	0.050	08/28/2021	ND	2.04	102	2.00	3.98		
Total Xylenes*	<0.150	0.150	08/28/2021	ND	6.31	105	6.00	3.41		
Total BTX	<0.300	0.300	08/28/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	08/30/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2021	ND	209	105	200	0.555	
DRO >C10-C28*	<10.0	10.0	08/28/2021	ND	211	105	200	3.44	
EXT DRO >C28-C36	<10.0	10.0	08/28/2021	ND					

Surrogate: 1-Chlorooctane 80.6 % 44.3-133

Surrogate: 1-Chlorooctadecane 77.5 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/27/2021	Sampling Date:	08/27/2021
Reported:	08/30/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 7 (H212330-18)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/28/2021	ND	2.03	102	2.00	4.07	
Toluene*	<0.050	0.050	08/28/2021	ND	2.21	110	2.00	3.61	
Ethylbenzene*	<0.050	0.050	08/28/2021	ND	2.04	102	2.00	3.98	
Total Xylenes*	<0.150	0.150	08/28/2021	ND	6.31	105	6.00	3.41	
Total BTEx	<0.300	0.300	08/28/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	08/30/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2021	ND	209	105	200	0.555	
DRO >C10-C28*	<10.0	10.0	08/28/2021	ND	211	105	200	3.44	
EXT DRO >C28-C36	<10.0	10.0	08/28/2021	ND					

Surrogate: 1-Chlorooctane 52.5 % 44.3-133

Surrogate: 1-Chlorooctadecane 50.7 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/27/2021	Sampling Date:	08/27/2021
Reported:	08/30/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 6 (H212330-19)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/28/2021	ND	2.03	102	2.00	4.07	
Toluene*	<0.050	0.050	08/28/2021	ND	2.21	110	2.00	3.61	
Ethylbenzene*	<0.050	0.050	08/28/2021	ND	2.04	102	2.00	3.98	
Total Xylenes*	<0.150	0.150	08/28/2021	ND	6.31	105	6.00	3.41	
Total BTEx	<0.300	0.300	08/28/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	08/30/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2021	ND	209	105	200	0.555	
DRO >C10-C28*	<10.0	10.0	08/28/2021	ND	211	105	200	3.44	
EXT DRO >C28-C36	<10.0	10.0	08/28/2021	ND					

Surrogate: 1-Chlorooctane 60.7 % 44.3-133

Surrogate: 1-Chlorooctadecane 57.8 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

BS-3	Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

A handwritten signature in black ink, appearing to read "Celey D. Keene", is written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager

Tetra Tech, Inc.

Brittany Long

EOG Resources

Project Name:

Ophelia Riser Spill

Project Location:
(Country, state)

Lea County, New Mexico

Project #:

212C-MD-02563

Receiving Laboratory:

EOG Resources/Kevin Black@eogresources.com

Sampler Signature:

Comments:

Cardinal Laboratory

Myles Taylor

Page 1 of 1

Page 22 of 23

ANALYSIS REQUEST

(Circle or Specify Method No.)

[illegible]

Released to Imaging: 10/4/2021 2:29:57 PM



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

August 31, 2021

BRITTANY LONG

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: OPHELIA RISER SPILL

Enclosed are the results of analyses for samples received by the laboratory on 08/30/21 13:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/30/2021	Sampling Date:	08/20/2021
Reported:	08/31/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: BH - 1 (ROAD) (H212339-01)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/30/2021	ND	1.91	95.3	2.00	5.65		
Toluene*	<0.050	0.050	08/30/2021	ND	1.94	97.1	2.00	4.97		
Ethylbenzene*	<0.050	0.050	08/30/2021	ND	1.86	93.2	2.00	4.74		
Total Xylenes*	<0.150	0.150	08/30/2021	ND	5.72	95.4	6.00	4.01		
Total BTEX	<0.300	0.300	08/30/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	192	16.0	08/30/2021	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/30/2021	ND	198	99.1	200	4.89	
DRO >C10-C28*	<10.0	10.0	08/30/2021	ND	220	110	200	7.41	
EXT DRO >C28-C36	<10.0	10.0	08/30/2021	ND					

Surrogate: 1-Chlorooctane 80.8 % 44.3-133

Surrogate: 1-Chlorooctadecane 71.1 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/30/2021	Sampling Date:	08/20/2021
Reported:	08/31/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: BH - 2 (ROAD) (H212339-02)

