

SITE INFORMATION

Report Type: Closure Report (2RP-704)

General Site Information:

Site:	Adeline ALN Federal #1					
Company:	EOG Resources					
Section, Township and Range	Unit F	Sec. 6	T 24S	R 31E		
County:	Eddy County, NM					
GPS:	32.24807			-103.81872		
Surface Owner:	State of New Mexico					

Release Data:

Date Released:	1/31/2009
Type Release:	Produced Water
Source of Contamination:	Tank overflowed de to valve malfunction
Fluid Released:	200 bbls. of Produced water
Fluids Recovered:	100 bbls. of Produced water

Official Communication:

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

Site Characterization

Depth to Groundwater:	50' below ground surface (bgs)
Karst Potential:	Low

Recommended Remedial Action Levels (RRALs)

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



June 14, 2021

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

**Re: Closure Report
EOG Resources
Adeline ALN Federal #1
Unit F, Section 6, Township 24 South, Range 31 East
Eddy County, New Mexico
2RP-704**

Mr. Billings:

Tetra Tech, Inc. (Tetra Tech) was contacted by EOG Resources (EOG) to assess a release at the EOG Adeline ALN Federal #1 (API No. 30-015-20939). The release footprint is located in the Public Land Survey System (PLSS) Unit F, Section 6, Township 24 South, Range 31 East, Eddy County, New Mexico (Site). The Site coordinates are 32.24807°, -103.81872°. The site location is shown on Figures 1 and 2.

Background

According to the State of New Mexico C-141 Initial Report, the release occurred on January 31, 2009 due to a valve switched sending water to back-up the water tank with no Murphy Switch causing the tank to fill and come out water leg at back of tank. The release consisted of 200 barrels (bbls.) of produced water affecting an area of approximate 125 feet (ft.) by 30 ft. within the bermed battery area. During immediate response actions, the valves were switched, and a vacuum truck recovered 110 bbls. of produced water. The initial C-141 report was submitted on February 12, 2009. The release was subsequently assigned the Remediation Permit (RP) number 2RP-704. The C-141 forms are included in Appendix A.

Site Characterization

A site characterization was performed for the site, and no watercourses, lakebeds, sinkholes, playa lakes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the specified distances, and the site is in a low karst potential area. The nearest well is listed in the USGS National Water Information Database website in Section 17, approximately 2 miles southeast of the site, and has a reported depth to groundwater of 74.44 feet below ground surface last sample on 2013. In addition, according to the New Mexico Office of the State Engineer, there are no water wells within 800 meters (½ miles) radius. However, there are ten (10) water wells are located within 5,200 meters (approximately 3.2 miles) of the Site. The average depth to groundwater is 440 ft. bgs. Site characterization data is included in Appendix B.

Tetra Tech

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

Tel 432.682.4559 Fax 432.682.3946 www.tetrattech.com



Regulatory

A risk-based evaluation was performed for the site per the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases, updated August 14, 2018. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based on the site characterization, the proposed RRAL for TPH is 100 mg/kg (GRO+DRO+MRO). Additionally, based on the site characterization, the proposed RRAL for chlorides is 600 mg/kg.

Soil Assessment and Analytical Results

Between March 4th and 30th, 2021, Tetra Tech personnel were on site to evaluate and sample the release area. The formerly impacted area was identified from the description in the C-141 and the aerial imagery. Soils were field screened for salinity using an Extech EC400 ExStik to determine sampling intervals. A total of four (4) auger holes (AH-1 through AH-4) were advanced to a total depth from surface to 4 ft. and 6 ft. bgs. In addition, a total of four (4) horizontal samples (H-1 through H-4) were advanced at a depth from top to 1 ft. bgs to delineate the release footprint. A total of twenty-two (22) samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix D. The results of the sampling are summarized in Table 1. The auger hole and horizontal locations are shown on Figure 3. Photographic documentation is included.

Referring to Table 1, the sample locations (AH-1, AH-2 and AH-3) exceeded the Site RRAL for TPH (100 mg/kg) at the upper 4 ft. bgs. In addition, none of the samples exceeded the Site RRAL for chloride (600 mg/kg), BTEX (50 m/kg) and benzene (10 mg/kg).

Remediation Activities

On May 10, 2021, Tetra Tech personnel were on-site to supervise the excavation and remediation activities in order to remove the impacted soil from the release area. The excavated areas are shown in Figure 4. Three (3) areas were excavated to a total depth of 4 ft. bgs. Once the excavations were completed, confirmation samples were collected for every 200 sq. ft. Three (3) bottom hole samples (AH-1BT, AH-2BT, and AH-3BT) were collected at the excavation area and twelve (12) sidewalls (AH-1N, AH-1W, AH-1S, AH-1E, AH-2N, AH-2W, AH-2S, AH-2E, AH-3N, AH-3W, AH-3S, and AH-3E) were collected at the three excavation areas. The excavated area was treated with Microblaze.

A total of fifteen (15) samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix D. The results of the sampling are summarized in Table 2.



Referring to Table 2, the sample location AH-3 East exceeded the site RRALs for TPH (100 mg/kg). In addition, all the samples analyzed were below the Site RRAL for chloride (600 mg/kg), TPH (100 mg/kg), BTEX (50 m/kg) and benzene (10 mg/kg).

On June 6, 2021, Tetra Tech returned to the site to resample the area (AH-3 East). One (1) sample was collected and analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix D. The results of the sampling are summarized in Table 2.

Referring to Table 2, the sample location AH-3 was below the Site RRAL for chloride (600 mg/kg), TPH (100 mg/kg), BTEX (50 m/kg) and benzene (10 mg/kg).

The excavation areas were backfilled with clean material to surface grade. Approximately 6 cubic yards of material was transported offsite for proper disposal.

Conclusion

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

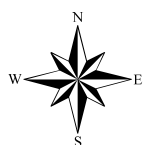
Respectfully submitted,
TETRA TECH

Paula Tocora Alonso
Paula Tocora Alonso
Environmental Engineer I
Tetra Tech, Inc

Figures



 SITE LOCATION



0 2.5 5
Miles
Approximate Scale in Miles

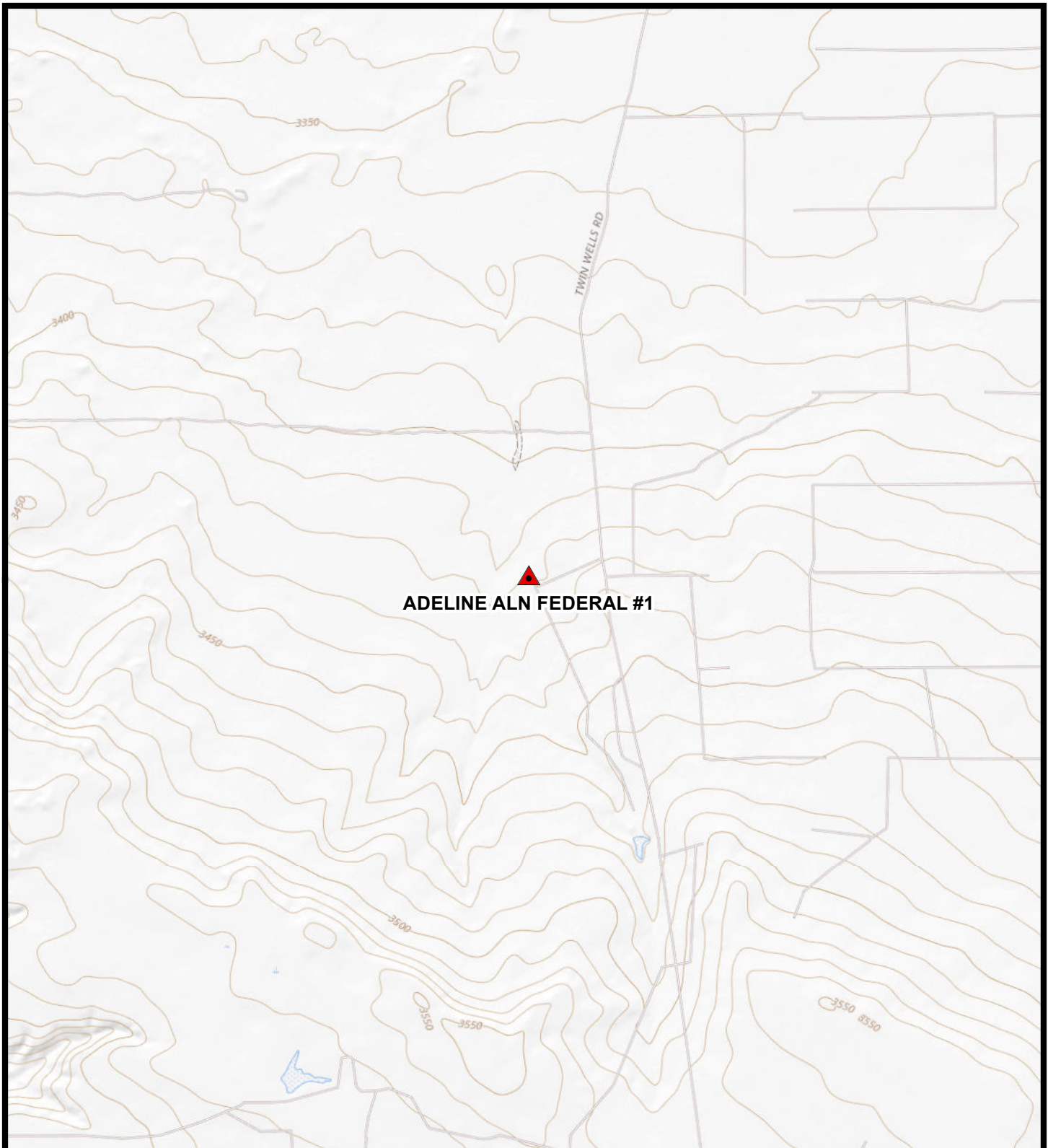
OVERVIEW MAP
ADELINE ALN FEDERAL #1
Property Located at coordinates 32.248118°, -103.819273°
EDDY COUNTY, NEW MEXICO



Project #:
212C-MD-02419

FIGURE
1

Source: ESRI Basemap - Streets, 2021.



 SITE LOCATION



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

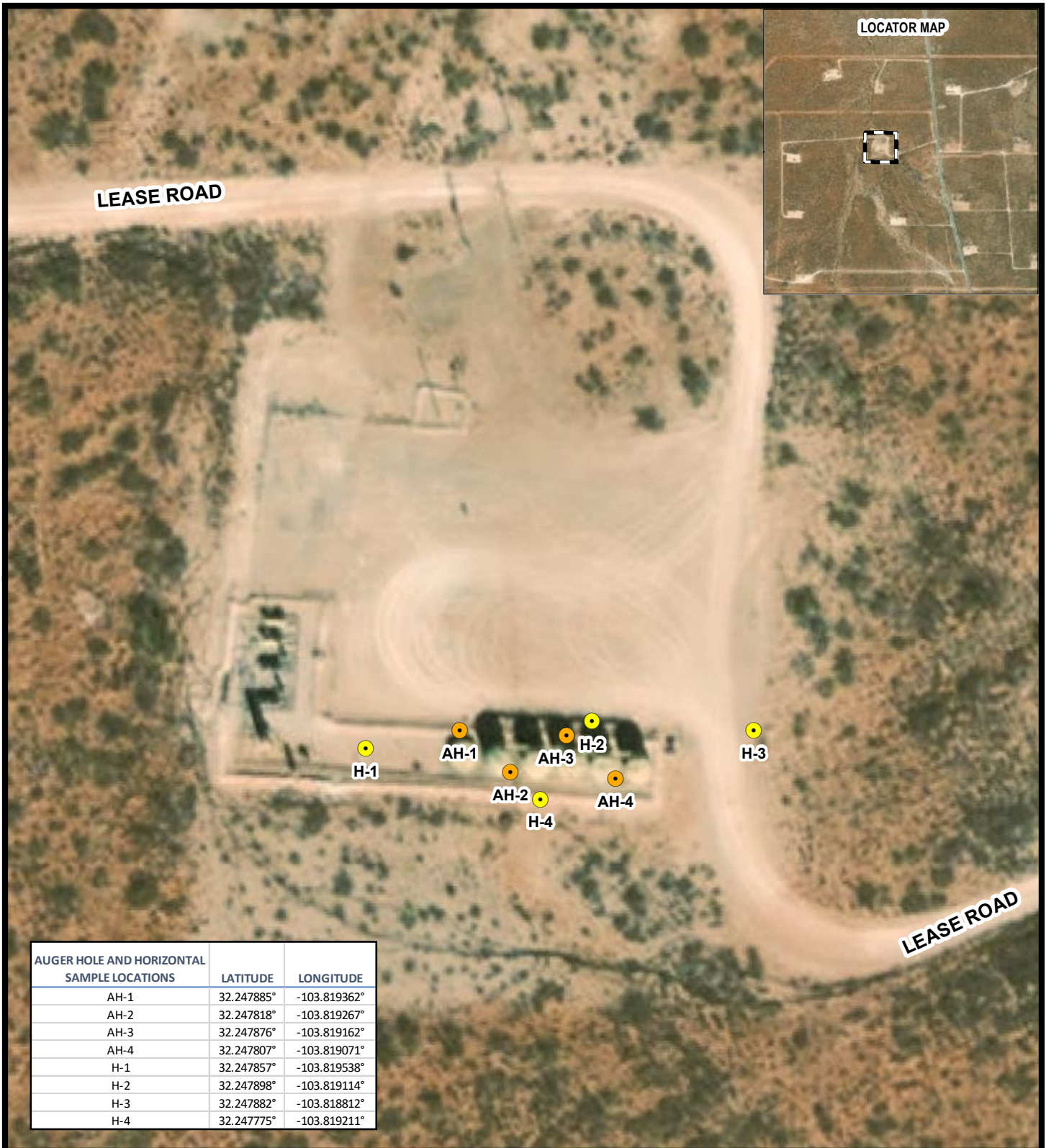
Source: USGS, The National Map,
Topo Base, 2021.

TOPOGRAPHIC MAP
ADELINE ALN FEDERAL #1
Property Located at coordinates 32.248118°, -103.819273°
EDDY COUNTY, NEW MEXICO

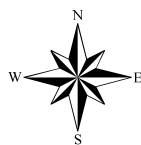


Project #:
212C-MD-02419

FIGURE
2



- AUGER HOLE SAMPLE LOCATION
- HORIZONTAL SAMPLE LOCATION



0 40 80 Feet
Approximate Scale in Feet

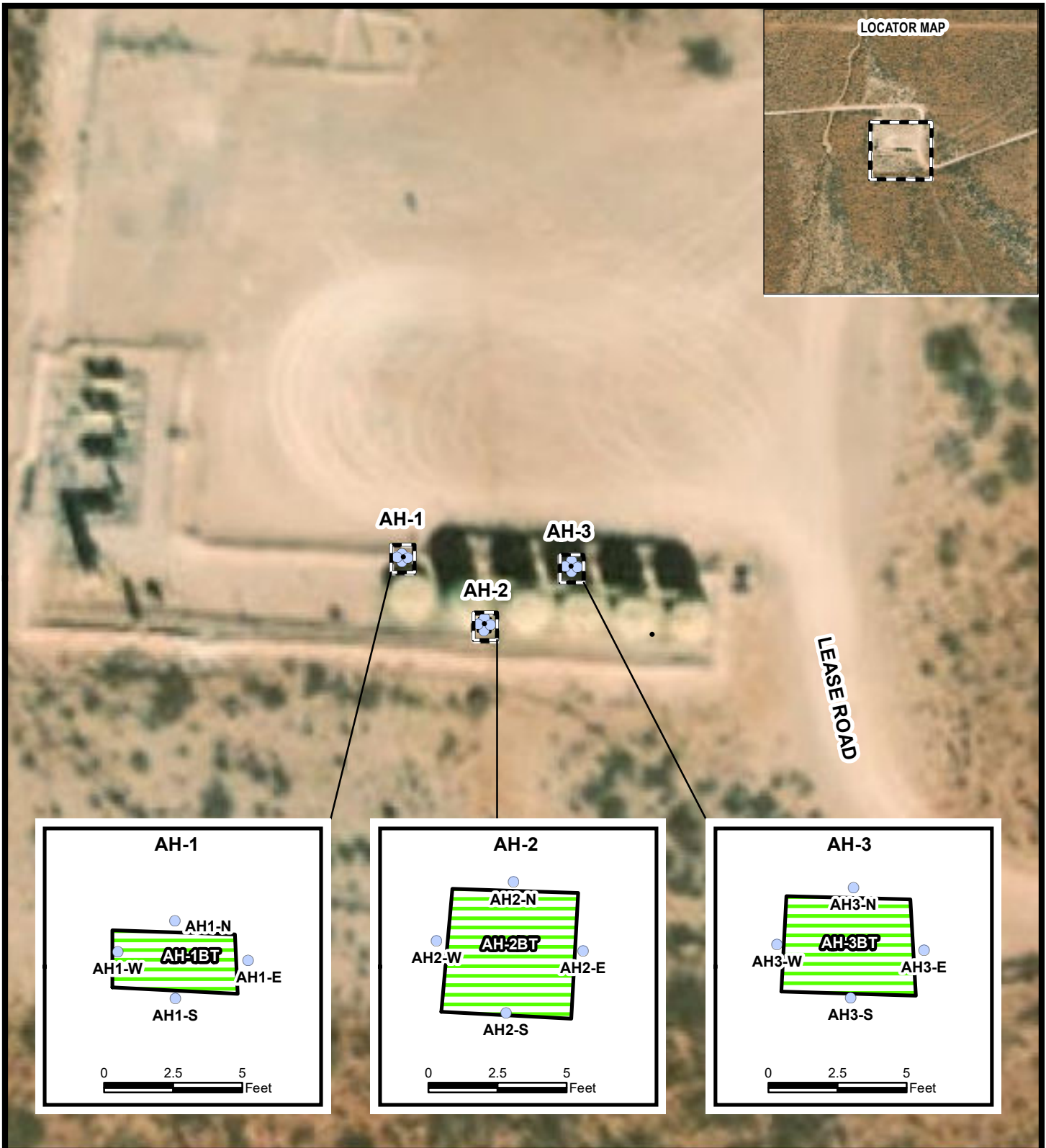
RELEASE ASSESSMENT MAP AND BORING LOCATIONS
ADELINE ALN FEDERAL #1
Property Located at coordinates 32.248118°, -103.819273°
EDDY COUNTY, NEW MEXICO



Project #:
212C-MD-02419

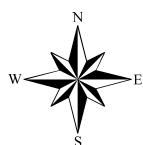
FIGURE
3

Source: ESRI Basemap - Imagery, 2020.



AH-1BT BOTTOM HOLE SAMPLE LOCATION

- SIDEWALL DESIGNATION
- 4' EXCAVATED DEPTH AREA



0 25 50 Feet
Approximate Scale in Feet

Source: ESRI Basemap - Imagery, 2020.