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/30/2021	ND	1.91	95.3	2.00	5.65		
Toluene*	<0.050	0.050	08/30/2021	ND	1.94	97.1	2.00	4.97		
Ethylbenzene*	<0.050	0.050	08/30/2021	ND	1.86	93.2	2.00	4.74		
Total Xylenes*	<0.150	0.150	08/30/2021	ND	5.72	95.4	6.00	4.01		
Total BTX	<0.300	0.300	08/30/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/30/2021	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/30/2021	ND	198	99.1	200	4.89	
DRO >C10-C28*	<10.0	10.0	08/30/2021	ND	220	110	200	7.41	
EXT DRO >C28-C36	<10.0	10.0	08/30/2021	ND					

Surrogate: 1-Chlorooctane 89.1 % 44.3-133

Surrogate: 1-Chlorooctadecane 79.7 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/30/2021	Sampling Date:	08/20/2021
Reported:	08/31/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: BH - 3 (ROAD) (H212339-03)

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/30/2021	ND	1.91	95.3	2.00	5.65		
Toluene*	<0.050	0.050	08/30/2021	ND	1.94	97.1	2.00	4.97		
Ethylbenzene*	<0.050	0.050	08/30/2021	ND	1.86	93.2	2.00	4.74		
Total Xylenes*	<0.150	0.150	08/30/2021	ND	5.72	95.4	6.00	4.01		
Total BTX	<0.300	0.300	08/30/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	08/30/2021	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/30/2021	ND	198	99.1	200	4.89	
DRO >C10-C28*	<10.0	10.0	08/30/2021	ND	220	110	200	7.41	
EXT DRO >C28-C36	<10.0	10.0	08/30/2021	ND					

Surrogate: 1-Chlorooctane 89.0 % 44.3-133

Surrogate: 1-Chlorooctadecane 82.6 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/30/2021	Sampling Date:	08/20/2021
Reported:	08/31/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 1 (ROAD) (H212339-04)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/30/2021	ND	1.91	95.3	2.00	5.65		
Toluene*	<0.050	0.050	08/30/2021	ND	1.94	97.1	2.00	4.97		
Ethylbenzene*	<0.050	0.050	08/30/2021	ND	1.86	93.2	2.00	4.74		
Total Xylenes*	<0.150	0.150	08/30/2021	ND	5.72	95.4	6.00	4.01		
Total BTEX	<0.300	0.300	08/30/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	08/30/2021	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/30/2021	ND	198	99.1	200	4.89	
DRO >C10-C28*	<10.0	10.0	08/30/2021	ND	220	110	200	7.41	
EXT DRO >C28-C36	<10.0	10.0	08/30/2021	ND					

Surrogate: 1-Chlorooctane 82.2 % 44.3-133

Surrogate: 1-Chlorooctadecane 73.3 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/30/2021	Sampling Date:	08/20/2021
Reported:	08/31/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 2 (ROAD) (H212339-05)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/30/2021	ND	1.91	95.3	2.00	5.65		
Toluene*	<0.050	0.050	08/30/2021	ND	1.94	97.1	2.00	4.97		
Ethylbenzene*	<0.050	0.050	08/30/2021	ND	1.86	93.2	2.00	4.74		
Total Xylenes*	<0.150	0.150	08/30/2021	ND	5.72	95.4	6.00	4.01		
Total BTEX	<0.300	0.300	08/30/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	528	16.0	08/30/2021	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/30/2021	ND	198	99.1	200	4.89	
DRO >C10-C28*	<10.0	10.0	08/30/2021	ND	220	110	200	7.41	
EXT DRO >C28-C36	<10.0	10.0	08/30/2021	ND					

Surrogate: 1-Chlorooctane 86.9 % 44.3-133

Surrogate: 1-Chlorooctadecane 80.3 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/30/2021	Sampling Date:	08/20/2021
Reported:	08/31/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 3 (ROAD) (H212339-06)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/30/2021	ND	1.91	95.3	2.00	5.65		
Toluene*	<0.050	0.050	08/30/2021	ND	1.94	97.1	2.00	4.97		
Ethylbenzene*	<0.050	0.050	08/30/2021	ND	1.86	93.2	2.00	4.74		
Total Xylenes*	<0.150	0.150	08/30/2021	ND	5.72	95.4	6.00	4.01		
Total BTEX	<0.300	0.300	08/30/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	08/30/2021	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/30/2021	ND	198	99.1	200	4.89	
DRO >C10-C28*	<10.0	10.0	08/30/2021	ND	220	110	200	7.41	
EXT DRO >C28-C36	<10.0	10.0	08/30/2021	ND					