EXCAVATION AREA AND DEPTH MAP

ADELINE ALN FEDERAL #1

Property Located at coordinates 32.248118°, -103.819273°
EDDY COUNTY, NEW MEXICO



Project #:
212C-MD-02419

FIGURE
4

Tables

Table 1
EOG
Adeline ALN Fed #1
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total						
AH-1	3/4/2021	0-1	X	-	<49.9	235	107	342	<0.00198	<0.00198	<0.00198	<0.00397	<0.00198	9.48
	"	1.5'-2	X	-	<49.8	619	266	885	<0.00200	<0.00200	<0.00200	<0.00399	<0.00200	<4.97
	"	2.5-3	X	-	<50.0	96.7	<50.0	96.7	<0.00202	<0.00202	<0.00202	<0.00403	<0.00202	<5.03
	"	3.5-4	X	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00201	<5.03
AH-2	3/4/2021	0-1	X	-	<50.0	82.3	<50.0	82.3	<0.00201	<0.00201	<0.00201	<0.00402	<0.00201	17
	"	1.5'-2	X	-	<50.0	264	109	373	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	46.6
	"	2.5-3	X	-	<49.9	170	62.1	232	<0.00202	<0.00202	<0.00202	<0.00404	<0.00202	87
	"	3.5-4	X	-	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00404	<0.00202	161
AH-3	3/4/2021	0-1	X	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00199	13.1
	"	1.5'-2	X	-	<50.0	162	67.6	230	<0.00199	<0.00199	<0.00199	<0.00398	<0.00199	<4.99
	"	2.5'-3	X	-	<50.0	581	94.9	676	<0.00199	<0.00199	<0.00199	<0.00398	<0.00199	10.8
	"	3'-4	X	-	<50.0	554	98.7	653	<0.00198	<0.00198	<0.00198	<0.00396	<0.00198	8.52
	3/30/2021	4.5'-5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00396	<0.00198	206
	"	5.5'-6	X	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00201	5.88
AH-4	3/4/2021	0-1	X	-	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00397	<0.00198	21.4
	"	1.5'-2	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00200	11.1
	"	2.5-3	X	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00201	12.4
	"	3.5-4	X	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00201	9.74
H-1	3/30/2021		X		<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00397	<0.00198	34.1
H-2	3/30/2021		X		<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	100
H-3	3/30/2021		X		<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00404	<0.00202	8.0
H-4	3/30/2021		X		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00201	7.13

(-)



Not Analyzed
Exceeded RRALs

Table 2
EOG
Adeline ALN Fed #1
Eddy County, NM

Sample ID	Sample Date	Sample Depth (ft)	BEB Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	ORO	Total						
AH-1 BT	5/10/2021	-	4	X	-	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	21
AH-1 East	5/10/2021	-	4	X	-	<49.7	<49.7	<49.7	<49.7	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	22.2
AH-1 North	5/10/2021	-	4	X	-	<49.6	<49.6	<49.6	<49.6	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	19.9
AH-1 South	5/10/2021	-	4	X	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	18.8
AH-1 West	5/10/2021	-	4	X	-	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	17
AH-2 BT	5/10/2021	-	4	X	-	<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	65.4
AH-2 East	5/10/2021	-	4	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	56.4
AH-2 North	5/10/2021	-	4	X	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	76.3
AH-2 South	5/10/2021	-	4	X	-	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	62.5
AH-2 West	5/10/2021	-	4	X	-	<49.7	<49.7	<49.7	<49.7	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	73
AH-3 BT	5/10/2021	-	4	X	-	<50.0	50.6	<50.0	50.6	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	77.5
AH-3 East	5/10/2021	-	4	X	-	<49.9	150	<49.9	150	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	73.3
AH-3 East	6/4/2021	-	4	X	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	54.3
AH-3 North	5/10/2021	-	4	X	-	<49.8	77.7	<49.8	77.7	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	87.9
AH-3 South	5/10/2021	-	4	X	-	<49.7	98.4	<49.7	98.4	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	75.8
AH-3 West	5/10/2021	-	4	X	-	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	38.8

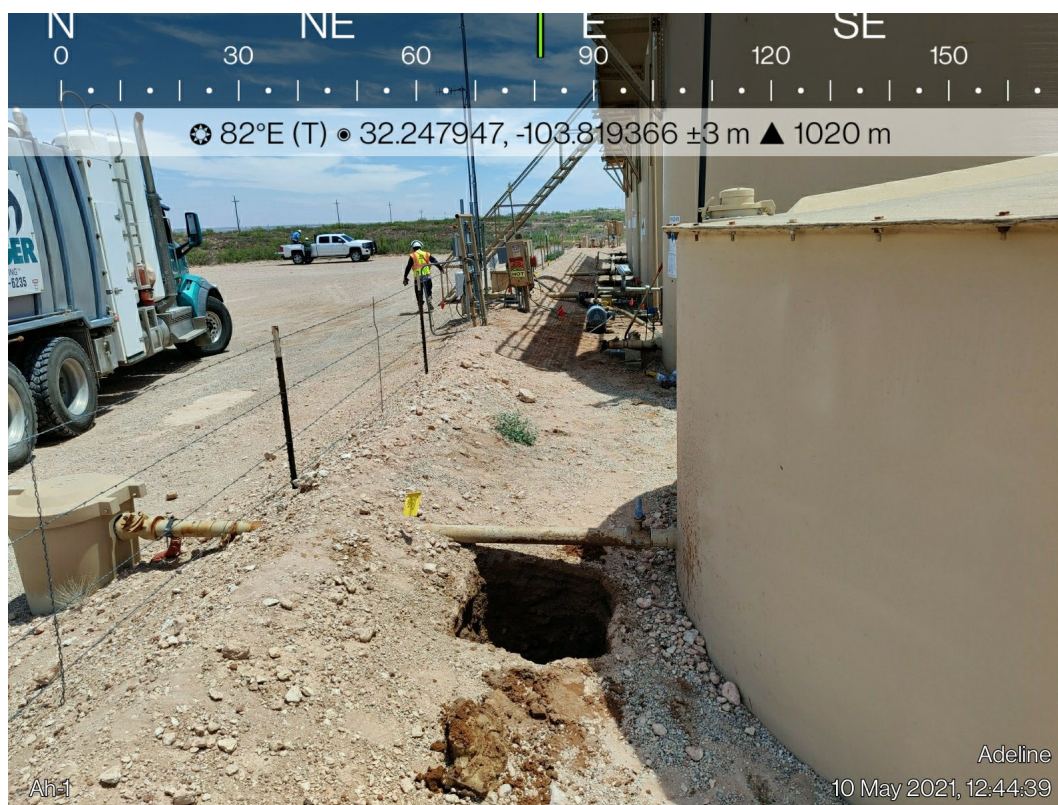
(-) Not Analyzed
 Excavated

Photos

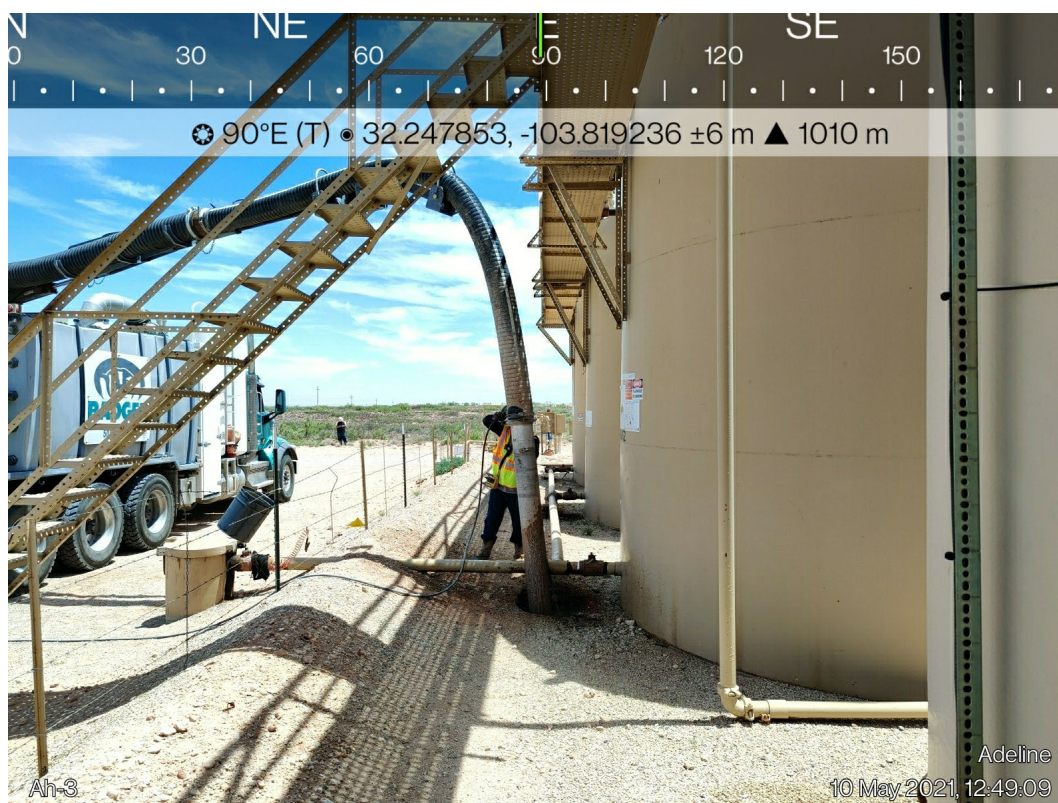
EOG Resources
Adeline ALN #1
Eddy County, New Mexico



TETRA TECH

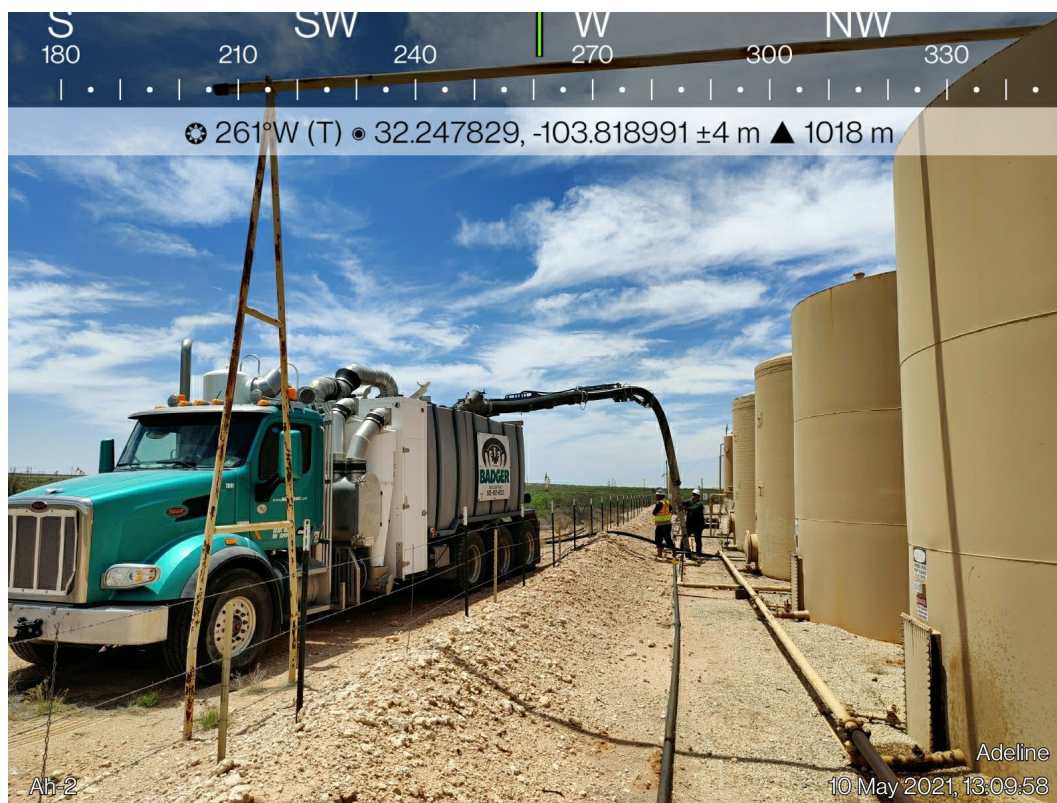


View of Remediation Activities – View East

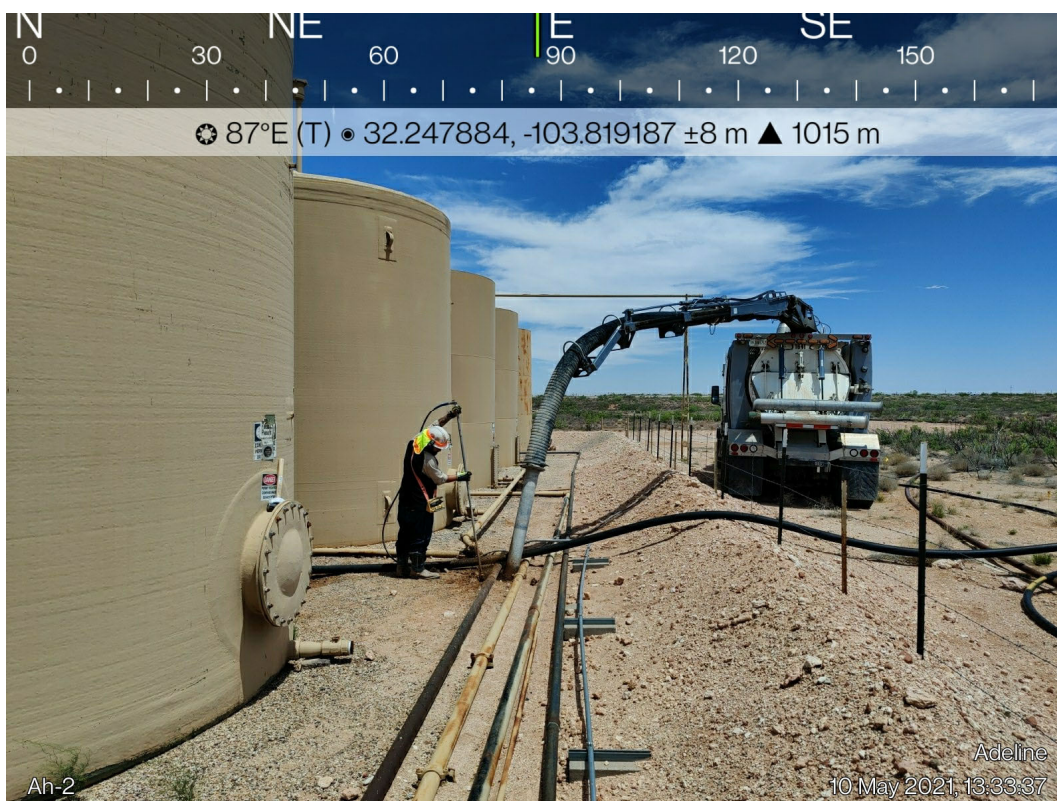


View of Remediation Activities – View East

EOG Resources
Adeline ALN #1
Eddy County, New Mexico



View of Remediation Activities – View Southwest



View of Remediation Activities – View Northeast

Appendix A

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 16 on back
side of form

Release Notification and Corrective Action

nkmw 1109455899

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Yates Petroleum Corporation	OGRID Number 25575	Contact Robert Asher
Address 104 S. 4 TH Street	API Number 30-015-20939	Telephone No. 505-748-1471
Facility Name Adcline ALN Federal #1	Facility Type Battery	Order Number 2RP-
Surface Owner Federal	Mineral Owner Federal	Lease No. NM-0432160

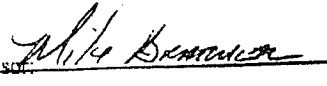
LOCATION OF RELEASE

Unit Letter F	Section 6	Township 24S	Range 31E	Feet from the 1980	North/South Line North	Feet from the 1980	East/West Line West	County Eddy
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Latitude 32.24807 Longitude 103.81872

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 200 B/PW	Volume Recovered 110 B/PW
Source of Release PW Tank	Date and Hour of Occurrence 1/31/2009 AM	Date and Hour of Discovery 1/31/2009 AM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher/NMOCD District II	
By Whom? Jerry Fanning/YPC Environmental	Date and Hour 1/31/2009 PM (voice mail message)	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	
If a Watercourse was Impacted, Describe Fully.* N/A		
Describe Cause of Problem and Remedial Action Taken.* Valves switched sending water to back-up water tank with no Murphy Switch causing tank to fill and come out water leg at back of tank. Received no alarm due to no Murphy Switch on back-up tank. Switched valves and vacuum truck called.		
Describe Area Affected and Cleanup Action Taken.* An approximate area of 125' X30', within the bermed battery area. Vertical and horizontal delineation samples will be taken and analysis ran for TPH & BTEX at a second party laboratory. If initial analytical results for TPH & BTEX are under RRAL's a Final Report, C-141 will be submitted to the OCD requesting closure. If the analytical results are above the RRAL's a work plan will be submitted to the OCD. Depth to Ground Water: > 100' (approximately 300'), Wellhead Protection Area: No, Distance to Surface Water Body: > 1000', SITE RANKING IS 0.		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Robert Asher	Approved by District Supervisor: 	
Title: Environmental Regulatory Agent	Approval Date: <u>4/4/11</u>	Expiration Date: _____
E-mail Address: boba@ypcnm.com	Conditions of Approval: _____	
Date: Thursday, February 12, 2009 Phone: 505-748-1471	tached ☐	

* Attach Additional Sheets If Necessary

REMEDATION per OCD Rules and
Guidelines. SUBMIT REMEDIATION
PROPOSAL BY: 5/4/11

2RP-704



FACSIMILE TRANSMITTAL SHEET

TO:	FROM:
Mike Bratcher	Robert Asher
FAX NUMBER:	DATE:
9-748-9720	Thursday, February 12, 2009
COMPANY:	TOTAL NO. OF PAGES INCLUDING COVER:
NMOCD	2
RE:	NOTES/COMMENTS:
C-141; Adeline ALN Federal #1	Initial Report (1/31/2009 Release)

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

ADDITIONAL NOTES & COMMENTS:

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

Thank you.

Robert Asher

Environmental Regulatory Department

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

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature: James F. Kennedy Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Incident ID	nKMW1109455899
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: James F. Kennedy 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.