Surrogate: 1-Chlorooctane 77.2 % 44.3-133

Surrogate: 1-Chlorooctadecane 68.8 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/30/2021	Sampling Date:	08/20/2021
Reported:	08/31/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 4 (ROAD) (H212339-07)

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/30/2021	ND	1.91	95.3	2.00	5.65		
Toluene*	<0.050	0.050	08/30/2021	ND	1.94	97.1	2.00	4.97		
Ethylbenzene*	<0.050	0.050	08/30/2021	ND	1.86	93.2	2.00	4.74		
Total Xylenes*	<0.150	0.150	08/30/2021	ND	5.72	95.4	6.00	4.01		
Total BTX	<0.300	0.300	08/30/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	08/30/2021	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/30/2021	ND	198	99.1	200	4.89	
DRO >C10-C28*	<10.0	10.0	08/30/2021	ND	220	110	200	7.41	
EXT DRO >C28-C36	<10.0	10.0	08/30/2021	ND					

Surrogate: 1-Chlorooctane 77.0 % 44.3-133

Surrogate: 1-Chlorooctadecane 70.6 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

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

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager

Analysis Request of Chain of Custody Record



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

Page 1 of 1

Page 10 of 10

Client Name:	EOG Resources	Site Manager:
--------------	---------------	---------------

Brittany Long

Project Name: Ophelia Riser Spill

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

Project #: 212C-MD-02563

EOG Resources/Kevin Black

Cardinal Laboratory

Sampler Signature:

Heidi Landis

Comments:

SAMPLE IDENTIFICATION

LAB USE ONLY

Reinquished by: _____ Date: _____ Time: _____

Relinquished by: _____ Date: _____ Time: _____

Received by: _____ Date: _____ Time: _____

Relinquished by: _____ Date: _____ Time: _____

Received by: _____ Date: _____ Time: _____

LAB USE	REMARKS:
---------	----------

LAB USE ONLY

Sample Temperature

17/5

☒ **RUSH: 24 hr**

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

ANALYSIS REQUEST
(Circle or Specify Method No.)

Hold

ORIGINAL COPY

Received by OCD: 9/3/2021 11:16:14 AM

Released to Imaging: 10/4/2021 2:29:57 PM



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

August 31, 2021

BRITTANY LONG

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: OPHELIA RISER SPILL

Enclosed are the results of analyses for samples received by the laboratory on 08/30/21 16:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/30/2021	Sampling Date:	08/30/2021
Reported:	08/31/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 20 (H212347-01)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/31/2021	ND	1.80	90.0	2.00	3.51	
Toluene*	<0.050	0.050	08/31/2021	ND	1.97	98.4	2.00	2.78	
Ethylbenzene*	<0.050	0.050	08/31/2021	ND	1.90	95.2	2.00	3.27	
Total Xylenes*	<0.150	0.150	08/31/2021	ND	5.73	95.5	6.00	3.12	
Total BTX	<0.300	0.300	08/31/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/31/2021	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/31/2021	ND	225	112	200	7.28	
DRO >C10-C28*	<10.0	10.0	08/31/2021	ND	217	108	200	4.28	
EXT DRO >C28-C36	<10.0	10.0	08/31/2021	ND					

Surrogate: 1-Chlorooctane 83.6 % 44.3-133

Surrogate: 1-Chlorooctadecane 80.4 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/30/2021	Sampling Date:	08/30/2021
Reported:	08/31/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 21 (H212347-02)

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/31/2021	ND	1.80	90.0	2.00	3.51		
Toluene*	<0.050	0.050	08/31/2021	ND	1.97	98.4	2.00	2.78		
Ethylbenzene*	<0.050	0.050	08/31/2021	ND	1.90	95.2	2.00	3.27		
Total Xylenes*	<0.150	0.150	08/31/2021	ND	5.73	95.5	6.00	3.12		
Total BTX	<0.300	0.300	08/31/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.7 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	08/31/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/31/2021	ND	225	112	200	7.28	
DRO >C10-C28*	<10.0	10.0	08/31/2021	ND	217	108	200	4.28	
EXT DRO >C28-C36	<10.0	10.0	08/31/2021	ND					