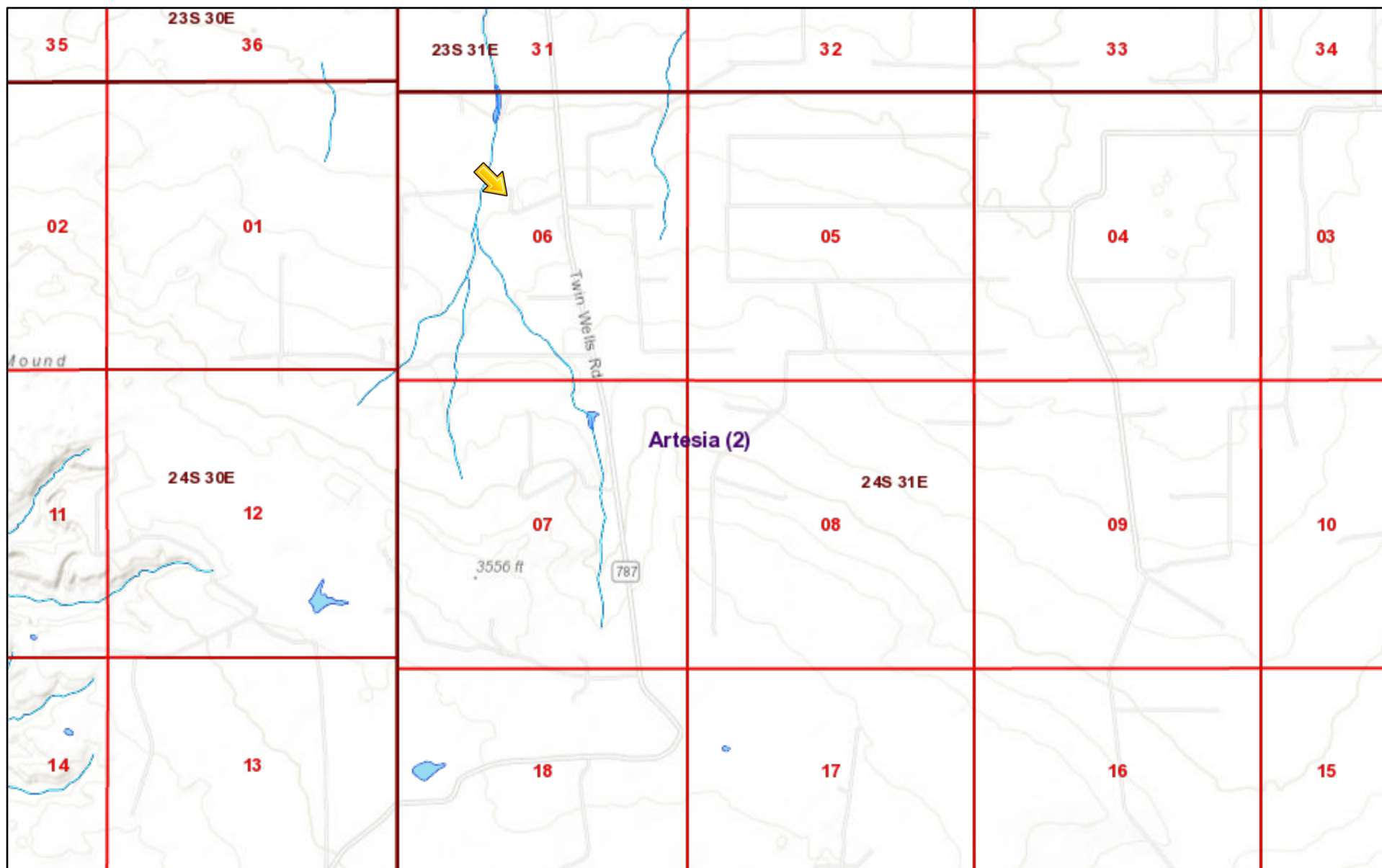
Bradford Billings

Closure Approved by: _____ Date: 11/01/2021

Printed Name: Bradford Billings Title: Envi.Spec.A

Appendix B

2RP-704

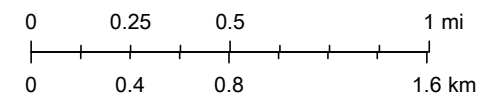


2/18/2021, 10:12:54 AM

1:36,112

- Override 1
- PLSS First Division
- PLJV Probable Playas
- OCD Districts
- PLSS Townships
- OSE Water-bodies

- OCD District Offices
- OSE Streams



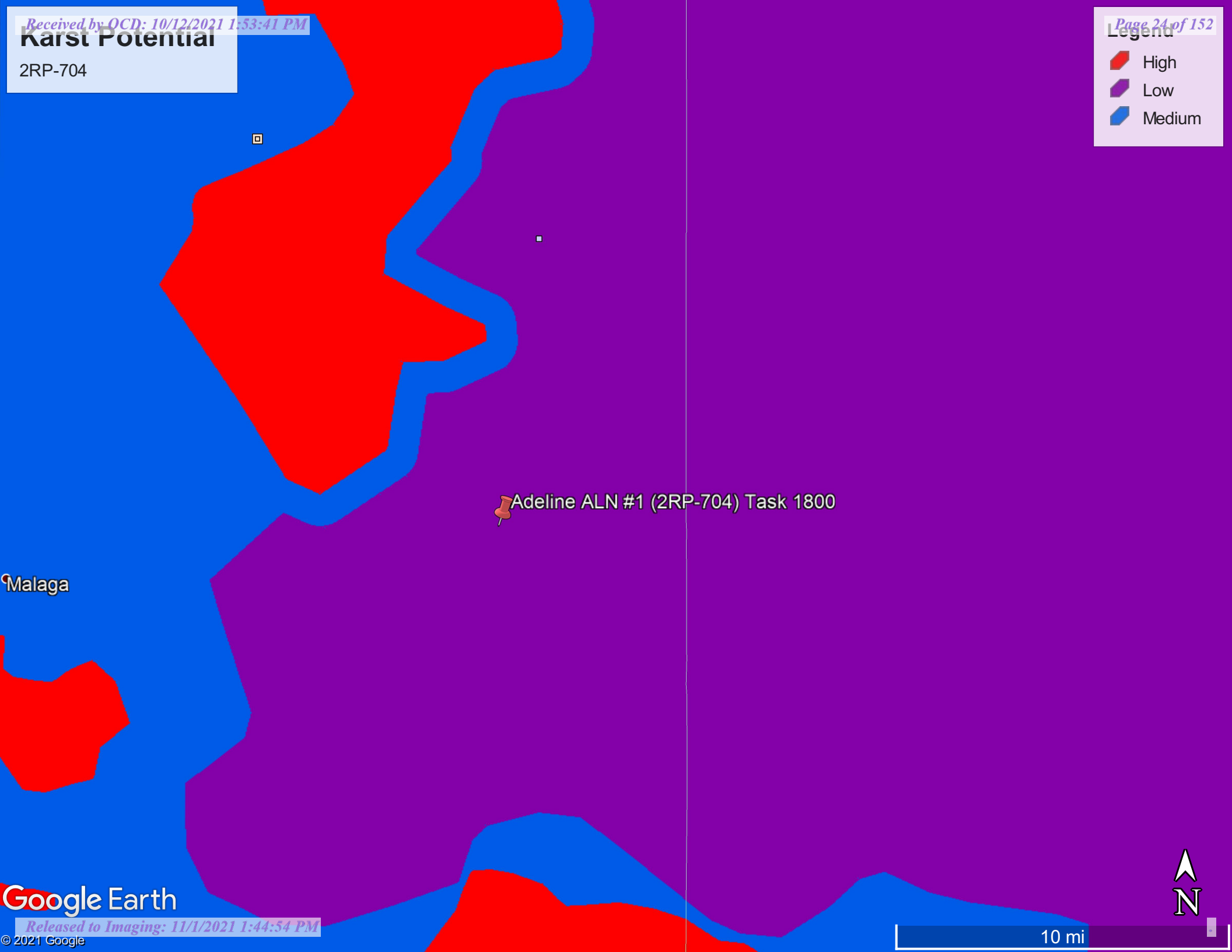
Bureau of Land Management, Texas Parks & Wildlife, Esri, HERE, Garmin,

Karst Potential

2RP-704

Legend

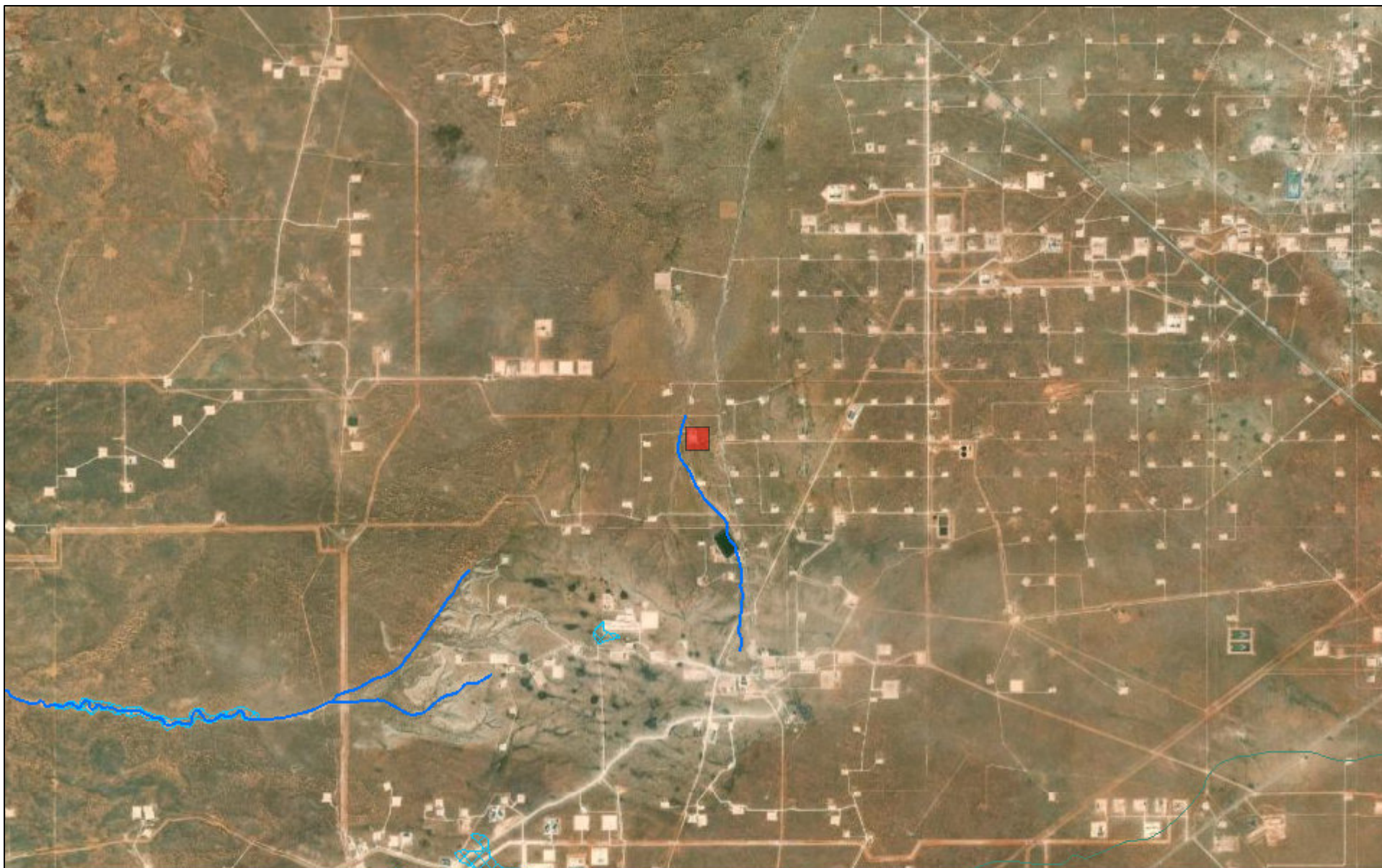
- High
- Low
- Medium



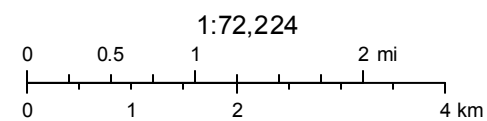
Malaga



New Mexico NFHL Data



February 18, 2021



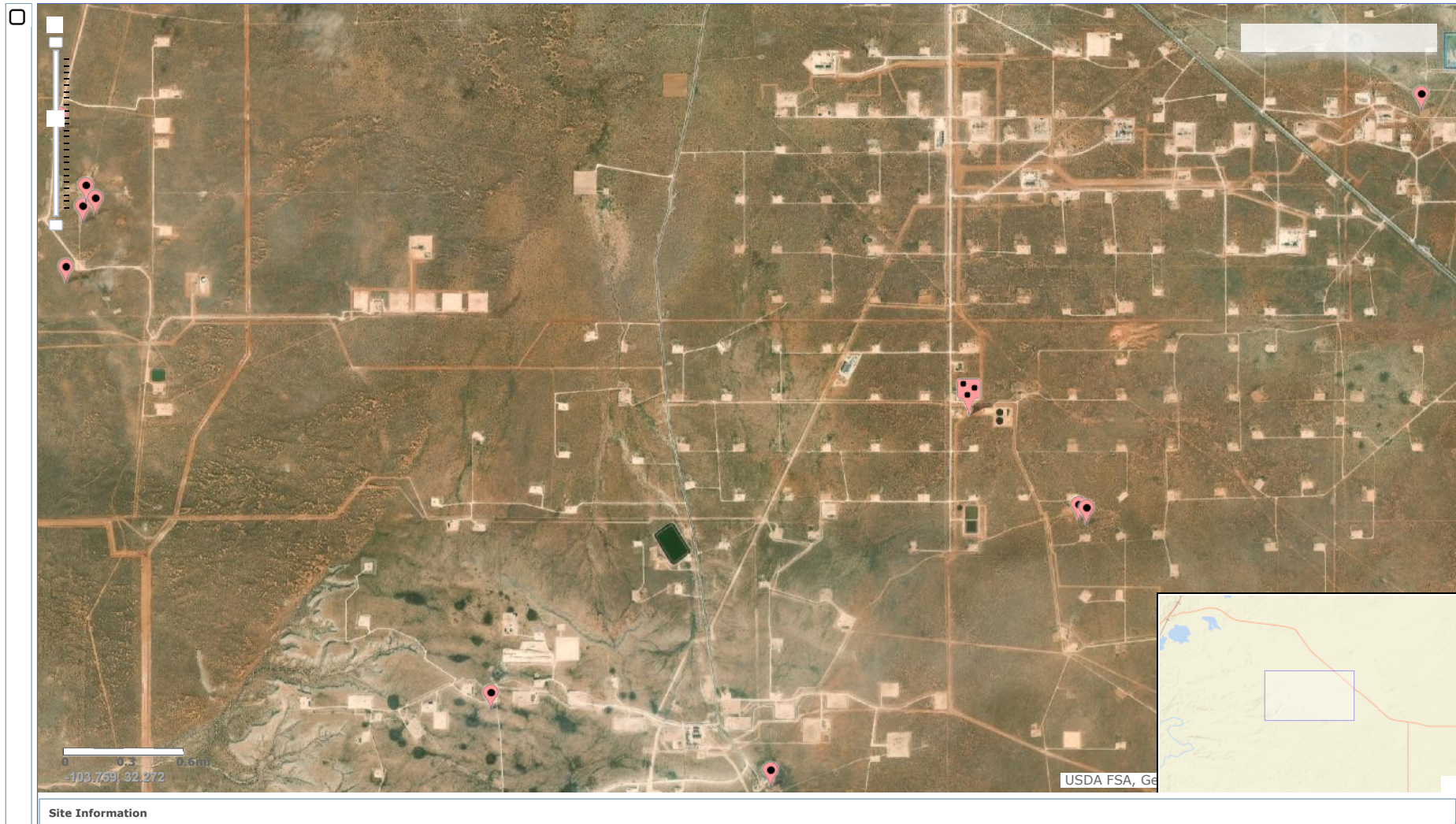
Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



USGS Home
Contact USGS
Search USGS

National Water Information System: Mapper

Help Info





(R=POD has been replaced,
O=orphaned,
C=the file is closed)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

Average Depth to Water:	440 feet
Minimum Depth:	440 feet
Maximum Depth:	440 feet

UTMNAD83 Radius Search (in meters):

Easting (X): 611281

Northing (Y): 3568544.49

Radius: 5200

*UTM location was derived from PLSS - see Help

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

4/13/21 8:04 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER



National Water Information System: Web Interface

USGS Water Resources

USGS Home
Contact USGS
Search USGS

Data Category:

Groundwater

Geographic Area:

New Mexico

GO

Click to hideNews Bulletins

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

Groundwater levels for New Mexico

Click to hide state-specific text

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

Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 321310103482101

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

USGS 321310103482101 24S.31E.17.13120

Eddy County, New Mexico
Latitude 32°13'14.1", Longitude 103°48'23.4" NAD83
Land-surface elevation 3,530.00 feet above NGVD29
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 of measurement	? Water- level approval status
1959-02-03			D	62610	3459.50	NGVD29	3	Z			A
1959-02-03			D	62611	3461.24	NAVD88	3	Z			A
1959-02-03			D	72019	70.50		3	Z			A
1959-03-25			D	62610	3462.33	NGVD29	1	Z			A
1959-03-25			D	62611	3464.07	NAVD88	1	Z			A
1959-03-25			D	72019	67.67		1	Z			A
1976-12-02			D	62610	3463.98	NGVD29	1	Z			A
1976-12-02			D	62611	3465.72	NAVD88	1	Z			A
1976-12-02			D	72019	66.02		1	Z			A
2013-01-17	21:00 UTC		m	62610	3455.56	NGVD29	1	S	USGS	S	A
2013-01-17	21:00 UTC		m	62611	3457.30	NAVD88	1	S	USGS	S	A
2013-01-17	21:00 UTC		m	72019	74.44		1	S	USGS	S	A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level date-time accuracy	m	Date is accurate to the Minute
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Status	3	Above
Method of measurement	S	Steel-tape measurement.
Method of measurement	Z	Other.
Measuring agency		Not determined
Measuring agency	USGS	U.S. Geological Survey
Source of measurement		Not determined
Source of measurement	S	Measured by personnel of reporting agency.
Water-level approval status	A	Approved for publication -- Processing and review completed.

Questions about sites/data?
Feedback on this web site
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Data Tips
Explanation of terms
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[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: 2021-02-18 16:33:41 EST

0.34 0.29 nadwv02

Appendix C

Certificate of Analysis Summary 690621



Tetra Tech- Midland, Midland, TX

Project Name: Adeline ALN #1

Project Id: 212C-MD-02419 TASK:1800

Contact: Clair Gonzales

Project Location: Eddy County, NM

Date Received in Lab: Fri 03.05.2021 12:41

Report Date: 03.15.2021 10:18

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	690621-001	690621-002	690621-003	690621-004	690621-005	690621-006
	<i>Field Id:</i>	AH-1 (0-1')	AH-1 (1.5'-2')	AH-1 (2.5-3')	AH-1 (3.5-4')	AH-2 (0-1')	AH-2 (1.5'-2')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	03.04.2021 00:00	03.04.2021 00:00	03.04.2021 00:00	03.04.2021 00:00	03.04.2021 00:00	03.04.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	03.12.2021 13:00	03.12.2021 13:00	03.12.2021 13:00	03.12.2021 13:00	03.12.2021 13:00	03.12.2021 13:00
	<i>Analyzed:</i>	03.13.2021 02:45	03.13.2021 03:05	03.13.2021 03:26	03.13.2021 03:46	03.13.2021 04:07	03.13.2021 04:27
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200
Toluene		<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200
Ethylbenzene		<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200
m,p-Xylenes		<0.00397 0.00397	<0.00399 0.00399	<0.00403 0.00403	<0.00402 0.00402	<0.00402 0.00402	<0.00400 0.00400
o-Xylene		<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200
Total Xylenes		<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200
Total BTEX		<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	03.06.2021 15:30	03.06.2021 15:30	03.06.2021 15:30	03.06.2021 15:30	03.06.2021 15:30	03.06.2021 15:30
	<i>Analyzed:</i>	03.06.2021 18:41	03.06.2021 18:47	03.06.2021 18:52	03.06.2021 18:58	03.06.2021 19:16	03.06.2021 19:21
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		9.48 4.97	<4.97 4.97	<5.03 5.03	<5.03 5.03	17.0 5.03	46.6 5.00
TPH By SW8015 Mod	<i>Extracted:</i>	03.05.2021 13:00	03.05.2021 13:00	03.05.2021 13:00	03.05.2021 13:00	03.05.2021 13:00	03.05.2021 13:00
	<i>Analyzed:</i>	03.06.2021 05:56	03.06.2021 06:16	03.06.2021 03:47	03.06.2021 00:34	03.06.2021 00:56	03.06.2021 04:09
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		235 49.9	619 49.8	96.7 50.0	<50.0 50.0	82.3 50.0	264 50.0
Motor Oil Range Hydrocarbons (MRO)		107 49.9	266 49.8	<50.0 50.0	<50.0 50.0	<50.0 50.0	109 50.0
Total TPH		342 49.9	885 49.8	96.7 50.0	<50.0 50.0	82.3 50.0	373 50.0

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 690621



Tetra Tech- Midland, Midland, TX

Project Name: Adeline ALN #1

Project Id: 212C-MD-02419 TASK:1800

Contact: Clair Gonzales

Project Location: Eddy County, NM

Date Received in Lab: Fri 03.05.2021 12:41

Report Date: 03.15.2021 10:18

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	690621-007	690621-008	690621-009	690621-010	690621-011	690621-012
	<i>Field Id:</i>	AH-2 (2.5'-3')	AH-2 (3.5'-4')	AH-3 (0'-1')	AH-3 (1.5'-2')	AH-3 (2.5'-3')	AH-3 (3'-4')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	03.04.2021 00:00	03.04.2021 00:00	03.04.2021 00:00	03.04.2021 00:00	03.04.2021 00:00	03.04.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	03.12.2021 13:00	03.12.2021 13:00	03.12.2021 13:00	03.12.2021 13:00	03.12.2021 13:00	03.12.2021 13:00
	<i>Analyzed:</i>	03.13.2021 04:47	03.13.2021 05:08	03.13.2021 05:28	03.13.2021 06:50	03.13.2021 07:11	03.13.2021 07:31
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198
Toluene		<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198
Ethylbenzene		<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198
m,p-Xylenes		<0.00404 0.00404	<0.00404 0.00404	<0.00398 0.00398	<0.00398 0.00398	<0.00398 0.00398	<0.00396 0.00396
o-Xylene		<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198
Total Xylenes		<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198
Total BTEX		<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	03.06.2021 15:30	03.06.2021 15:30	03.06.2021 15:30	03.06.2021 15:30	03.06.2021 15:30	03.06.2021 15:30
	<i>Analyzed:</i>	03.06.2021 19:27	03.06.2021 19:33	03.06.2021 19:39	03.06.2021 19:45	03.06.2021 20:02	03.06.2021 20:08
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		87.0 4.96	161 4.97	13.1 4.99	<4.99 4.99	10.8 4.98	8.52 4.99
TPH By SW8015 Mod	<i>Extracted:</i>	03.05.2021 13:00	03.05.2021 13:00	03.05.2021 13:00	03.05.2021 13:00	03.05.2021 13:00	03.05.2021 13:00
	<i>Analyzed:</i>	03.06.2021 04:30	03.06.2021 01:17	03.06.2021 01:39	03.06.2021 04:52	03.06.2021 05:14	03.06.2021 05:35
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		170 49.9	<50.0 50.0	<49.9 49.9	162 50.0	581 50.0	554 50.0
Motor Oil Range Hydrocarbons (MRO)		62.1 49.9	<50.0 50.0	<49.9 49.9	67.6 50.0	94.9 50.0	98.7 50.0
Total TPH		232 49.9	<50.0 50.0	<49.9 49.9	230 50.0	676 50.0	653 50.0

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 690621

Tetra Tech- Midland, Midland, TX

Project Name: Adeline ALN #1

Project Id: 212C-MD-02419 TASK:1800

Contact: Clair Gonzales

Project Location: Eddy County, NM

Date Received in Lab: Fri 03.05.2021 12:41

Report Date: 03.15.2021 10:18

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	690621-013	690621-014	690621-015	690621-016		
	Field Id:	AH-4 (0-1')	AH-4 (1.5'-2')	AH-4 (2.5-3')	AH-4 (3.5-4')		
	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL		
	Sampled:	03.04.2021 00:00	03.04.2021 00:00	03.04.2021 00:00	03.04.2021 00:00		
BTEX by EPA 8021B	Extracted:	03.12.2021 13:00	03.12.2021 13:00	03.12.2021 13:00	03.12.2021 13:00		
	Analyzed:	03.13.2021 07:51	03.13.2021 08:12	03.13.2021 08:32	03.13.2021 08:53		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201		
Toluene		<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201		
Ethylbenzene		<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201		
m,p-Xylenes		<0.00397 0.00397	<0.00399 0.00399	<0.00402 0.00402	<0.00402 0.00402		
o-Xylene		<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201		
Total Xylenes		<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201		
Total BTEX		<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201		
Inorganic Anions by EPA 300/300.1	Extracted:	03.06.2021 15:30	03.06.2021 15:30	03.06.2021 15:30	03.06.2021 15:30		
	Analyzed:	03.06.2021 20:25	03.06.2021 20:31	03.06.2021 20:37	03.06.2021 20:42		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		21.4 5.04	11.1 5.02	12.4 4.97	9.74 4.97		
TPH By SW8015 Mod	Extracted:	03.05.2021 13:00	03.05.2021 13:00	03.05.2021 13:00	03.05.2021 13:00		
	Analyzed:	03.06.2021 02:00	03.06.2021 02:21	03.06.2021 03:04	03.06.2021 03:26		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<49.9 49.9	<50.0 50.0	<50.0 50.0		
Diesel Range Organics (DRO)		<49.8 49.8	<49.9 49.9	<50.0 50.0	<50.0 50.0		
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	<49.9 49.9	<50.0 50.0	<50.0 50.0		
Total TPH		<49.8 49.8	<49.9 49.9	<50.0 50.0	<50.0 50.0		

BRL - Below Reporting Limit

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



Analytical Report 690621

for

Tetra Tech- Midland

Project Manager: Clair Gonzales

Adeline ALN #1

212C-MD-02419 TASK:1800

03.15.2021

Collected By: Client



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

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

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNi02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



03.15.2021

Project Manager: **Clair Gonzales**

Tetra Tech- Midland

901 West Wall ST

Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **690621**

Adeline ALN #1

Project Address: Eddy County, NM

Clair Gonzales:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 690621. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 690621 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

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

Jessica Kramer

Project Manager

A Small Business and Minority Company

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

Sample Cross Reference 690621

Tetra Tech- Midland, Midland, TX

Adeline ALN #1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
AH-1 (0-1')	S	03.04.2021 00:00		690621-001
AH-1 (1.5'-2')	S	03.04.2021 00:00		690621-002
AH-1 (2.5-3')	S	03.04.2021 00:00		690621-003
AH-1 (3.5-4')	S	03.04.2021 00:00		690621-004
AH-2 (0-1')	S	03.04.2021 00:00		690621-005
AH-2 (1.5'-2')	S	03.04.2021 00:00		690621-006
AH-2 (2.5-3')	S	03.04.2021 00:00		690621-007
AH-2 (3.5-4')	S	03.04.2021 00:00		690621-008
AH-3 (0-1')	S	03.04.2021 00:00		690621-009
AH-3 (1.5'-2')	S	03.04.2021 00:00		690621-010
AH-3 (2.5'-3')	S	03.04.2021 00:00		690621-011
AH-3 (3'-4')	S	03.04.2021 00:00		690621-012
AH-4 (0-1')	S	03.04.2021 00:00		690621-013
AH-4 (1.5'-2')	S	03.04.2021 00:00		690621-014
AH-4 (2.5-3')	S	03.04.2021 00:00		690621-015
AH-4 (3.5-4')	S	03.04.2021 00:00		690621-016



CASE NARRATIVE

Client Name: Tetra Tech- Midland

Project Name: Adeline ALN #1

Project ID: 212C-MD-02419 TASK:
Work Order Number(s): 690621

Report Date: 03.15.2021
Date Received: 03.05.2021

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 690621

Tetra Tech- Midland, Midland, TX

Adeline ALN #1

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

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690621-001

Date Collected: 03.04.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 03.06.2021 15:30

% Moisture:

Seq Number: 3152767

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9.48	4.97	mg/kg	03.06.2021 18:41		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.05.2021 13:00

% Moisture:

Seq Number: 3152843

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.06.2021 05:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	235	49.9	mg/kg	03.06.2021 05:56		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	107	49.9	mg/kg	03.06.2021 05:56		1
Total TPH	PHC635	342	49.9	mg/kg	03.06.2021 05:56		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	100	%	70-130	03.06.2021 05:56		
o-Terphenyl	84-15-1	106	%	70-130	03.06.2021 05:56		



Certificate of Analytical Results 690621

Tetra Tech- Midland, Midland, TX

Adeline ALN #1

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

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690621-001

Date Collected: 03.04.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.12.2021 13:00

% Moisture:

Seq Number: 3153540

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	03.13.2021 02:45	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	03.13.2021 02:45	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	03.13.2021 02:45	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	03.13.2021 02:45	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	03.13.2021 02:45	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	03.13.2021 02:45	U	1
Total BTEX		<0.00198	0.00198	mg/kg	03.13.2021 02:45	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	96	%	70-130	03.13.2021 02:45		
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.13.2021 02:45		



Certificate of Analytical Results 690621

Tetra Tech- Midland, Midland, TX

Adeline ALN #1

Sample Id: **AH-1 (1.5'-2')** Matrix: Soil Date Received: 03.05.2021 12:41
 Lab Sample Id: 690621-002 Date Collected: 03.04.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: SPC
 Analyst: SPC Date Prep: 03.06.2021 15:30 % Moisture:
 Seq Number: 3152767 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.97	4.97	mg/kg	03.06.2021 18:47	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 03.05.2021 13:00 % Moisture:
 Seq Number: 3152843 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	03.06.2021 06:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	619	49.8	mg/kg	03.06.2021 06:16		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	266	49.8	mg/kg	03.06.2021 06:16		1
Total TPH	PHC635	885	49.8	mg/kg	03.06.2021 06:16		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	110	%	70-130	03.06.2021 06:16		
o-Terphenyl	84-15-1	110	%	70-130	03.06.2021 06:16		



Certificate of Analytical Results 690621

Tetra Tech- Midland, Midland, TX

Adeline ALN #1

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

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690621-002

Date Collected: 03.04.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.12.2021 13:00

% Moisture:

Seq Number: 3153540

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.13.2021 03:05	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.13.2021 03:05	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.13.2021 03:05	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.13.2021 03:05	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.13.2021 03:05	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.13.2021 03:05	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.13.2021 03:05	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	95	%	70-130	03.13.2021 03:05		
4-Bromofluorobenzene	460-00-4	97	%	70-130	03.13.2021 03:05		



Certificate of Analytical Results 690621

Tetra Tech- Midland, Midland, TX

Adeline ALN #1

Sample Id: **AH-1 (2.5-3')** Matrix: Soil Date Received: 03.05.2021 12:41
 Lab Sample Id: 690621-003 Date Collected: 03.04.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: SPC
 Analyst: SPC Date Prep: 03.06.2021 15:30 % Moisture:
 Seq Number: 3152767 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.03	5.03	mg/kg	03.06.2021 18:52	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 03.05.2021 13:00 % Moisture:
 Seq Number: 3152843 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.06.2021 03:47	U	1
Diesel Range Organics (DRO)	C10C28DRO	96.7	50.0	mg/kg	03.06.2021 03:47		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.06.2021 03:47	U	1
Total TPH	PHC635	96.7	50.0	mg/kg	03.06.2021 03:47		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	98	%	70-130	03.06.2021 03:47		
o-Terphenyl	84-15-1	105	%	70-130	03.06.2021 03:47		



Certificate of Analytical Results 690621

Tetra Tech- Midland, Midland, TX

Adeline ALN #1

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

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690621-003

Date Collected: 03.04.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.12.2021 13:00

% Moisture:

Seq Number: 3153540

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.13.2021 03:26	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.13.2021 03:26	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.13.2021 03:26	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	03.13.2021 03:26	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.13.2021 03:26	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	03.13.2021 03:26	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.13.2021 03:26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	70-130	03.13.2021 03:26		
1,4-Difluorobenzene	540-36-3	85	%	70-130	03.13.2021 03:26		



Certificate of Analytical Results 690621

Tetra Tech- Midland, Midland, TX

Adeline ALN #1

Sample Id: **AH-1 (3.5-4')**

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690621-004

Date Collected: 03.04.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 03.06.2021 15:30

% Moisture:

Seq Number: 3152767

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.03	5.03	mg/kg	03.06.2021 18:58	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.05.2021 13:00

% Moisture:

Seq Number: 3152843

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.06.2021 00:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.06.2021 00:34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.06.2021 00:34	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.06.2021 00:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-130	03.06.2021 00:34	
o-Terphenyl	84-15-1	108	%	70-130	03.06.2021 00:34	



Certificate of Analytical Results 690621

Tetra Tech- Midland, Midland, TX

Adeline ALN #1

Sample Id: **AH-1 (3.5-4')**

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690621-004

Date Collected: 03.04.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.12.2021 13:00

% Moisture:

Seq Number: 3153540

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.13.2021 03:46	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.13.2021 03:46	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.13.2021 03:46	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.13.2021 03:46	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.13.2021 03:46	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.13.2021 03:46	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.13.2021 03:46	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	94	%	70-130	03.13.2021 03:46		
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.13.2021 03:46		



Certificate of Analytical Results 690621

Tetra Tech- Midland, Midland, TX

Adeline ALN #1

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

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690621-005

Date Collected: 03.04.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 03.06.2021 15:30

% Moisture:

Seq Number: 3152767

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	17.0	5.03	mg/kg	03.06.2021 19:16		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.05.2021 13:00

% Moisture:

Seq Number: 3152843

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.06.2021 00:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	82.3	50.0	mg/kg	03.06.2021 00:56		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.06.2021 00:56	U	1
Total TPH	PHC635	82.3	50.0	mg/kg	03.06.2021 00:56		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-130	03.06.2021 00:56	
o-Terphenyl	84-15-1	104	%	70-130	03.06.2021 00:56	



Certificate of Analytical Results 690621

Tetra Tech- Midland, Midland, TX

Adeline ALN #1

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

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690621-005

Date Collected: 03.04.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.12.2021 13:00

% Moisture:

Seq Number: 3153540

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.13.2021 04:07	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.13.2021 04:07	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.13.2021 04:07	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.13.2021 04:07	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.13.2021 04:07	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.13.2021 04:07	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.13.2021 04:07	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	94	%	70-130	03.13.2021 04:07		
4-Bromofluorobenzene	460-00-4	99	%	70-130	03.13.2021 04:07		



Certificate of Analytical Results 690621

Tetra Tech- Midland, Midland, TX

Adeline ALN #1

Sample Id: **AH-2 (1.5'-2')** Matrix: Soil Date Received: 03.05.2021 12:41
 Lab Sample Id: 690621-006 Date Collected: 03.04.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: SPC
 Analyst: SPC Date Prep: 03.06.2021 15:30 % Moisture:
 Seq Number: 3152767 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	46.6	5.00	mg/kg	03.06.2021 19:21		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 03.05.2021 13:00 % Moisture:
 Seq Number: 3152843 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.06.2021 04:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	264	50.0	mg/kg	03.06.2021 04:09		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	109	50.0	mg/kg	03.06.2021 04:09		1
Total TPH	PHC635	373	50.0	mg/kg	03.06.2021 04:09		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	114	%	70-130	03.06.2021 04:09		
o-Terphenyl	84-15-1	108	%	70-130	03.06.2021 04:09		



Certificate of Analytical Results 690621

Tetra Tech- Midland, Midland, TX

Adeline ALN #1

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

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690621-006

Date Collected: 03.04.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.12.2021 13:00

% Moisture:

Seq Number: 3153540

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.13.2021 04:27	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.13.2021 04:27	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.13.2021 04:27	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	03.13.2021 04:27	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.13.2021 04:27	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.13.2021 04:27	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.13.2021 04:27	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.13.2021 04:27		
1,4-Difluorobenzene	540-36-3	92	%	70-130	03.13.2021 04:27		



Certificate of Analytical Results 690621

Tetra Tech- Midland, Midland, TX

Adeline ALN #1

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

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690621-007

Date Collected: 03.04.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 03.06.2021 15:30

% Moisture:

Seq Number: 3152767

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	87.0	4.96	mg/kg	03.06.2021 19:27		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.05.2021 13:00

% Moisture:

Seq Number: 3152843

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.06.2021 04:30	U	1
Diesel Range Organics (DRO)	C10C28DRO	170	49.9	mg/kg	03.06.2021 04:30		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	62.1	49.9	mg/kg	03.06.2021 04:30		1
Total TPH	PHC635	232	49.9	mg/kg	03.06.2021 04:30		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	101	%	70-130	03.06.2021 04:30		
o-Terphenyl	84-15-1	103	%	70-130	03.06.2021 04:30		



Certificate of Analytical Results 690621

Tetra Tech- Midland, Midland, TX

Adeline ALN #1

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

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690621-007

Date Collected: 03.04.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.12.2021 13:00

% Moisture:

Seq Number: 3153540

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.13.2021 04:47	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.13.2021 04:47	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.13.2021 04:47	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	03.13.2021 04:47	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.13.2021 04:47	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	03.13.2021 04:47	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.13.2021 04:47	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	70-130	03.13.2021 04:47		
1,4-Difluorobenzene	540-36-3	93	%	70-130	03.13.2021 04:47		



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Tetra Tech- Midland, Midland, TX

Adeline ALN #1

Sample Id: **AH-2 (3.5-4')** Matrix: Soil Date Received: 03.05.2021 12:41
 Lab Sample Id: 690621-008 Date Collected: 03.04.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: SPC
 Analyst: SPC Date Prep: 03.06.2021 15:30 % Moisture:
 Seq Number: 3152767 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	161	4.97	mg/kg	03.06.2021 19:33		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 03.05.2021 13:00 % Moisture:
 Seq Number: 3152843 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.06.2021 01:17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.06.2021 01:17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.06.2021 01:17	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.06.2021 01:17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	113	%	70-130	03.06.2021 01:17		
o-Terphenyl	84-15-1	111	%	70-130	03.06.2021 01:17		



Certificate of Analytical Results 690621

Tetra Tech- Midland, Midland, TX

Adeline ALN #1

Sample Id: **AH-2 (3.5-4')**

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690621-008

Date Collected: 03.04.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.12.2021 13:00

% Moisture:

Seq Number: 3153540

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.13.2021 05:08	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.13.2021 05:08	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.13.2021 05:08	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	03.13.2021 05:08	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.13.2021 05:08	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	03.13.2021 05:08	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.13.2021 05:08	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	94	%	70-130	03.13.2021 05:08		
4-Bromofluorobenzene	460-00-4	97	%	70-130	03.13.2021 05:08		



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Tetra Tech- Midland, Midland, TX

Adeline ALN #1

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

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690621-009

Date Collected: 03.04.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 03.06.2021 15:30

% Moisture:

Seq Number: 3152767

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	13.1	4.99	mg/kg	03.06.2021 19:39		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.05.2021 13:00

% Moisture:

Seq Number: 3152843

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.06.2021 01:39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.06.2021 01:39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.06.2021 01:39	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.06.2021 01:39	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	97	%	70-130	03.06.2021 01:39		
o-Terphenyl	84-15-1	104	%	70-130	03.06.2021 01:39		



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Tetra Tech- Midland, Midland, TX

Adeline ALN #1

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

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690621-009

Date Collected: 03.04.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.12.2021 13:00

% Moisture:

Seq Number: 3153540

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.13.2021 05:28	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.13.2021 05:28	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.13.2021 05:28	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.13.2021 05:28	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.13.2021 05:28	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.13.2021 05:28	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.13.2021 05:28	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	90	%	70-130	03.13.2021 05:28		
4-Bromofluorobenzene	460-00-4	99	%	70-130	03.13.2021 05:28		



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Tetra Tech- Midland, Midland, TX

Adeline ALN #1

Sample Id: **AH-3 (1.5'-2')** Matrix: Soil Date Received: 03.05.2021 12:41
 Lab Sample Id: 690621-010 Date Collected: 03.04.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: SPC
 Analyst: SPC Date Prep: 03.06.2021 15:30 % Moisture:
 Seq Number: 3152767 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.99	4.99	mg/kg	03.06.2021 19:45	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 03.05.2021 13:00 % Moisture:
 Seq Number: 3152843 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.06.2021 04:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	162	50.0	mg/kg	03.06.2021 04:52		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	67.6	50.0	mg/kg	03.06.2021 04:52		1
Total TPH	PHC635	230	50.0	mg/kg	03.06.2021 04:52		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	116	%	70-130	03.06.2021 04:52		
o-Terphenyl	84-15-1	109	%	70-130	03.06.2021 04:52		



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Tetra Tech- Midland, Midland, TX

Adeline ALN #1

Sample Id: **AH-3 (1.5'-2')**

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690621-010

Date Collected: 03.04.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.12.2021 13:00

% Moisture:

Seq Number: 3153540

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.13.2021 06:50	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.13.2021 06:50	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.13.2021 06:50	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.13.2021 06:50	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.13.2021 06:50	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.13.2021 06:50	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.13.2021 06:50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	108	%	70-130	03.13.2021 06:50		
1,4-Difluorobenzene	540-36-3	93	%	70-130	03.13.2021 06:50		



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Tetra Tech- Midland, Midland, TX

Adeline ALN #1

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

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690621-011

Date Collected: 03.04.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 03.06.2021 15:30

% Moisture:

Seq Number: 3152767

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.8	4.98	mg/kg	03.06.2021 20:02		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.05.2021 13:00

% Moisture:

Seq Number: 3152843

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.06.2021 05:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	581	50.0	mg/kg	03.06.2021 05:14		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	94.9	50.0	mg/kg	03.06.2021 05:14		1
Total TPH	PHC635	676	50.0	mg/kg	03.06.2021 05:14		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	117	%	70-130	03.06.2021 05:14		
o-Terphenyl	84-15-1	113	%	70-130	03.06.2021 05:14		



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Tetra Tech- Midland, Midland, TX