Surrogate: 1-Chlorooctane 81.6 % 44.3-133

Surrogate: 1-Chlorooctadecane 78.4 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/30/2021	Sampling Date:	08/30/2021
Reported:	08/31/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 22 (H212347-03)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/31/2021	ND	1.80	90.0	2.00	3.51	
Toluene*	<0.050	0.050	08/31/2021	ND	1.97	98.4	2.00	2.78	
Ethylbenzene*	<0.050	0.050	08/31/2021	ND	1.90	95.2	2.00	3.27	
Total Xylenes*	<0.150	0.150	08/31/2021	ND	5.73	95.5	6.00	3.12	
Total BTX	<0.300	0.300	08/31/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	08/31/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/31/2021	ND	225	112	200	7.28	
DRO >C10-C28*	<10.0	10.0	08/31/2021	ND	217	108	200	4.28	
EXT DRO >C28-C36	<10.0	10.0	08/31/2021	ND					

Surrogate: 1-Chlorooctane 78.3 % 44.3-133

Surrogate: 1-Chlorooctadecane 75.3 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
 BRITTANY LONG
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	08/30/2021	Sampling Date:	08/30/2021
Reported:	08/31/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 23 (H212347-04)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/31/2021	ND	1.80	90.0	2.00	3.51		
Toluene*	<0.050	0.050	08/31/2021	ND	1.97	98.4	2.00	2.78		
Ethylbenzene*	<0.050	0.050	08/31/2021	ND	1.90	95.2	2.00	3.27		
Total Xylenes*	<0.150	0.150	08/31/2021	ND	5.73	95.5	6.00	3.12		
Total BTEx	<0.300	0.300	08/31/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	08/31/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/31/2021	ND	225	112	200	7.28	
DRO >C10-C28*	<10.0	10.0	08/31/2021	ND	217	108	200	4.28	
EXT DRO >C28-C36	<10.0	10.0	08/31/2021	ND					

Surrogate: 1-Chlorooctane 86.7 % 44.3-133

Surrogate: 1-Chlorooctadecane 83.5 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
 BRITTANY LONG
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	08/30/2021	Sampling Date:	08/30/2021
Reported:	08/31/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 24 (H212347-05)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/31/2021	ND	1.80	90.0	2.00	3.51		
Toluene*	<0.050	0.050	08/31/2021	ND	1.97	98.4	2.00	2.78		
Ethylbenzene*	<0.050	0.050	08/31/2021	ND	1.90	95.2	2.00	3.27		
Total Xylenes*	<0.150	0.150	08/31/2021	ND	5.73	95.5	6.00	3.12		
Total BTEx	<0.300	0.300	08/31/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.7 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	08/31/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/31/2021	ND	225	112	200	7.28	
DRO >C10-C28*	<10.0	10.0	08/31/2021	ND	217	108	200	4.28	
EXT DRO >C28-C36	<10.0	10.0	08/31/2021	ND					

Surrogate: 1-Chlorooctane 87.1 % 44.3-133

Surrogate: 1-Chlorooctadecane 84.3 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/30/2021	Sampling Date:	08/30/2021
Reported:	08/31/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 25 (H212347-06)

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/31/2021	ND	1.80	90.0	2.00	3.51		
Toluene*	<0.050	0.050	08/31/2021	ND	1.97	98.4	2.00	2.78		
Ethylbenzene*	<0.050	0.050	08/31/2021	ND	1.90	95.2	2.00	3.27		
Total Xylenes*	<0.150	0.150	08/31/2021	ND	5.73	95.5	6.00	3.12		
Total BTX	<0.300	0.300	08/31/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.9 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	08/31/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/31/2021	ND	225	112	200	7.28	
DRO >C10-C28*	<10.0	10.0	08/31/2021	ND	217	108	200	4.28	
EXT DRO >C28-C36	<10.0	10.0	08/31/2021	ND					

Surrogate: 1-Chlorooctane 83.1 % 44.3-133

Surrogate: 1-Chlorooctadecane 80.1 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
 BRITTANY LONG
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	08/30/2021	Sampling Date:	08/30/2021
Reported:	08/31/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 26 (H212347-07)