Adeline ALN #1

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

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690621-011

Date Collected: 03.04.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.12.2021 13:00

% Moisture:

Seq Number: 3153540

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.13.2021 07:11	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.13.2021 07:11	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.13.2021 07:11	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.13.2021 07:11	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.13.2021 07:11	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.13.2021 07:11	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.13.2021 07:11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	108	%	70-130	03.13.2021 07:11		
1,4-Difluorobenzene	540-36-3	103	%	70-130	03.13.2021 07:11		



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Tetra Tech- Midland, Midland, TX

Adeline ALN #1

Sample Id: **AH-3 (3'-4')**

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690621-012

Date Collected: 03.04.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 03.06.2021 15:30

% Moisture:

Seq Number: 3152767

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8.52	4.99	mg/kg	03.06.2021 20:08		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.05.2021 13:00

% Moisture:

Seq Number: 3152843

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.06.2021 05:35	U	1
Diesel Range Organics (DRO)	C10C28DRO	554	50.0	mg/kg	03.06.2021 05:35		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	98.7	50.0	mg/kg	03.06.2021 05:35		1
Total TPH	PHC635	653	50.0	mg/kg	03.06.2021 05:35		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	117	%	70-130	03.06.2021 05:35		
o-Terphenyl	84-15-1	115	%	70-130	03.06.2021 05:35		



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Tetra Tech- Midland, Midland, TX

Adeline ALN #1

Sample Id: **AH-3 (3'-4')**

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690621-012

Date Collected: 03.04.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.12.2021 13:00

% Moisture:
Basis: Wet Weight

Seq Number: 3153540

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	03.13.2021 07:31	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	03.13.2021 07:31	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	03.13.2021 07:31	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	03.13.2021 07:31	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	03.13.2021 07:31	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	03.13.2021 07:31	U	1
Total BTEX		<0.00198	0.00198	mg/kg	03.13.2021 07:31	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	03.13.2021 07:31		
4-Bromofluorobenzene	460-00-4	104	%	70-130	03.13.2021 07:31		



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Tetra Tech- Midland, Midland, TX

Adeline ALN #1

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

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690621-013

Date Collected: 03.04.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 03.06.2021 15:30

% Moisture:

Seq Number: 3152767

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	21.4	5.04	mg/kg	03.06.2021 20:25		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.05.2021 13:00

% Moisture:

Seq Number: 3152843

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	03.06.2021 02:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	03.06.2021 02:00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	03.06.2021 02:00	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	03.06.2021 02:00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	97	%	70-130	03.06.2021 02:00		
o-Terphenyl	84-15-1	97	%	70-130	03.06.2021 02:00		



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Tetra Tech- Midland, Midland, TX

Adeline ALN #1

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

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690621-013

Date Collected: 03.04.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.12.2021 13:00

% Moisture:

Seq Number: 3153540

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	03.13.2021 07:51	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	03.13.2021 07:51	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	03.13.2021 07:51	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	03.13.2021 07:51	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	03.13.2021 07:51	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	03.13.2021 07:51	U	1
Total BTEX		<0.00198	0.00198	mg/kg	03.13.2021 07:51	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	70-130	03.13.2021 07:51		
1,4-Difluorobenzene	540-36-3	96	%	70-130	03.13.2021 07:51		



Certificate of Analytical Results 690621

Tetra Tech- Midland, Midland, TX

Adeline ALN #1

Sample Id: **AH-4 (1.5'-2')** Matrix: Soil Date Received: 03.05.2021 12:41
 Lab Sample Id: 690621-014 Date Collected: 03.04.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: SPC
 Analyst: SPC Date Prep: 03.06.2021 15:30 % Moisture:
 Seq Number: 3152767 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.1	5.02	mg/kg	03.06.2021 20:31		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 03.05.2021 13:00 % Moisture:
 Seq Number: 3152843 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.06.2021 02:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.06.2021 02:21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.06.2021 02:21	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.06.2021 02:21	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	97	%	70-130	03.06.2021 02:21		
o-Terphenyl	84-15-1	102	%	70-130	03.06.2021 02:21		



Certificate of Analytical Results 690621

Tetra Tech- Midland, Midland, TX

Adeline ALN #1

Sample Id: **AH-4 (1.5'-2')**

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690621-014

Date Collected: 03.04.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.12.2021 13:00

% Moisture:

Seq Number: 3153540

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.13.2021 08:12	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.13.2021 08:12	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.13.2021 08:12	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.13.2021 08:12	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.13.2021 08:12	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.13.2021 08:12	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.13.2021 08:12	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	03.13.2021 08:12		
1,4-Difluorobenzene	540-36-3	96	%	70-130	03.13.2021 08:12		



Certificate of Analytical Results 690621

Tetra Tech- Midland, Midland, TX

Adeline ALN #1

Sample Id: **AH-4 (2.5-3')** Matrix: Soil Date Received: 03.05.2021 12:41
 Lab Sample Id: 690621-015 Date Collected: 03.04.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: SPC
 Analyst: SPC Date Prep: 03.06.2021 15:30 % Moisture:
 Seq Number: 3152767 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.4	4.97	mg/kg	03.06.2021 20:37		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 03.05.2021 13:00 % Moisture:
 Seq Number: 3152843 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.06.2021 03:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.06.2021 03:04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.06.2021 03:04	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.06.2021 03:04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	95	%	70-130	03.06.2021 03:04		
o-Terphenyl	84-15-1	101	%	70-130	03.06.2021 03:04		



Certificate of Analytical Results 690621

Tetra Tech- Midland, Midland, TX

Adeline ALN #1

Sample Id: **AH-4 (2.5-3')**

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690621-015

Date Collected: 03.04.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.12.2021 13:00

% Moisture:

Seq Number: 3153540

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.13.2021 08:32	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.13.2021 08:32	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.13.2021 08:32	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.13.2021 08:32	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.13.2021 08:32	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.13.2021 08:32	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.13.2021 08:32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	93	%	70-130	03.13.2021 08:32		
4-Bromofluorobenzene	460-00-4	96	%	70-130	03.13.2021 08:32		



Certificate of Analytical Results 690621

Tetra Tech- Midland, Midland, TX

Adeline ALN #1

Sample Id: **AH-4 (3.5-4')** Matrix: Soil Date Received: 03.05.2021 12:41
 Lab Sample Id: 690621-016 Date Collected: 03.04.2021 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: SPC
 Analyst: SPC Date Prep: 03.06.2021 15:30 % Moisture:
 Seq Number: 3152767 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9.74	4.97	mg/kg	03.06.2021 20:42		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 03.05.2021 13:00 % Moisture:
 Seq Number: 3152843 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.06.2021 03:26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.06.2021 03:26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.06.2021 03:26	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.06.2021 03:26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	95	%	70-130	03.06.2021 03:26		
o-Terphenyl	84-15-1	102	%	70-130	03.06.2021 03:26		



Certificate of Analytical Results 690621

Tetra Tech- Midland, Midland, TX

Adeline ALN #1

Sample Id: **AH-4 (3.5-4')**

Matrix: Soil

Date Received: 03.05.2021 12:41

Lab Sample Id: 690621-016

Date Collected: 03.04.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.12.2021 13:00

% Moisture:

Seq Number: 3153540

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.13.2021 08:53	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.13.2021 08:53	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.13.2021 08:53	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.13.2021 08:53	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.13.2021 08:53	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.13.2021 08:53	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.13.2021 08:53	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	03.13.2021 08:53		
1,4-Difluorobenzene	540-36-3	94	%	70-130	03.13.2021 08:53		

Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



Tetra Tech- Midland

Adeline ALN #1

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3152767

Matrix: Solid

Prep Method: E300P

Date Prep: 03.06.2021

MB Sample Id: 7722687-1-BLK

LCS Sample Id: 7722687-1-BKS

LCSD Sample Id: 7722687-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	254	102	254	102	90-110	0	20	mg/kg	03.06.2021 18:12	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3152767

Matrix: Soil

Prep Method: E300P

Date Prep: 03.06.2021

Parent Sample Id: 690620-004

MS Sample Id: 690620-004 S

MSD Sample Id: 690620-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	4290	2500	6920	105	6920	105	90-110	0	20	mg/kg	03.06.2021 18:29	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3152767

Matrix: Soil

Prep Method: E300P

Date Prep: 03.06.2021

Parent Sample Id: 690621-010

MS Sample Id: 690621-010 S

MSD Sample Id: 690621-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<4.99	250	259	104	258	103	90-110	0	20	mg/kg	03.06.2021 19:50	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3152843

Matrix: Solid

Prep Method: SW8015P

Date Prep: 03.05.2021

MB Sample Id: 7722741-1-BLK

LCS Sample Id: 7722741-1-BKS

LCSD Sample Id: 7722741-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1020	102	1040	104	70-130	2	20	mg/kg	03.05.2021 21:44	
Diesel Range Organics (DRO)	<50.0	1000	1030	103	1060	106	70-130	3	20	mg/kg	03.05.2021 21:44	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	88		94		97		70-130	%	03.05.2021 21:44
o-Terphenyl	97		91		97		70-130	%	03.05.2021 21:44

Analytical Method: TPH By SW8015 Mod

Seq Number: 3152843

Matrix: Solid

Prep Method: SW8015P

Date Prep: 03.05.2021

MB Sample Id: 7722741-1-BLK

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

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

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

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

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



Tetra Tech- Midland

Adeline ALN #1

Analytical Method: TPH By SW8015 Mod

Seq Number: 3152843

Parent Sample Id: 690620-004

Matrix: Soil

MS Sample Id: 690620-004 S

Prep Method: SW8015P

Date Prep: 03.05.2021

MSD Sample Id: 690620-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	999	1090	109	1190	119	70-130	9	20	mg/kg	03.05.2021 22:48	
Diesel Range Organics (DRO)	773	999	1750	98	1860	109	70-130	6	20	mg/kg	03.05.2021 22:48	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	115		123		70-130	%	03.05.2021 22:48
o-Terphenyl	103		108		70-130	%	03.05.2021 22:48

Analytical Method: BTEX by EPA 8021B

Seq Number: 3153540

MB Sample Id: 7723200-1-BLK

Matrix: Solid

LCS Sample Id: 7723200-1-BKS

Prep Method: SW5035A

Date Prep: 03.12.2021

LCSD Sample Id: 7723200-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0901	90	0.0837	84	70-130	7	35	mg/kg	03.13.2021 00:04	
Toluene	<0.00200	0.100	0.0861	86	0.0805	81	70-130	7	35	mg/kg	03.13.2021 00:04	
Ethylbenzene	<0.00200	0.100	0.0888	89	0.0829	83	70-130	7	35	mg/kg	03.13.2021 00:04	
m,p-Xylenes	<0.00400	0.200	0.182	91	0.170	85	70-130	7	35	mg/kg	03.13.2021 00:04	
o-Xylene	<0.00200	0.100	0.0948	95	0.0893	89	70-130	6	35	mg/kg	03.13.2021 00:04	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	90		102		101		70-130	%	03.13.2021 00:04
4-Bromofluorobenzene	94		101		101		70-130	%	03.13.2021 00:04

Analytical Method: BTEX by EPA 8021B

Seq Number: 3153540

Parent Sample Id: 690620-004

Matrix: Soil

MS Sample Id: 690620-004 S

Prep Method: SW5035A

Date Prep: 03.12.2021

MSD Sample Id: 690620-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0911	90	0.0897	90	70-130	2	35	mg/kg	03.13.2021 00:44	
Toluene	<0.00202	0.101	0.0838	83	0.0836	84	70-130	0	35	mg/kg	03.13.2021 00:44	
Ethylbenzene	<0.00202	0.101	0.0810	80	0.0807	81	70-130	0	35	mg/kg	03.13.2021 00:44	
m,p-Xylenes	<0.00404	0.202	0.163	81	0.163	81	70-130	0	35	mg/kg	03.13.2021 00:44	
o-Xylene	<0.00202	0.101	0.0827	82	0.0819	82	70-130	1	35	mg/kg	03.13.2021 00:44	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		101		70-130	%	03.13.2021 00:44
4-Bromofluorobenzene	105		102		70-130	%	03.13.2021 00:44

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

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

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

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

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

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

690621

Page: 1 of 2

Client Name: EOG		Site Manager: Clair Gonzales	
Project Name: Adeline ALN #1		Contact Info:	
Project Location: Eddy County, NM		Project #: 212C-MD-02419 Task: 1800	
Invoice to: EOG: James Kennedy			
Receiving Laboratory: Xenco		Sampler Signature: Devin Dominguez	
Comments:			

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX	PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)	ANALYSIS REQUEST (Circle or Specify Method No.)		
		YEAR: 2020	DATE		TIME	WATER	SOIL	HCL	HNO ₃				ICE	NONE
	AH-1 (0-1)		3/4/2021		X			X			1	N	X	
	AH-1 (1.5-2)		3/4/2021		X			X			1	N	X	
	AH-1 (2.5-3)		3/4/2021		X			X			1	N	X	
	AH-1 (3.5-4)		3/4/2021		X			X			1	N	X	
	AH-2 (0-1)		3/4/2021		X			X			1	N	X	
	AH-2 (1.5-2)		3/4/2021		X			X			1	N	X	
	AH-2 (2.5-3)		3/4/2021		X			X			1	N	X	
	AH-2 (3.5-4)		3/4/2021		X			X			1	N	X	
	AH-3 (0-1)		3/4/2021		X			X			1	N	X	
	AH-3 (1.5-2)		3/4/2021		X			X			1	N	X	

Relinquished by: <i>[Signature]</i> Date: 3/5/21 Time: 12:41	Received by: <i>[Signature]</i> Date: 3/5/21 Time: 12:41
Relinquished by: _____ Date: _____ Time: _____	Received by: _____ Date: _____ Time: _____

LAB USE ONLY	REMARKS:
☐ Standard ☒ RUSH: Same Day 24 hr. 48 hr. 72 hr. ☐ Rush Charges Authorized ☐ Special Report Limits or TRAP Report	

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Analysis Request of Chain of Custody Record

Page : 2 of 2



Tetra Tech, Inc.

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

Client Name:

EOG

Site Manager:

Clair Gonzales

Project Name:

Adeline ALN #1

Contact Info:

Project Location:
(county, state)

Eddy County, NM

Project #:

212C-MD-02419 Task: 1800

Invoice to:

EOG: James Kennedy

Receiving Laboratory:

Xenco

Sampler Signature:

Devlin Dominguez

Comments:

LAB #
(LAB USE ONLY)

SAMPLE IDENTIFICATION

YEAR: 2020

DATE

TIME

WATER

SOIL

HCL

HNO₃

ICE

NONE

CONTAINERS

FILTERED (Y/N)

BTEX 8021B BTEX 8260B

TPH TX1005 (Ext to C35)

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

PAH 8270C

Total Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8260B / 624

GC/MS Semi. Vol. 8270C/625

PCB's 8082 / 608

NORM

PLM (Asbestos)

Chloride 300.0

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

TPH 8015R

HOLD

ANALYSIS REQUEST

(Circle or Specify Method No.)

Relinquished by:

Date: Time:

Received by:

Date: Time:

12/4

LAB USE ONLY

REMARKS:

Standard

RUSH: Same Day 24 hr. 48 hr. 72 hr.

Push Charges Authorized

Special Report Limits or TRRP Report

Relinquished by:

Date: Time:

Received by:

Date: Time:

12/4

LAB USE ONLY

REMARKS:

Standard

RUSH: Same Day 24 hr. 48 hr. 72 hr.

Push Charges Authorized

Special Report Limits or TRRP Report

Relinquished by:

Date: Time:

Received by:

Date: Time:

12/4

LAB USE ONLY

REMARKS:

Standard

RUSH: Same Day 24 hr. 48 hr. 72 hr.

Push Charges Authorized

Special Report Limits or TRRP Report

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 03.05.2021 12.41.00 PM

Work Order #: 690621

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR8

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

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Brianna Teel

Date: 03.05.2021

Checklist reviewed by:



Jessica Kramer

Date: 03.08.2021



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-940-1

Laboratory Sample Delivery Group: Eddy County NM
Client Project/Site: Adeline ALN #1 212C-MD-02419 Task
1800

For:

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

Attn: Clair Gonzales

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

Authorized for release by:
4/5/2021 8:37:25 AM

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

LINKS

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results through

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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: Adeline ALN #1 212C-MD-02419 Task 1800

Laboratory Job ID: 880-940-1
SDG: Eddy County NM

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Definitions/Glossary

Client: Tetra Tech, Inc.

Project/Site: Adeline ALN #1 212C-MD-02419 Task 1800

Job ID: 880-940-1

SDG: Eddy County NM

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN #1 212C-MD-02419 Task 1800

Job ID: 880-940-1
SDG: Eddy County NM

Job ID: 880-940-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative 880-940-1

Comments

No additional comments.

Receipt

The samples were received on 3/31/2021 3:49 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 was 4.0° C.

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: AH-3 (5.5'-6') (880-940-6). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 880-940-1

Project/Site: Adeline ALN #1 212C-MD-02419 Task 1800

SDG: Eddy County NM

Client Sample ID: H-1

Lab Sample ID: 880-940-1

Date Collected: 03/30/21 00:00

Matrix: Solid

Date Received: 03/31/21 15:49

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		04/01/21 09:34	04/01/21 19:41	1
Toluene	<0.00198	U	0.00198		mg/Kg		04/01/21 09:34	04/01/21 19:41	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		04/01/21 09:34	04/01/21 19:41	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		04/01/21 09:34	04/01/21 19:41	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		04/01/21 09:34	04/01/21 19:41	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		04/01/21 09:34	04/01/21 19:41	1
Total BTEX	<0.00198	U	0.00198		mg/Kg		04/01/21 09:34	04/01/21 19:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130	04/01/21 09:34	04/01/21 19:41	1
1,4-Difluorobenzene (Surr)	107		70 - 130	04/01/21 09:34	04/01/21 19:41	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	<49.9	U	49.9		mg/Kg		04/01/21 16:36	04/02/21 07:47	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/01/21 16:36	04/02/21 07:47	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/01/21 16:36	04/02/21 07:47	1
Total TPH	<49.9	U	49.9		mg/Kg		04/01/21 16:36	04/02/21 07:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	04/01/21 16:36	04/02/21 07:47	1
o-Terphenyl	94		70 - 130	04/01/21 16:36	04/02/21 07:47	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	34.1		5.01		mg/Kg			04/03/21 00:35	1

Client Sample ID: H-2

Lab Sample ID: 880-940-2

Date Collected: 03/30/21 00:00

Matrix: Solid

Date Received: 03/31/21 15:49

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:34	04/01/21 20:01	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:34	04/01/21 20:01	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:34	04/01/21 20:01	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/01/21 09:34	04/01/21 20:01	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:34	04/01/21 20:01	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/01/21 09:34	04/01/21 20:01	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/01/21 09:34	04/01/21 20:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130	04/01/21 09:34	04/01/21 20:01	1
1,4-Difluorobenzene (Surr)	106		70 - 130	04/01/21 09:34	04/01/21 20:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		04/01/21 16:36	04/02/21 08:09	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN #1 212C-MD-02419 Task 1800

Job ID: 880-940-1
SDG: Eddy County NM

Client Sample ID: H-2

Lab Sample ID: 880-940-2

Date Collected: 03/30/21 00:00

Matrix: Solid

Date Received: 03/31/21 15:49

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		04/01/21 16:36	04/02/21 08:09	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		04/01/21 16:36	04/02/21 08:09	1
Total TPH	<49.8	U	49.8		mg/Kg		04/01/21 16:36	04/02/21 08:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				04/01/21 16:36	04/02/21 08:09	1
o-Terphenyl	95		70 - 130				04/01/21 16:36	04/02/21 08:09	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	100		5.03		mg/Kg			04/03/21 00:40	1