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/31/2021	ND	1.80	90.0	2.00	3.51		
Toluene*	<0.050	0.050	08/31/2021	ND	1.97	98.4	2.00	2.78		
Ethylbenzene*	<0.050	0.050	08/31/2021	ND	1.90	95.2	2.00	3.27		
Total Xylenes*	<0.150	0.150	08/31/2021	ND	5.73	95.5	6.00	3.12		
Total BTX	<0.300	0.300	08/31/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.8 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	08/31/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/31/2021	ND	225	112	200	7.28	
DRO >C10-C28*	<10.0	10.0	08/31/2021	ND	217	108	200	4.28	
EXT DRO >C28-C36	<10.0	10.0	08/31/2021	ND					

Surrogate: 1-Chlorooctane 86.5 % 44.3-133

Surrogate: 1-Chlorooctadecane 83.6 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/30/2021	Sampling Date:	08/30/2021
Reported:	08/31/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 27 (H212347-08)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/31/2021	ND	1.80	90.0	2.00	3.51		
Toluene*	<0.050	0.050	08/31/2021	ND	1.97	98.4	2.00	2.78		
Ethylbenzene*	<0.050	0.050	08/31/2021	ND	1.90	95.2	2.00	3.27		
Total Xylenes*	<0.150	0.150	08/31/2021	ND	5.73	95.5	6.00	3.12		
Total BTEx	<0.300	0.300	08/31/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	08/31/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/31/2021	ND	225	112	200	7.28	
DRO >C10-C28*	<10.0	10.0	08/31/2021	ND	217	108	200	4.28	
EXT DRO >C28-C36	<10.0	10.0	08/31/2021	ND					

Surrogate: 1-Chlorooctane 77.5 % 44.3-133

Surrogate: 1-Chlorooctadecane 74.9 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/30/2021	Sampling Date:	08/30/2021
Reported:	08/31/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 28 (H212347-09)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/31/2021	ND	1.80	90.0	2.00	3.51		
Toluene*	<0.050	0.050	08/31/2021	ND	1.97	98.4	2.00	2.78		
Ethylbenzene*	<0.050	0.050	08/31/2021	ND	1.90	95.2	2.00	3.27		
Total Xylenes*	<0.150	0.150	08/31/2021	ND	5.73	95.5	6.00	3.12		
Total BTEx	<0.300	0.300	08/31/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	08/31/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/31/2021	ND	225	112	200	7.28	
DRO >C10-C28*	<10.0	10.0	08/31/2021	ND	217	108	200	4.28	
EXT DRO >C28-C36	<10.0	10.0	08/31/2021	ND					

Surrogate: 1-Chlorooctane 82.1 % 44.3-133

Surrogate: 1-Chlorooctadecane 78.9 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/30/2021	Sampling Date:	08/30/2021
Reported:	08/31/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: SW - 29 (H212347-10)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/31/2021	ND	1.80	90.0	2.00	3.51		
Toluene*	<0.050	0.050	08/31/2021	ND	1.97	98.4	2.00	2.78		
Ethylbenzene*	<0.050	0.050	08/31/2021	ND	1.90	95.2	2.00	3.27		
Total Xylenes*	<0.150	0.150	08/31/2021	ND	5.73	95.5	6.00	3.12		
Total BTEX	<0.300	0.300	08/31/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	08/31/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/31/2021	ND	225	112	200	7.28	
DRO >C10-C28*	<10.0	10.0	08/31/2021	ND	217	108	200	4.28	
EXT DRO >C28-C36	<10.0	10.0	08/31/2021	ND					

Surrogate: 1-Chlorooctane 85.8 % 44.3-133

Surrogate: 1-Chlorooctadecane 82.2 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/30/2021	Sampling Date:	08/30/2021
Reported:	08/31/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: BH - 23 (H212347-11)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/31/2021	ND	1.80	90.0	2.00	3.51		
Toluene*	<0.050	0.050	08/31/2021	ND	1.97	98.4	2.00	2.78		
Ethylbenzene*	<0.050	0.050	08/31/2021	ND	1.90	95.2	2.00	3.27		
Total Xylenes*	<0.150	0.150	08/31/2021	ND	5.73	95.5	6.00	3.12		
Total BTEx	<0.300	0.300	08/31/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	08/31/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/31/2021	ND	225	112	200	7.28	
DRO >C10-C28*	<10.0	10.0	08/31/2021	ND	217	108	200	4.28	
EXT DRO >C28-C36	<10.0	10.0	08/31/2021	ND					