Client Sample ID: H-3

Lab Sample ID: 880-940-3

Date Collected: 03/30/21 00:00

Matrix: Solid

Date Received: 03/31/21 15:49

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		04/01/21 09:34	04/01/21 20:21	1
Toluene	<0.00202	U	0.00202		mg/Kg		04/01/21 09:34	04/01/21 20:21	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		04/01/21 09:34	04/01/21 20:21	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		04/01/21 09:34	04/01/21 20:21	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		04/01/21 09:34	04/01/21 20:21	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		04/01/21 09:34	04/01/21 20:21	1
Total BTEX	<0.00202	U	0.00202		mg/Kg		04/01/21 09:34	04/01/21 20:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130				04/01/21 09:34	04/01/21 20:21	1
1,4-Difluorobenzene (Surr)	104		70 - 130				04/01/21 09:34	04/01/21 20:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/01/21 16:36	04/02/21 08:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/01/21 16:36	04/02/21 08:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/01/21 16:36	04/02/21 08:30	1
Total TPH	<50.0	U	50.0		mg/Kg		04/01/21 16:36	04/02/21 08:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130				04/01/21 16:36	04/02/21 08:30	1
o-Terphenyl	84		70 - 130				04/01/21 16:36	04/02/21 08:30	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.00		5.02		mg/Kg			04/03/21 00:45	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 880-940-1

Project/Site: Adeline ALN #1 212C-MD-02419 Task 1800

SDG: Eddy County NM

Client Sample ID: H-4

Lab Sample ID: 880-940-4

Date Collected: 03/30/21 00:00

Matrix: Solid

Date Received: 03/31/21 15:49

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		04/01/21 09:34	04/01/21 20:42	1
Toluene	<0.00201	U	0.00201		mg/Kg		04/01/21 09:34	04/01/21 20:42	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		04/01/21 09:34	04/01/21 20:42	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		04/01/21 09:34	04/01/21 20:42	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		04/01/21 09:34	04/01/21 20:42	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		04/01/21 09:34	04/01/21 20:42	1
Total BTEX	<0.00201	U	0.00201		mg/Kg		04/01/21 09:34	04/01/21 20:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130	04/01/21 09:34	04/01/21 20:42	1
1,4-Difluorobenzene (Surr)	105		70 - 130	04/01/21 09:34	04/01/21 20:42	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	<50.0	U	50.0		mg/Kg		04/01/21 16:36	04/02/21 08:51	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/01/21 16:36	04/02/21 08:51	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/01/21 16:36	04/02/21 08:51	1
Total TPH	<50.0	U	50.0		mg/Kg		04/01/21 16:36	04/02/21 08:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130	04/01/21 16:36	04/02/21 08:51	1
o-Terphenyl	89		70 - 130	04/01/21 16:36	04/02/21 08:51	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.13		4.98		mg/Kg			04/03/21 00:50	1

Client Sample ID: AH-3 (4.5'-5')

Lab Sample ID: 880-940-5

Date Collected: 03/30/21 00:00

Matrix: Solid

Date Received: 03/31/21 15:49

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		04/01/21 09:34	04/01/21 21:02	1
Toluene	<0.00198	U	0.00198		mg/Kg		04/01/21 09:34	04/01/21 21:02	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		04/01/21 09:34	04/01/21 21:02	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		04/01/21 09:34	04/01/21 21:02	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		04/01/21 09:34	04/01/21 21:02	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		04/01/21 09:34	04/01/21 21:02	1
Total BTEX	<0.00198	U	0.00198		mg/Kg		04/01/21 09:34	04/01/21 21:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130	04/01/21 09:34	04/01/21 21:02	1
1,4-Difluorobenzene (Surr)	107		70 - 130	04/01/21 09:34	04/01/21 21:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/01/21 16:36	04/02/21 09:12	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 880-940-1

Project/Site: Adeline ALN #1 212C-MD-02419 Task 1800

SDG: Eddy County NM

Client Sample ID: AH-3 (4.5'-5')

Lab Sample ID: 880-940-5

Date Collected: 03/30/21 00:00

Matrix: Solid

Date Received: 03/31/21 15:49

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/01/21 16:36	04/02/21 09:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/01/21 16:36	04/02/21 09:12	1
Total TPH	<50.0	U	50.0		mg/Kg		04/01/21 16:36	04/02/21 09:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				04/01/21 16:36	04/02/21 09:12	1
o-Terphenyl	100		70 - 130				04/01/21 16:36	04/02/21 09:12	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	206		5.04		mg/Kg			04/03/21 01:05	1

Client Sample ID: AH-3 (5.5'-6')

Lab Sample ID: 880-940-6

Date Collected: 03/30/21 00:00

Matrix: Solid

Date Received: 03/31/21 15:49

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		04/01/21 09:34	04/01/21 21:23	1
Toluene	<0.00201	U	0.00201		mg/Kg		04/01/21 09:34	04/01/21 21:23	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		04/01/21 09:34	04/01/21 21:23	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		04/01/21 09:34	04/01/21 21:23	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		04/01/21 09:34	04/01/21 21:23	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		04/01/21 09:34	04/01/21 21:23	1
Total BTEX	<0.00201	U	0.00201		mg/Kg		04/01/21 09:34	04/01/21 21:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130				04/01/21 09:34	04/01/21 21:23	1
1,4-Difluorobenzene (Surr)	89		70 - 130				04/01/21 09:34	04/01/21 21:23	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	<50.0	U	50.0		mg/Kg		04/01/21 16:36	04/02/21 09:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/01/21 16:36	04/02/21 09:33	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/01/21 16:36	04/02/21 09:33	1
Total TPH	<50.0	U	50.0		mg/Kg		04/01/21 16:36	04/02/21 09:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130				04/01/21 16:36	04/02/21 09:33	1
o-Terphenyl	89		70 - 130				04/01/21 16:36	04/02/21 09:33	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.88		5.05		mg/Kg			04/03/21 01:10	1

Eurofins Xenco, Midland

Action Limit Summary

Client: Tetra Tech, Inc.

Job ID: 880-940-1

Project/Site: Adeline ALN #1 212C-MD-02419 Task 1800

SDG: Eddy County NM

Client Sample ID: H-1

Lab Sample ID: 880-940-1

100 - NM NMOCD 51 ft - 100 ft

Analyte	Result	Qualifier	Unit	High Reg Limit	RL	Method	Prep Type
Benzene	<0.00198	U	mg/Kg	10.000	0.00198	8021B	Total/NA
Total BTEX	<0.00198	U	mg/Kg	50.000	0.00198	8021B	Total/NA
Total TPH	<49.9	U	mg/Kg	2500.0	49.9	8015B NM	Total/NA
Chloride	34.1		mg/Kg	10000	5.01	300.0	Soluble

Client Sample ID: H-2

Lab Sample ID: 880-940-2

100 - NM NMOCD 51 ft - 100 ft

Analyte	Result	Qualifier	Unit	High Reg Limit	RL	Method	Prep Type
Benzene	<0.00200	U	mg/Kg	10.000	0.00200	8021B	Total/NA
Total BTEX	<0.00200	U	mg/Kg	50.000	0.00200	8021B	Total/NA
Total TPH	<49.8	U	mg/Kg	2500.0	49.8	8015B NM	Total/NA
Chloride	100		mg/Kg	10000	5.03	300.0	Soluble

Client Sample ID: H-3

Lab Sample ID: 880-940-3

100 - NM NMOCD 51 ft - 100 ft

Analyte	Result	Qualifier	Unit	High Reg Limit	RL	Method	Prep Type
Benzene	<0.00202	U	mg/Kg	10.000	0.00202	8021B	Total/NA
Total BTEX	<0.00202	U	mg/Kg	50.000	0.00202	8021B	Total/NA
Total TPH	<50.0	U	mg/Kg	2500.0	50.0	8015B NM	Total/NA
Chloride	8.00		mg/Kg	10000	5.02	300.0	Soluble

Client Sample ID: H-4

Lab Sample ID: 880-940-4

100 - NM NMOCD 51 ft - 100 ft

Analyte	Result	Qualifier	Unit	High Reg Limit	RL	Method	Prep Type
Benzene	<0.00201	U	mg/Kg	10.000	0.00201	8021B	Total/NA
Total BTEX	<0.00201	U	mg/Kg	50.000	0.00201	8021B	Total/NA
Total TPH	<50.0	U	mg/Kg	2500.0	50.0	8015B NM	Total/NA
Chloride	7.13		mg/Kg	10000	4.98	300.0	Soluble

Client Sample ID: AH-3 (4.5'-5')

Lab Sample ID: 880-940-5

100 - NM NMOCD 51 ft - 100 ft

Analyte	Result	Qualifier	Unit	High Reg Limit	RL	Method	Prep Type
Benzene	<0.00198	U	mg/Kg	10.000	0.00198	8021B	Total/NA
Total BTEX	<0.00198	U	mg/Kg	50.000	0.00198	8021B	Total/NA
Total TPH	<50.0	U	mg/Kg	2500.0	50.0	8015B NM	Total/NA
Chloride	206		mg/Kg	10000	5.04	300.0	Soluble

Client Sample ID: AH-3 (5.5'-6')

Lab Sample ID: 880-940-6

100 - NM NMOCD 51 ft - 100 ft

Analyte	Result	Qualifier	Unit	High Reg Limit	RL	Method	Prep Type
Benzene	<0.00201	U	mg/Kg	10.000	0.00201	8021B	Total/NA
Total BTEX	<0.00201	U	mg/Kg	50.000	0.00201	8021B	Total/NA

Eurofins Xenco, Midland

Action Limit Summary

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN #1 212C-MD-02419 Task 1800

Job ID: 880-940-1
SDG: Eddy County NM

Client Sample ID: AH-3 (5.5'-6') (Continued)

Lab Sample ID: 880-940-6

100 - NM NMOCD 51 ft - 100 ft

Analyte	Result	Qualifier	Unit	High Reg Limit	RL	Method	Prep Type
Total TPH	<50.0	U	mg/Kg	2500.0	50.0	8015B NM	Total/NA
Chloride	5.88		mg/Kg	10000	5.05	300.0	Soluble

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Surrogate Summary

Client: Tetra Tech, Inc.

Job ID: 880-940-1

Project/Site: Adeline ALN #1 212C-MD-02419 Task 1800

SDG: Eddy County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-940-1	H-1	124	107
880-940-2	H-2	120	106
880-940-3	H-3	122	104
880-940-4	H-4	123	105
880-940-5	AH-3 (4.5'-5')	125	107
880-940-6	AH-3 (5.5'-6')	109	89
LCS 880-1146/1-A	Lab Control Sample	101	104
LCSD 880-1146/2-A	Lab Control Sample Dup	107	103
MB 880-1146/5-A	Method Blank	105	101
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)
880-940-1	H-1	98	94
880-940-2	H-2	102	95
880-940-3	H-3	90	84
880-940-4	H-4	92	89
880-940-5	AH-3 (4.5'-5')	102	100
880-940-6	AH-3 (5.5'-6')	93	89
LCS 880-1211/2-A	Lab Control Sample	105	92
LCSD 880-1211/3-A	Lab Control Sample Dup	105	90
MB 880-1211/1-A	Method Blank	104	104
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.

Job ID: 880-940-1

Project/Site: Adeline ALN #1 212C-MD-02419 Task 1800

SDG: Eddy County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-1146/5-A

Matrix: Solid

Analysis Batch: 1148

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1146

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:34	04/01/21 13:09	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:34	04/01/21 13:09	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:34	04/01/21 13:09	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/01/21 09:34	04/01/21 13:09	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:34	04/01/21 13:09	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/01/21 09:34	04/01/21 13:09	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/01/21 09:34	04/01/21 13:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	04/01/21 09:34	04/01/21 13:09	1
1,4-Difluorobenzene (Surr)	101		70 - 130	04/01/21 09:34	04/01/21 13:09	1

Lab Sample ID: LCS 880-1146/1-A

Matrix: Solid

Analysis Batch: 1148

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1146

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08719		mg/Kg		87	70 - 130
Toluene	0.100	0.08099		mg/Kg		81	70 - 130
Ethylbenzene	0.100	0.08356		mg/Kg		84	70 - 130
m-Xylene & p-Xylene	0.200	0.1689		mg/Kg		84	70 - 130
o-Xylene	0.100	0.08691		mg/Kg		87	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: LCSD 880-1146/2-A

Matrix: Solid

Analysis Batch: 1148

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1146

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08839		mg/Kg		88	70 - 130	1	35
Toluene	0.100	0.08269		mg/Kg		83	70 - 130	2	35
Ethylbenzene	0.100	0.08663		mg/Kg		87	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1754		mg/Kg		88	70 - 130	4	35
o-Xylene	0.100	0.09110		mg/Kg		91	70 - 130	5	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.

Job ID: 880-940-1

Project/Site: Adeline ALN #1 212C-MD-02419 Task 1800

SDG: Eddy County NM

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

Lab Sample ID: MB 880-1211/1-A

Matrix: Solid

Analysis Batch: 1157

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1211

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/01/21 16:36	04/02/21 01:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/01/21 16:36	04/02/21 01:30	1
Oil Range Organics (Over C28-C36)	78.53		50.0		mg/Kg		04/01/21 16:36	04/02/21 01:30	1
Total TPH	78.53		50.0		mg/Kg		04/01/21 16:36	04/02/21 01:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	04/01/21 16:36	04/02/21 01:30	1
o-Terphenyl	104		70 - 130	04/01/21 16:36	04/02/21 01:30	1

Lab Sample ID: LCS 880-1211/2-A

Matrix: Solid

Analysis Batch: 1157

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1211

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	953.8		mg/Kg		95	70 - 130
Diesel Range Organics (Over C10-C28)	1000	853.6		mg/Kg		85	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	92		70 - 130

Lab Sample ID: LCSD 880-1211/3-A

Matrix: Solid

Analysis Batch: 1157

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1211

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	966.7		mg/Kg		97	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	834.1		mg/Kg		83	70 - 130	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	90		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-1199/1-A

Matrix: Solid

Analysis Batch: 1246

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			04/02/21 23:25	1

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.

Job ID: 880-940-1

Project/Site: Adeline ALN #1 212C-MD-02419 Task 1800

SDG: Eddy County NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-1199/2-A

Matrix: Solid

Analysis Batch: 1246

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	241.3		mg/Kg		97	90 - 110		

Lab Sample ID: LCSD 880-1199/3-A

Matrix: Solid

Analysis Batch: 1246

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	241.2		mg/Kg		96	90 - 110	0	20

Lab Sample ID: 880-940-4 MS

Matrix: Solid

Analysis Batch: 1246

Client Sample ID: H-4

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	7.13		249	275.7		mg/Kg		108	90 - 110		

Lab Sample ID: 880-940-4 MSD

Matrix: Solid

Analysis Batch: 1246

Client Sample ID: H-4

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	7.13		249	276.2		mg/Kg		108	90 - 110	0	20

Eurofins Xenco, Midland

QC Association Summary

Client: Tetra Tech, Inc.
 Project/Site: Adeline ALN #1 212C-MD-02419 Task 1800

Job ID: 880-940-1
 SDG: Eddy County NM

GC VOA

Prep Batch: 1146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-940-1	H-1	Total/NA	Solid	5035	
880-940-2	H-2	Total/NA	Solid	5035	
880-940-3	H-3	Total/NA	Solid	5035	
880-940-4	H-4	Total/NA	Solid	5035	
880-940-5	AH-3 (4.5'-5')	Total/NA	Solid	5035	
880-940-6	AH-3 (5.5'-6')	Total/NA	Solid	5035	
MB 880-1146/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1146/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1146/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 1148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-940-1	H-1	Total/NA	Solid	8021B	1146
880-940-2	H-2	Total/NA	Solid	8021B	1146
880-940-3	H-3	Total/NA	Solid	8021B	1146
880-940-4	H-4	Total/NA	Solid	8021B	1146
880-940-5	AH-3 (4.5'-5')	Total/NA	Solid	8021B	1146
880-940-6	AH-3 (5.5'-6')	Total/NA	Solid	8021B	1146
MB 880-1146/5-A	Method Blank	Total/NA	Solid	8021B	1146
LCS 880-1146/1-A	Lab Control Sample	Total/NA	Solid	8021B	1146
LCSD 880-1146/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1146

GC Semi VOA

Analysis Batch: 1157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-940-1	H-1	Total/NA	Solid	8015B NM	1211
880-940-2	H-2	Total/NA	Solid	8015B NM	1211
880-940-3	H-3	Total/NA	Solid	8015B NM	1211
880-940-4	H-4	Total/NA	Solid	8015B NM	1211
880-940-5	AH-3 (4.5'-5')	Total/NA	Solid	8015B NM	1211
880-940-6	AH-3 (5.5'-6')	Total/NA	Solid	8015B NM	1211
MB 880-1211/1-A	Method Blank	Total/NA	Solid	8015B NM	1211
LCS 880-1211/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	1211
LCSD 880-1211/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	1211

Prep Batch: 1211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-940-1	H-1	Total/NA	Solid	8015NM Prep	
880-940-2	H-2	Total/NA	Solid	8015NM Prep	
880-940-3	H-3	Total/NA	Solid	8015NM Prep	
880-940-4	H-4	Total/NA	Solid	8015NM Prep	
880-940-5	AH-3 (4.5'-5')	Total/NA	Solid	8015NM Prep	
880-940-6	AH-3 (5.5'-6')	Total/NA	Solid	8015NM Prep	
MB 880-1211/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-1211/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-1211/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Tetra Tech, Inc.

Job ID: 880-940-1

Project/Site: Adeline ALN #1 212C-MD-02419 Task 1800

SDG: Eddy County NM

HPLC/IC

Leach Batch: 1199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-940-1	H-1	Soluble	Solid	DI Leach	
880-940-2	H-2	Soluble	Solid	DI Leach	
880-940-3	H-3	Soluble	Solid	DI Leach	
880-940-4	H-4	Soluble	Solid	DI Leach	
880-940-5	AH-3 (4.5'-5')	Soluble	Solid	DI Leach	
880-940-6	AH-3 (5.5'-6')	Soluble	Solid	DI Leach	
MB 880-1199/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1199/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1199/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-940-4 MS	H-4	Soluble	Solid	DI Leach	
880-940-4 MSD	H-4	Soluble	Solid	DI Leach	

Analysis Batch: 1246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-940-1	H-1	Soluble	Solid	300.0	1199
880-940-2	H-2	Soluble	Solid	300.0	1199
880-940-3	H-3	Soluble	Solid	300.0	1199
880-940-4	H-4	Soluble	Solid	300.0	1199
880-940-5	AH-3 (4.5'-5')	Soluble	Solid	300.0	1199
880-940-6	AH-3 (5.5'-6')	Soluble	Solid	300.0	1199
MB 880-1199/1-A	Method Blank	Soluble	Solid	300.0	1199
LCS 880-1199/2-A	Lab Control Sample	Soluble	Solid	300.0	1199
LCSD 880-1199/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1199
880-940-4 MS	H-4	Soluble	Solid	300.0	1199
880-940-4 MSD	H-4	Soluble	Solid	300.0	1199

Lab Chronicle

Client: Tetra Tech, Inc.