Surrogate: 1-Chlorooctane 80.7 % 44.3-133

Surrogate: 1-Chlorooctadecane 77.4 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
 BRITTANY LONG
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	08/30/2021	Sampling Date:	08/30/2021
Reported:	08/31/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: BH - 24 (H212347-12)

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/31/2021	ND	1.80	90.0	2.00	3.51		
Toluene*	<0.050	0.050	08/31/2021	ND	1.97	98.4	2.00	2.78		
Ethylbenzene*	<0.050	0.050	08/31/2021	ND	1.90	95.2	2.00	3.27		
Total Xylenes*	<0.150	0.150	08/31/2021	ND	5.73	95.5	6.00	3.12		
Total BTX	<0.300	0.300	08/31/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	08/31/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/31/2021	ND	225	112	200	7.28	
DRO >C10-C28*	<10.0	10.0	08/31/2021	ND	217	108	200	4.28	
EXT DRO >C28-C36	<10.0	10.0	08/31/2021	ND					

Surrogate: 1-Chlorooctane 79.5 % 44.3-133

Surrogate: 1-Chlorooctadecane 75.9 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/30/2021	Sampling Date:	08/30/2021
Reported:	08/31/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: BH - 25 (H212347-13)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/31/2021	ND	1.80	90.0	2.00	3.51		
Toluene*	<0.050	0.050	08/31/2021	ND	1.97	98.4	2.00	2.78		
Ethylbenzene*	<0.050	0.050	08/31/2021	ND	1.90	95.2	2.00	3.27		
Total Xylenes*	<0.150	0.150	08/31/2021	ND	5.73	95.5	6.00	3.12		
Total BTEx	<0.300	0.300	08/31/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	08/31/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/31/2021	ND	225	112	200	7.28	
DRO >C10-C28*	<10.0	10.0	08/31/2021	ND	217	108	200	4.28	
EXT DRO >C28-C36	<10.0	10.0	08/31/2021	ND					

Surrogate: 1-Chlorooctane 87.9 % 44.3-133

Surrogate: 1-Chlorooctadecane 85.4 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/30/2021	Sampling Date:	08/30/2021
Reported:	08/31/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: BH - 26 (H212347-14)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/31/2021	ND	1.80	90.0	2.00	3.51		
Toluene*	<0.050	0.050	08/31/2021	ND	1.97	98.4	2.00	2.78		
Ethylbenzene*	<0.050	0.050	08/31/2021	ND	1.90	95.2	2.00	3.27		
Total Xylenes*	<0.150	0.150	08/31/2021	ND	5.73	95.5	6.00	3.12		
Total BTEx	<0.300	0.300	08/31/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.9 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	08/31/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/31/2021	ND	225	112	200	7.28	
DRO >C10-C28*	<10.0	10.0	08/31/2021	ND	217	108	200	4.28	
EXT DRO >C28-C36	<10.0	10.0	08/31/2021	ND					

Surrogate: 1-Chlorooctane 86.8 % 44.3-133

Surrogate: 1-Chlorooctadecane 83.8 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TETRA TECH
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	08/30/2021	Sampling Date:	08/30/2021
Reported:	08/31/2021	Sampling Type:	Soil
Project Name:	OPHELIA RISER SPILL	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02563	Sample Received By:	Tamara Oldaker
Project Location:	EOG RESOURCES - LEA CO NM		

Sample ID: BH - 27 (H212347-15)

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/31/2021	ND	1.80	90.0	2.00	3.51		
Toluene*	<0.050	0.050	08/31/2021	ND	1.97	98.4	2.00	2.78		
Ethylbenzene*	<0.050	0.050	08/31/2021	ND	1.90	95.2	2.00	3.27		
Total Xylenes*	<0.150	0.150	08/31/2021	ND	5.73	95.5	6.00	3.12		
Total BTX	<0.300	0.300	08/31/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	08/31/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/31/2021	ND	225	112	200	7.28	
DRO >C10-C28*	<10.0	10.0	08/31/2021	ND	217	108	200	4.28	
EXT DRO >C28-C36	<10.0	10.0	08/31/2021	ND					

Surrogate: 1-Chlorooctane 87.5 % 44.3-133

Surrogate: 1-Chlorooctadecane 84.4 % 38.9-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