Project/Site: Adeline ALN #1 212C-MD-02419 Task 1800

Job ID: 880-940-1

SDG: Eddy County NM

Client Sample ID: H-1

Lab Sample ID: 880-940-1

Date Collected: 03/30/21 00:00

Matrix: Solid

Date Received: 03/31/21 15:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1146	04/01/21 09:34	KL	XM
Total/NA	Analysis	8021B		1	1148	04/01/21 19:41	KL	XM
Total/NA	Prep	8015NM Prep			1211	04/01/21 16:36	DM	XM
Total/NA	Analysis	8015B NM		1	1157	04/02/21 07:47	AJ	XM
Soluble	Leach	DI Leach			1199	04/01/21 14:35	SC	XM
Soluble	Analysis	300.0		1	1246	04/03/21 00:35	CH	XM

Client Sample ID: H-2

Lab Sample ID: 880-940-2

Date Collected: 03/30/21 00:00

Matrix: Solid

Date Received: 03/31/21 15:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1146	04/01/21 09:34	KL	XM
Total/NA	Analysis	8021B		1	1148	04/01/21 20:01	KL	XM
Total/NA	Prep	8015NM Prep			1211	04/01/21 16:36	DM	XM
Total/NA	Analysis	8015B NM		1	1157	04/02/21 08:09	AJ	XM
Soluble	Leach	DI Leach			1199	04/01/21 14:35	SC	XM
Soluble	Analysis	300.0		1	1246	04/03/21 00:40	CH	XM

Client Sample ID: H-3

Lab Sample ID: 880-940-3

Date Collected: 03/30/21 00:00

Matrix: Solid

Date Received: 03/31/21 15:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1146	04/01/21 09:34	KL	XM
Total/NA	Analysis	8021B		1	1148	04/01/21 20:21	KL	XM
Total/NA	Prep	8015NM Prep			1211	04/01/21 16:36	DM	XM
Total/NA	Analysis	8015B NM		1	1157	04/02/21 08:30	AJ	XM
Soluble	Leach	DI Leach			1199	04/01/21 14:35	SC	XM
Soluble	Analysis	300.0		1	1246	04/03/21 00:45	CH	XM

Client Sample ID: H-4

Lab Sample ID: 880-940-4

Date Collected: 03/30/21 00:00

Matrix: Solid

Date Received: 03/31/21 15:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1146	04/01/21 09:34	KL	XM
Total/NA	Analysis	8021B		1	1148	04/01/21 20:42	KL	XM
Total/NA	Prep	8015NM Prep			1211	04/01/21 16:36	DM	XM
Total/NA	Analysis	8015B NM		1	1157	04/02/21 08:51	AJ	XM
Soluble	Leach	DI Leach			1199	04/01/21 14:35	SC	XM
Soluble	Analysis	300.0		1	1246	04/03/21 00:50	CH	XM

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Lab Chronicle

Client: Tetra Tech, Inc.

Project/Site: Adeline ALN #1 212C-MD-02419 Task 1800

Job ID: 880-940-1

SDG: Eddy County NM

Client Sample ID: AH-3 (4.5'-5')

Lab Sample ID: 880-940-5

Date Collected: 03/30/21 00:00

Matrix: Solid

Date Received: 03/31/21 15:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1146	04/01/21 09:34	KL	XM
Total/NA	Analysis	8021B		1	1148	04/01/21 21:02	KL	XM
Total/NA	Prep	8015NM Prep			1211	04/01/21 16:36	DM	XM
Total/NA	Analysis	8015B NM		1	1157	04/02/21 09:12	AJ	XM
Soluble	Leach	DI Leach			1199	04/01/21 14:35	SC	XM
Soluble	Analysis	300.0		1	1246	04/03/21 01:05	CH	XM

Client Sample ID: AH-3 (5.5'-6')

Lab Sample ID: 880-940-6

Date Collected: 03/30/21 00:00

Matrix: Solid

Date Received: 03/31/21 15:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1146	04/01/21 09:34	KL	XM
Total/NA	Analysis	8021B		1	1148	04/01/21 21:23	KL	XM
Total/NA	Prep	8015NM Prep			1211	04/01/21 16:36	DM	XM
Total/NA	Analysis	8015B NM		1	1157	04/02/21 09:33	AJ	XM
Soluble	Leach	DI Leach			1199	04/01/21 14:35	SC	XM
Soluble	Analysis	300.0		1	1246	04/03/21 01:10	CH	XM

Laboratory References:

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

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN #1 212C-MD-02419 Task 1800

Job ID: 880-940-1
SDG: Eddy County NM

Laboratory: Eurofins Xenco, Midland

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

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

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

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Method Summary

Client: Tetra Tech, Inc.

Job ID: 880-940-1

Project/Site: Adeline ALN #1 212C-MD-02419 Task 1800

SDG: Eddy County NM

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Eurofins Xenco, Midland

Sample Summary

Client: Tetra Tech, Inc.

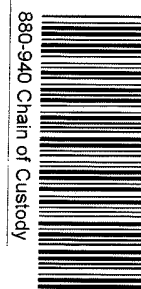
Job ID: 880-940-1

Project/Site: Adeline ALN #1 212C-MD-02419 Task 1800

SDG: Eddy County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
880-940-1	H-1	Solid	03/30/21 00:00	03/31/21 15:49	
880-940-2	H-2	Solid	03/30/21 00:00	03/31/21 15:49	
880-940-3	H-3	Solid	03/30/21 00:00	03/31/21 15:49	
880-940-4	H-4	Solid	03/30/21 00:00	03/31/21 15:49	
880-940-5	AH-3 (4.5'-5')	Solid	03/30/21 00:00	03/31/21 15:49	
880-940-6	AH-3 (5.5'-6')	Solid	03/30/21 00:00	03/31/21 15:49	

Analysis Request of Chain of Custody Record

**Tetra Tech, Inc.**

880-940 Chain of Custody

Page 1 of 1

Client Name

EOG

Site Manager

Paula Tolora Alonso

Project Name

Ade live ALN#1

Project Location
(county, state)

Eddy County New Mexico

Project #

212C-WD-02419 Task 1800

Invoice to

EOG Atkinson: James Kennedy

Receiving Laboratory

Yence

Sample Signature

Comments

LAB #

(LAB USE ONLY)

SAMPLE IDENTIFICATION

SAMPLING

MATRIX

PRESERVATIVE METHOD

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)

PAH 8270C

Total Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol 8260B / 624

GC/MS Semi Vol 8270C/625

PCB s 8082 / 608

NORM

PLM (Asbestos)

Chloride 300.0

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

Asbestos

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

Sample Temperature

3.8/4.0

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: 880-940-1

SDG Number: Eddy County NM

Login Number: 940

List Number: 1

Creator: Teel, Brianna

List Source: Eurofins Midland

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



Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-653-1

Laboratory Sample Delivery Group: Eddy County NM
Client Project/Site: Adeline ALN Fed #1.

For:

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

Attn: Clair Gonzales

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

Authorized for release by:
5/12/2021 5:36:35 PM

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

LINKS

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results through

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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: Adeline ALN Fed #1.

Laboratory Job ID: 890-653-1
SDG: Eddy County NM

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Definitions/Glossary

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Fed #1.

Job ID: 890-653-1
SDG: Eddy County NM

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Fed #1.

Job ID: 890-653-1
SDG: Eddy County NM

Job ID: 890-653-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

**Job Narrative
890-653-1****Receipt**

The samples were received on 5/11/2021 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.2°C

Receipt Exceptions

The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: AH-1 BT (890-653-1), AH-1 North (890-653-2), AH-1 East (890-653-3), AH-1 South (890-653-4), AH-1 West (890-653-5), AH-3 BT (890-653-6), AH-3 North (890-653-7), AH-3 East (890-653-8), AH-3 South (890-653-9), AH-3 West (890-653-10), AH-2 BT (890-653-11), AH-2 North (890-653-12), AH-2 East (890-653-13), AH-2 South (890-653-14) and AH-2 West (890-653-15).

GC VOA

Method 8021B: Internal standard responses were outside of acceptance limits for the following samples: AH-3 East (890-653-8) and AH-2 South (890-653-14). The sample(s) shows evidence of matrix interference.

Method 8021B: Surrogate recovery for the following sample was outside control limits: AH-3 East (890-653-8). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

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

HPLC/IC

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

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Fed #1.

Job ID: 890-653-1
SDG: Eddy County NM

Client Sample ID: AH-1 BT

Lab Sample ID: 890-653-1

Date Collected: 05/10/21 12:25

Matrix: Solid

Date Received: 05/11/21 08:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/11/21 14:20	05/11/21 23:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/11/21 14:20	05/11/21 23:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/11/21 14:20	05/11/21 23:35	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/11/21 14:20	05/11/21 23:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/11/21 14:20	05/11/21 23:35	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/11/21 14:20	05/11/21 23:35	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		05/11/21 14:20	05/11/21 23:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	79		70 - 130	05/11/21 14:20	05/11/21 23:35	1
1,4-Difluorobenzene (Surr)	95		70 - 130	05/11/21 14:20	05/11/21 23:35	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		05/12/21 07:52	05/12/21 11:30	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		05/12/21 07:52	05/12/21 11:30	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/12/21 07:52	05/12/21 11:30	1
Total TPH	<49.8	U	49.8		mg/Kg		05/12/21 07:52	05/12/21 11:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	05/12/21 07:52	05/12/21 11:30	1
o-Terphenyl	109		70 - 130	05/12/21 07:52	05/12/21 11:30	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21.0		4.96		mg/Kg			05/12/21 00:20	1

Client Sample ID: AH-1 North

Lab Sample ID: 890-653-2

Date Collected: 05/10/21 12:28

Matrix: Solid

Date Received: 05/11/21 08:00

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		05/11/21 14:20	05/12/21 00:01	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/11/21 14:20	05/12/21 00:01	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/11/21 14:20	05/12/21 00:01	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		05/11/21 14:20	05/12/21 00:01	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/11/21 14:20	05/12/21 00:01	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		05/11/21 14:20	05/12/21 00:01	1
Total BTEX	<0.00396	U	0.00396		mg/Kg		05/11/21 14:20	05/12/21 00:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130	05/11/21 14:20	05/12/21 00:01	1
1,4-Difluorobenzene (Surr)	99		70 - 130	05/11/21 14:20	05/12/21 00:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		05/12/21 07:52	05/12/21 12:32	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Fed #1.

Job ID: 890-653-1
SDG: Eddy County NM

Client Sample ID: AH-1 North

Lab Sample ID: 890-653-2

Date Collected: 05/10/21 12:28

Matrix: Solid

Date Received: 05/11/21 08:00

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)	<49.6	U	49.6		mg/Kg		05/12/21 07:52	05/12/21 12:32	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		05/12/21 07:52	05/12/21 12:32	1
Total TPH	<49.6	U	49.6		mg/Kg		05/12/21 07:52	05/12/21 12:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130				05/12/21 07:52	05/12/21 12:32	1
o-Terphenyl	112		70 - 130				05/12/21 07:52	05/12/21 12:32	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19.9		4.96		mg/Kg			05/12/21 00:25	1

Client Sample ID: AH-1 East

Lab Sample ID: 890-653-3

Date Collected: 05/10/21 12:35

Matrix: Solid

Date Received: 05/11/21 08:00

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		05/11/21 14:20	05/12/21 00:27	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/11/21 14:20	05/12/21 00:27	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/11/21 14:20	05/12/21 00:27	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		05/11/21 14:20	05/12/21 00:27	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/11/21 14:20	05/12/21 00:27	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		05/11/21 14:20	05/12/21 00:27	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		05/11/21 14:20	05/12/21 00:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130				05/11/21 14:20	05/12/21 00:27	1
1,4-Difluorobenzene (Surr)	91		70 - 130				05/11/21 14:20	05/12/21 00:27	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	<49.7	U	49.7		mg/Kg		05/12/21 07:52	05/12/21 12:52	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		05/12/21 07:52	05/12/21 12:52	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		05/12/21 07:52	05/12/21 12:52	1
Total TPH	<49.7	U	49.7		mg/Kg		05/12/21 07:52	05/12/21 12:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130				05/12/21 07:52	05/12/21 12:52	1
o-Terphenyl	113		70 - 130				05/12/21 07:52	05/12/21 12:52	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.2		5.00		mg/Kg			05/12/21 00:31	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Fed #1.

Job ID: 890-653-1
SDG: Eddy County NM

Client Sample ID: AH-1 South

Lab Sample ID: 890-653-4

Date Collected: 05/10/21 12:38

Matrix: Solid

Date Received: 05/11/21 08:00

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		05/11/21 14:30	05/12/21 02:17	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/11/21 14:30	05/12/21 02:17	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/11/21 14:30	05/12/21 02:17	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/11/21 14:30	05/12/21 02:17	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/11/21 14:30	05/12/21 02:17	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/11/21 14:30	05/12/21 02:17	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/11/21 14:30	05/12/21 02:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	05/11/21 14:30	05/12/21 02:17	1
1,4-Difluorobenzene (Surr)	102		70 - 130	05/11/21 14:30	05/12/21 02:17	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	<50.0	U	50.0		mg/Kg		05/12/21 07:52	05/12/21 13:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/12/21 07:52	05/12/21 13:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/12/21 07:52	05/12/21 13:13	1
Total TPH	<50.0	U	50.0		mg/Kg		05/12/21 07:52	05/12/21 13:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	05/12/21 07:52	05/12/21 13:13	1
o-Terphenyl	119		70 - 130	05/12/21 07:52	05/12/21 13:13	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.8		4.99		mg/Kg			05/12/21 00:36	1

Client Sample ID: AH-1 West

Lab Sample ID: 890-653-5

Date Collected: 05/10/21 12:45

Matrix: Solid

Date Received: 05/11/21 08:00

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		05/11/21 14:30	05/12/21 02:37	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/11/21 14:30	05/12/21 02:37	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/11/21 14:30	05/12/21 02:37	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		05/11/21 14:30	05/12/21 02:37	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/11/21 14:30	05/12/21 02:37	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		05/11/21 14:30	05/12/21 02:37	1
Total BTEX	<0.00404	U	0.00404		mg/Kg		05/11/21 14:30	05/12/21 02:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	05/11/21 14:30	05/12/21 02:37	1
1,4-Difluorobenzene (Surr)	100		70 - 130	05/11/21 14:30	05/12/21 02:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/12/21 07:52	05/12/21 13:34	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Fed #1.

Job ID: 890-653-1
SDG: Eddy County NM

Client Sample ID: AH-1 West

Lab Sample ID: 890-653-5

Date Collected: 05/10/21 12:45

Matrix: Solid

Date Received: 05/11/21 08:00

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		05/12/21 07:52	05/12/21 13:34	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/12/21 07:52	05/12/21 13:34	1
Total TPH	<50.0	U	50.0		mg/Kg		05/12/21 07:52	05/12/21 13:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130				05/12/21 07:52	05/12/21 13:34	1
o-Terphenyl	114		70 - 130				05/12/21 07:52	05/12/21 13:34	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.0		4.99		mg/Kg			05/12/21 00:41	1

Client Sample ID: AH-3 BT

Lab Sample ID: 890-653-6

Date Collected: 05/10/21 12:55

Matrix: Solid

Date Received: 05/11/21 08:00

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		05/11/21 14:30	05/12/21 02:58	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/11/21 14:30	05/12/21 02:58	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/11/21 14:30	05/12/21 02:58	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/11/21 14:30	05/12/21 02:58	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/11/21 14:30	05/12/21 02:58	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/11/21 14:30	05/12/21 02:58	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/11/21 14:30	05/12/21 02:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130				05/11/21 14:30	05/12/21 02:58	1
1,4-Difluorobenzene (Surr)	103		70 - 130				05/11/21 14:30	05/12/21 02:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/12/21 07:52	05/12/21 13:54	1
Diesel Range Organics (Over C10-C28)	50.6		50.0		mg/Kg		05/12/21 07:52	05/12/21 13:54	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/12/21 07:52	05/12/21 13:54	1
Total TPH	50.6		50.0		mg/Kg		05/12/21 07:52	05/12/21 13:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130				05/12/21 07:52	05/12/21 13:54	1
o-Terphenyl	113		70 - 130				05/12/21 07:52	05/12/21 13:54	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	77.5		5.00		mg/Kg			05/12/21 00:47	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Fed #1.

Job ID: 890-653-1
SDG: Eddy County NM

Client Sample ID: AH-3 North

Lab Sample ID: 890-653-7

Date Collected: 05/10/21 12:58

Matrix: Solid

Date Received: 05/11/21 08:00

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		05/11/21 14:30	05/12/21 03:18	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/11/21 14:30	05/12/21 03:18	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/11/21 14:30	05/12/21 03:18	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/11/21 14:30	05/12/21 03:18	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/11/21 14:30	05/12/21 03:18	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/11/21 14:30	05/12/21 03:18	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		05/11/21 14:30	05/12/21 03:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	05/11/21 14:30	05/12/21 03:18	1
1,4-Difluorobenzene (Surr)	100		70 - 130	05/11/21 14:30	05/12/21 03:18	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	<49.8	U	49.8		mg/Kg		05/12/21 07:52	05/12/21 14:15	1
Diesel Range Organics (Over C10-C28)	77.7		49.8		mg/Kg		05/12/21 07:52	05/12/21 14:15	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/12/21 07:52	05/12/21 14:15	1
Total TPH	77.7		49.8		mg/Kg		05/12/21 07:52	05/12/21 14:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	05/12/21 07:52	05/12/21 14:15	1
o-Terphenyl	114		70 - 130	05/12/21 07:52	05/12/21 14:15	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	87.9		5.04		mg/Kg			05/12/21 01:03	1

Client Sample ID: AH-3 East

Lab Sample ID: 890-653-8

Date Collected: 05/10/21 13:05

Matrix: Solid

Date Received: 05/11/21 08:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/11/21 14:30	05/12/21 03:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/11/21 14:30	05/12/21 03:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/11/21 14:30	05/12/21 03:38	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/11/21 14:30	05/12/21 03:38	1
o-Xylene	0.00249		0.00200		mg/Kg		05/11/21 14:30	05/12/21 03:38	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/11/21 14:30	05/12/21 03:38	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		05/11/21 14:30	05/12/21 03:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	151	S1+	70 - 130	05/11/21 14:30	05/12/21 03:38	1
1,4-Difluorobenzene (Surr)	86		70 - 130	05/11/21 14:30	05/12/21 03:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/12/21 07:52	05/12/21 14:35	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Fed #1.

Job ID: 890-653-1
SDG: Eddy County NM

Client Sample ID: AH-3 East

Lab Sample ID: 890-653-8

Date Collected: 05/10/21 13:05

Matrix: Solid

Date Received: 05/11/21 08:00

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)	150		49.9		mg/Kg		05/12/21 07:52	05/12/21 14:35	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/12/21 07:52	05/12/21 14:35	1
Total TPH	150		49.9		mg/Kg		05/12/21 07:52	05/12/21 14:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130				05/12/21 07:52	05/12/21 14:35	1
o-Terphenyl	116		70 - 130				05/12/21 07:52	05/12/21 14:35	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	73.3		4.98		mg/Kg			05/12/21 01:08	1

Client Sample ID: AH-3 South

Lab Sample ID: 890-653-9

Date Collected: 05/10/21 13:08

Matrix: Solid

Date Received: 05/11/21 08:00

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		05/11/21 14:30	05/12/21 03:59	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/11/21 14:30	05/12/21 03:59	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/11/21 14:30	05/12/21 03:59	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/11/21 14:30	05/12/21 03:59	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/11/21 14:30	05/12/21 03:59	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/11/21 14:30	05/12/21 03:59	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/11/21 14:30	05/12/21 03:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130				05/11/21 14:30	05/12/21 03:59	1
1,4-Difluorobenzene (Surr)	99		70 - 130				05/11/21 14:30	05/12/21 03:59	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		05/12/21 08:24	05/12/21 11:30	1
Diesel Range Organics (Over C10-C28)	98.4		49.7		mg/Kg		05/12/21 08:24	05/12/21 11:30	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		05/12/21 08:24	05/12/21 11:30	1
Total TPH	98.4		49.7		mg/Kg		05/12/21 08:24	05/12/21 11:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130				05/12/21 08:24	05/12/21 11:30	1
o-Terphenyl	103		70 - 130				05/12/21 08:24	05/12/21 11:30	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	75.8		4.99		mg/Kg			05/12/21 01:24	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Fed #1.