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

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

 901 W. Wall Street, Ste 100
 Midland, Texas 79705
 Tel (432) 682-4559
 Fax (432) 682-3945

Page ____ of ____

Client Name: EOG Resources		Site Manager: Brittany Long	
Project Name: Opelia Riser Spill		Project #: 212C-MD-62563	
Project Location: Lea County, New Mexico			
Invoice to: EOG Resources / Kevin Black		Sampler Signature: Myles Taylor	
Receiving Laboratory: Cardinal Laboratory		Comments:	

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)		
		DATE	TIME	WATER	SOIL	HCL	HNO ₃			ICE	None
1	SW-20	8/30/21		X				X			
2	SW-21	8/30/21		X				X			
3	SW-22	8/30/21		X				X			
4	SW-23	8/30/21		X				X			
5	SW-24	8/30/21		X				X			
6	SW-25	8/30/21		X				X			
7	SW-26	8/30/21		X				X			
8	SW-27	8/30/21		X				X			
9	SW-28	8/30/21		X				X			
10	SW-29	8/30/21		X				X			

Relinquished by: Myles Taylor	Date: 8/30/21	Time: 1650	Received by: Brittany Long	Date: 8-30-21	Time: 1650
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

LAB USE ONLY	REMARKS:
<input type="checkbox"/> STANDARD <input checked="" type="checkbox"/> RUSH: Same Day (24 hr) 48 hr 72 hr <input type="checkbox"/> Rush Charges Authorized <input type="checkbox"/> Special Report Limits or TRRP Report	BTEX 8021B BTEX 8260B TPH TX1005 (Ext to C35) TPH 8015M (GRO - DRO - ORO - MRO) PAH 8270C Total Metals Ag As Ba Cd Cr Pb Se Hg TCLP Metals Ag As Ba Cd Cr Pb Se Hg TCLP Volatiles TCLP Semi Volatiles RCI GC/MS Vol. 8260B / 624 GC/MS Semi. Vol. 8270C/625 PCB's 8082 / 608 NORM PLM (Asbestos) Chloride Chloride Sulfate TDS General Water Chemistry (see attached list) Anion/Cation Balance Hold

ORIGINAL COPY

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

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

(432) 682-3946

Page _____ of _____

Page 19 of 19

Client Name: EOG Resources		Site Manager: Brittany Long	
Project Name: Ophelia River Spill		Project #: 212 C-MD-02563	
Project Location: Lea County, New Mexico		Invoice to: EOG Resources/Kevin Black	
Receiving Laboratory: Cardinal Laboratory		Sampler Signature: Myles Taylor	
Comments:			
LAB # H21347		LAB USE ONLY	
SAMPLE IDENTIFICATION		SAMPLING	
		YEAR: 2020	
		DATE	
		TIME	
		WATER	
		SOIL	
		HCL	
		HNO3	
		ICE	
		None	
		# CONTAINERS	
		FILTERED (Y/N)	
11 BH-23		8/30/21	
12 BH-24		8/30/21	
13 BH-25		8/30/21	
14 BH-26		8/30/21	
15 BH-27		8/30/21	
Relinquished by:		Date: Time:	
Relinquished by: Myles Taylor		Date: 8/30/21 Time: 1650	
Received by:		Date: Time:	
Received by: Mariana Dela Cruz		Date: 8-30-21 Time: 1650	
Relinquished by:		Date: Time:	
Relinquished by:		Date: Time:	
LAB USE ONLY		REMARKS:	
Sample Temperature		STANDARD	
1.5°C		RUSH: Same Day (24 hr) 48 hr 72 hr	
#113		Special Report Limits or TRRP Report	
70°			
ANALYSIS REQUEST		(Circle or Specify Method No.)	
BTEX 8021B BTEX 8260B			
TPH TX1005 (Ext to C35)			
TPH 8015M (GRO - DRO - ORO - MRO)			
PAH 8270C			
Total Metals Ag As Ba Cd Cr Pb Se Hg			
TCLP Metals Ag As Ba Cd Cr Pb Se Hg			
TCLP Volatiles			
TCLP Semi Volatiles			
RCI			
GC/MS Vol. 8260B / 624			
GC/MS Semi. Vol. 8270C/625			
PCB's 8082 / 608			
NORM			
PLM (Asbestos)			
Chloride			
Chloride Sulfate TDS			
General Water Chemistry (see attached list)			
Anion/Cation Balance			
Hold			

ORIGINAL COPY

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 46409

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 46409
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	None	10/4/2021