Job ID: 890-653-1
SDG: Eddy County NM

Client Sample ID: AH-3 West

Lab Sample ID: 890-653-10

Date Collected: 05/10/21 13:10

Matrix: Solid

Date Received: 05/11/21 08:00

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		05/11/21 14:30	05/12/21 05:48	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/11/21 14:30	05/12/21 05:48	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/11/21 14:30	05/12/21 05:48	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		05/11/21 14:30	05/12/21 05:48	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/11/21 14:30	05/12/21 05:48	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		05/11/21 14:30	05/12/21 05:48	1
Total BTEX	<0.00404	U	0.00404		mg/Kg		05/11/21 14:30	05/12/21 05:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	05/11/21 14:30	05/12/21 05:48	1
1,4-Difluorobenzene (Surr)	97		70 - 130	05/11/21 14:30	05/12/21 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		05/12/21 08:24	05/12/21 12:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/12/21 08:24	05/12/21 12:32	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/12/21 08:24	05/12/21 12:32	1
Total TPH	<50.0	U	50.0		mg/Kg		05/12/21 08:24	05/12/21 12:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130	05/12/21 08:24	05/12/21 12:32	1
o-Terphenyl	104		70 - 130	05/12/21 08:24	05/12/21 12:32	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	38.8		4.97		mg/Kg			05/12/21 01:30	1

Client Sample ID: AH-2 BT

Lab Sample ID: 890-653-11

Date Collected: 05/10/21 13:20

Matrix: Solid

Date Received: 05/11/21 08:00

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		05/11/21 14:30	05/12/21 06:09	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/11/21 14:30	05/12/21 06:09	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/11/21 14:30	05/12/21 06:09	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		05/11/21 14:30	05/12/21 06:09	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/11/21 14:30	05/12/21 06:09	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		05/11/21 14:30	05/12/21 06:09	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		05/11/21 14:30	05/12/21 06:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	05/11/21 14:30	05/12/21 06:09	1
1,4-Difluorobenzene (Surr)	102		70 - 130	05/11/21 14:30	05/12/21 06:09	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	<49.8	U	49.8		mg/Kg		05/12/21 08:24	05/12/21 12:52	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Fed #1.

Job ID: 890-653-1
SDG: Eddy County NM

Client Sample ID: AH-2 BT

Lab Sample ID: 890-653-11

Date Collected: 05/10/21 13:20

Matrix: Solid

Date Received: 05/11/21 08:00

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		05/12/21 08:24	05/12/21 12:52	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/12/21 08:24	05/12/21 12:52	1
Total TPH	<49.8	U	49.8		mg/Kg		05/12/21 08:24	05/12/21 12:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130				05/12/21 08:24	05/12/21 12:52	1
o-Terphenyl	106		70 - 130				05/12/21 08:24	05/12/21 12:52	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	65.4		4.97		mg/Kg			05/12/21 01:35	1

Client Sample ID: AH-2 North

Lab Sample ID: 890-653-12

Date Collected: 05/10/21 13:23

Matrix: Solid

Date Received: 05/11/21 08:00

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		05/11/21 14:30	05/12/21 06:29	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/11/21 14:30	05/12/21 06:29	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/11/21 14:30	05/12/21 06:29	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/11/21 14:30	05/12/21 06:29	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/11/21 14:30	05/12/21 06:29	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/11/21 14:30	05/12/21 06:29	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/11/21 14:30	05/12/21 06:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130				05/11/21 14:30	05/12/21 06:29	1
1,4-Difluorobenzene (Surr)	102		70 - 130				05/11/21 14:30	05/12/21 06:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/12/21 08:24	05/12/21 13:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/12/21 08:24	05/12/21 13:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/12/21 08:24	05/12/21 13:13	1
Total TPH	<50.0	U	50.0		mg/Kg		05/12/21 08:24	05/12/21 13:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				05/12/21 08:24	05/12/21 13:13	1
o-Terphenyl	117		70 - 130				05/12/21 08:24	05/12/21 13:13	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	76.3		4.96		mg/Kg			05/12/21 01:40	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Fed #1.

Job ID: 890-653-1
SDG: Eddy County NM

Client Sample ID: AH-2 East

Lab Sample ID: 890-653-13

Date Collected: 05/10/21 13:28

Matrix: Solid

Date Received: 05/11/21 08:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/11/21 14:30	05/12/21 06:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/11/21 14:30	05/12/21 06:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/11/21 14:30	05/12/21 06:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/11/21 14:30	05/12/21 06:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/11/21 14:30	05/12/21 06:50	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/11/21 14:30	05/12/21 06:50	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/11/21 14:30	05/12/21 06:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	05/11/21 14:30	05/12/21 06:50	1
1,4-Difluorobenzene (Surr)	104		70 - 130	05/11/21 14:30	05/12/21 06:50	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	<49.9	U	49.9		mg/Kg		05/12/21 08:24	05/12/21 13:34	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/12/21 08:24	05/12/21 13:34	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/12/21 08:24	05/12/21 13:34	1
Total TPH	<49.9	U	49.9		mg/Kg		05/12/21 08:24	05/12/21 13:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	05/12/21 08:24	05/12/21 13:34	1
o-Terphenyl	111		70 - 130	05/12/21 08:24	05/12/21 13:34	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	56.4		5.03		mg/Kg			05/12/21 01:46	1

Client Sample ID: AH-2 South

Lab Sample ID: 890-653-14

Date Collected: 05/10/21 13:30

Matrix: Solid

Date Received: 05/11/21 08:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/11/21 14:30	05/12/21 07:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/11/21 14:30	05/12/21 07:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/11/21 14:30	05/12/21 07:10	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/11/21 14:30	05/12/21 07:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/11/21 14:30	05/12/21 07:10	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/11/21 14:30	05/12/21 07:10	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		05/11/21 14:30	05/12/21 07:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130	05/11/21 14:30	05/12/21 07:10	1
1,4-Difluorobenzene (Surr)	81		70 - 130	05/11/21 14:30	05/12/21 07:10	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		05/12/21 08:24	05/12/21 13:54	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Fed #1.

Job ID: 890-653-1
SDG: Eddy County NM

Client Sample ID: AH-2 South

Lab Sample ID: 890-653-14

Date Collected: 05/10/21 13:30

Matrix: Solid

Date Received: 05/11/21 08:00

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		05/12/21 08:24	05/12/21 13:54	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/12/21 08:24	05/12/21 13:54	1
Total TPH	<49.8	U	49.8		mg/Kg		05/12/21 08:24	05/12/21 13:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130				05/12/21 08:24	05/12/21 13:54	1
o-Terphenyl	107		70 - 130				05/12/21 08:24	05/12/21 13:54	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	62.5		5.03		mg/Kg			05/12/21 01:51	1

Client Sample ID: AH-2 West

Lab Sample ID: 890-653-15

Date Collected: 05/10/21 13:35

Matrix: Solid

Date Received: 05/11/21 08:00

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		05/11/21 14:30	05/12/21 07:30	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/11/21 14:30	05/12/21 07:30	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/11/21 14:30	05/12/21 07:30	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/11/21 14:30	05/12/21 07:30	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/11/21 14:30	05/12/21 07:30	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/11/21 14:30	05/12/21 07:30	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		05/11/21 14:30	05/12/21 07:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130				05/11/21 14:30	05/12/21 07:30	1
1,4-Difluorobenzene (Surr)	102		70 - 130				05/11/21 14:30	05/12/21 07:30	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	<49.7	U	49.7		mg/Kg		05/12/21 08:24	05/12/21 14:15	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		05/12/21 08:24	05/12/21 14:15	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		05/12/21 08:24	05/12/21 14:15	1
Total TPH	<49.7	U	49.7		mg/Kg		05/12/21 08:24	05/12/21 14:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				05/12/21 08:24	05/12/21 14:15	1
o-Terphenyl	112		70 - 130				05/12/21 08:24	05/12/21 14:15	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	73.0		5.01		mg/Kg			05/12/21 01:56	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Fed #1.

Job ID: 890-653-1
SDG: Eddy County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-653-1	AH-1 BT	79	95
890-653-2	AH-1 North	73	99
890-653-3	AH-1 East	83	91
890-653-4	AH-1 South	108	102
890-653-5	AH-1 West	110	100
890-653-6	AH-3 BT	112	103
890-653-7	AH-3 North	106	100
890-653-8	AH-3 East	151 S1+	86
890-653-9	AH-3 South	105	99
890-653-10	AH-3 West	114	97
890-653-11	AH-2 BT	109	102
890-653-12	AH-2 North	111	102
890-653-13	AH-2 East	110	104
890-653-14	AH-2 South	130	81
890-653-15	AH-2 West	113	102
LCS 880-2955/1-A	Lab Control Sample	101	99
LCS 880-2967/1-A	Lab Control Sample	73	102
LCSD 880-2955/2-A	Lab Control Sample Dup	102	98
LCSD 880-2967/2-A	Lab Control Sample Dup	81	106
MB 880-2940/5-A	Method Blank	104	95
MB 880-2955/5-A	Method Blank	105	94
MB 880-2967/5-A	Method Blank	56 S1-	84
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)
890-653-1	AH-1 BT	104	109
890-653-1 MS	AH-1 BT	103	98
890-653-1 MSD	AH-1 BT	103	100
890-653-2	AH-1 North	108	112
890-653-3	AH-1 East	109	113
890-653-4	AH-1 South	110	119
890-653-5	AH-1 West	110	114
890-653-6	AH-3 BT	109	113
890-653-7	AH-3 North	109	114
890-653-8	AH-3 East	113	116
890-653-9	AH-3 South	90	103
890-653-9 MS	AH-3 South	87	92
890-653-9 MSD	AH-3 South	86	91
890-653-10	AH-3 West	91	104
890-653-11	AH-2 BT	93	106
890-653-12	AH-2 North	104	117
890-653-13	AH-2 East	97	111

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: Tetra Tech, Inc.

Job ID: 890-653-1

Project/Site: Adeline ALN Fed #1.

SDG: Eddy County NM

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)
890-653-14	AH-2 South	94	107
890-653-15	AH-2 West	99	112
LCS 880-3008/2-A	Lab Control Sample	111	110
LCS 880-3010/2-A	Lab Control Sample	115	127
LCSD 880-3008/3-A	Lab Control Sample Dup	115	110
LCSD 880-3010/3-A	Lab Control Sample Dup	98	106
MB 880-3008/1-A	Method Blank	106	111
MB 880-3010/1-A	Method Blank	90	103

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Fed #1.

Job ID: 890-653-1
SDG: Eddy County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-2940/5-A

Matrix: Solid

Analysis Batch: 2936

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2940

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/11/21 10:30	05/11/21 12:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/11/21 10:30	05/11/21 12:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/11/21 10:30	05/11/21 12:51	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/11/21 10:30	05/11/21 12:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/11/21 10:30	05/11/21 12:51	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/11/21 10:30	05/11/21 12:51	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/11/21 10:30	05/11/21 12:51	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	05/11/21 10:30	05/11/21 12:51	1
1,4-Difluorobenzene (Surr)	95		70 - 130	05/11/21 10:30	05/11/21 12:51	1

Lab Sample ID: MB 880-2955/5-A

Matrix: Solid

Analysis Batch: 2936

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2955

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/11/21 10:08	05/12/21 00:26	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/11/21 10:08	05/12/21 00:26	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/11/21 10:08	05/12/21 00:26	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/11/21 10:08	05/12/21 00:26	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/11/21 10:08	05/12/21 00:26	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/11/21 10:08	05/12/21 00:26	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/11/21 10:08	05/12/21 00:26	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	05/11/21 10:08	05/12/21 00:26	1
1,4-Difluorobenzene (Surr)	94		70 - 130	05/11/21 10:08	05/12/21 00:26	1

Lab Sample ID: LCS 880-2955/1-A

Matrix: Solid

Analysis Batch: 2936

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2955

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08880		mg/Kg		89	70 - 130
Toluene	0.100	0.09663		mg/Kg		97	70 - 130
Ethylbenzene	0.100	0.1006		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	0.200	0.2045		mg/Kg		102	70 - 130
o-Xylene	0.100	0.1037		mg/Kg		104	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Fed #1.

Job ID: 890-653-1
SDG: Eddy County NM

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

Lab Sample ID: LCSD 880-2955/2-A

Matrix: Solid

Analysis Batch: 2936

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 2955

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08696		mg/Kg		87	70 - 130	2	35
Toluene	0.100	0.09670		mg/Kg		97	70 - 130	0	35
Ethylbenzene	0.100	0.1001		mg/Kg		100	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.2049		mg/Kg		102	70 - 130	0	35
o-Xylene	0.100	0.1039		mg/Kg		104	70 - 130	0	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: MB 880-2967/5-A

Matrix: Solid

Analysis Batch: 2938

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2967

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/11/21 11:13	05/11/21 15:32	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/11/21 11:13	05/11/21 15:32	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/11/21 11:13	05/11/21 15:32	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/11/21 11:13	05/11/21 15:32	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/11/21 11:13	05/11/21 15:32	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/11/21 11:13	05/11/21 15:32	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/11/21 11:13	05/11/21 15:32	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	56	S1-	70 - 130	05/11/21 11:13	05/11/21 15:32	1
1,4-Difluorobenzene (Surr)	84		70 - 130	05/11/21 11:13	05/11/21 15:32	1

Lab Sample ID: LCS 880-2967/1-A

Matrix: Solid

Analysis Batch: 2938

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2967

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1011		mg/Kg		101	70 - 130
Toluene	0.100	0.09728		mg/Kg		97	70 - 130
Ethylbenzene	0.100	0.09711		mg/Kg		97	70 - 130
m-Xylene & p-Xylene	0.200	0.2033		mg/Kg		102	70 - 130
o-Xylene	0.100	0.08259		mg/Kg		83	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	73		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: LCSD 880-2967/2-A

Matrix: Solid

Analysis Batch: 2938

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 2967

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1018		mg/Kg		102	70 - 130	1	35

Eurofins Xenco, Carlsbad

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Fed #1.

Job ID: 890-653-1
SDG: Eddy County NM

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

Lab Sample ID: LCSD 880-2967/2-A

Matrix: Solid

Analysis Batch: 2938

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 2967

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	0.100	0.09811		mg/Kg		98	70 - 130	1	35
Ethylbenzene	0.100	0.1008		mg/Kg		101	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.2125		mg/Kg		106	70 - 130	4	35
o-Xylene	0.100	0.08623		mg/Kg		86	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	81		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

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

Lab Sample ID: MB 880-3008/1-A

Matrix: Solid

Analysis Batch: 3004

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3008

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/12/21 07:52	05/12/21 10:29	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/12/21 07:52	05/12/21 10:29	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/12/21 07:52	05/12/21 10:29	1
Total TPH	<50.0	U	50.0		mg/Kg		05/12/21 07:52	05/12/21 10:29	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	05/12/21 07:52	05/12/21 10:29	1
o-Terphenyl	111		70 - 130	05/12/21 07:52	05/12/21 10:29	1

Lab Sample ID: LCS 880-3008/2-A

Matrix: Solid

Analysis Batch: 3004

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3008

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	963.8		mg/Kg		96	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1152		mg/Kg		115	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	111		70 - 130
o-Terphenyl	110		70 - 130

Lab Sample ID: LCSD 880-3008/3-A

Matrix: Solid

Analysis Batch: 3004

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3008

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	996.0		mg/Kg		100	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	1142		mg/Kg		114	70 - 130	1	20

Eurofins Xenco, Carlsbad

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Fed #1.

Job ID: 890-653-1
SDG: Eddy County NM

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

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	115		70 - 130
o-Terphenyl	110		70 - 130

Lab Sample ID: 890-653-1 MS

Matrix: Solid

Analysis Batch: 3004

Client Sample ID: AH-1 BT

Prep Type: Total/NA

Prep Batch: 3008

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	997	899.4		mg/Kg		90	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	997	1012		mg/Kg		102	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: 890-653-1 MSD

Matrix: Solid

Analysis Batch: 3004

Client Sample ID: AH-1 BT

Prep Type: Total/NA

Prep Batch: 3008

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	868.6		mg/Kg		87	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.8	U	998	1026		mg/Kg		103	70 - 130	1	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	100		70 - 130

Lab Sample ID: MB 880-3010/1-A

Matrix: Solid

Analysis Batch: 3006

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3010

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/12/21 08:24	05/12/21 10:29	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/12/21 08:24	05/12/21 10:29	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/12/21 08:24	05/12/21 10:29	1
Total TPH	<50.0	U	50.0		mg/Kg		05/12/21 08:24	05/12/21 10:29	1

	MB	MB							
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
1-Chlorooctane	90		70 - 130	05/12/21 08:24	05/12/21 10:29	1			
o-Terphenyl	103		70 - 130	05/12/21 08:24	05/12/21 10:29	1			

Eurofins Xenco, Carlsbad

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Fed #1.

Job ID: 890-653-1
SDG: Eddy County NM

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

Lab Sample ID: LCS 880-3010/2-A

Matrix: Solid

Analysis Batch: 3006

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3010

Analyte			Spike	LCS	LCS	Unit	D	%Rec	%Rec.		
			Added	Result	Qualifier				Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	917.5		mg/Kg		92	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1080		mg/Kg		108	70 - 130		

Lab Sample ID: LCSD 880-3010/3-A

Matrix: Solid

Analysis Batch: 3006

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3010

			Spike	LCSD	LCSD				%Rec.			RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10			1000	803.6		mg/Kg		80	70 - 130	13	20	
Diesel Range Organics (Over C10-C28)			1000	1044		mg/Kg		104	70 - 130	3	20	
			LCSD	LCSD								
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	98		70 - 130									
o-Terphenyl	106		70 - 130									

Lab Sample ID: 890-653-9 MS

Matrix: Solid

Analysis Batch: 3006

Client Sample ID: AH-3 South

Prep Type: Total/NA

Prep Batch: 3010

	Sample	Sample	Spike	MS	MS				%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	996	838.7		mg/Kg		81	70 - 130		
Diesel Range Organics (Over C10-C28)	98.4		996	925.0		mg/Kg		83	70 - 130		

Lab Sample ID: 890-653-9 MSD

Matrix: Solid

Analysis Batch: 3006

Client Sample ID: AH-3 South

Prep Type: Total/NA

Prep Batch: 3010

	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	<49.7	U	998	839.3		mg/Kg		81	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	98.4		998	914.0		mg/Kg		82	70 - 130	1	20

Eurofins Xenco, Carlsbad

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Fed #1.

Job ID: 890-653-1
SDG: Eddy County NM

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

Lab Sample ID: 890-653-9 MSD

Matrix: Solid

Analysis Batch: 3006

Client Sample ID: AH-3 South

Prep Type: Total/NA

Prep Batch: 3010

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
<i>o</i> -Terphenyl	91		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-2942/1-A

Matrix: Solid

Analysis Batch: 2988

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB	MB								
	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil	Fac
Chloride	<5.00	U	5.00		mg/Kg			05/11/21 23:15	1	

Lab Sample ID: LCS 880-2942/2-A

Matrix: Solid

Analysis Batch: 2988

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte			Spike	LCS	LCS				%Rec.	
			Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride			250	237.5		mg/Kg		95	90 - 110	

Lab Sample ID: LCSD 880-2942/3-A

Matrix: Solid

Analysis Batch: 2988

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte			Spike	LCSD	LCSD				%Rec.		RPD
			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride			250	238.0		mg/Kg		95	90 - 110	0	20

Lab Sample ID: 890-653-6 MS

Matrix: Solid

Analysis Batch: 2988

Client Sample ID: AH-3 BT

Prep Type: Soluble

Analyte	Sample	Sample	Spike	MS	MS				%Rec.		
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	77.5		250	317.4		mg/Kg		96	90 - 110		

Lab Sample ID: 890-653-6 MSD

Matrix: Solid

Analysis Batch: 2988

Client Sample ID: AH-3 BT

Prep Type: Soluble

Analyte	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	77.5		250	307.6		mg/Kg		92	90 - 110	3	20

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QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Fed #1.

Job ID: 890-653-1
SDG: Eddy County NM

GC VOA

Analysis Batch: 2936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-653-4	AH-1 South	Total/NA	Solid	8021B	2955
890-653-5	AH-1 West	Total/NA	Solid	8021B	2955
890-653-6	AH-3 BT	Total/NA	Solid	8021B	2955
890-653-7	AH-3 North	Total/NA	Solid	8021B	2955
890-653-8	AH-3 East	Total/NA	Solid	8021B	2955
890-653-9	AH-3 South	Total/NA	Solid	8021B	2955
890-653-10	AH-3 West	Total/NA	Solid	8021B	2955
890-653-11	AH-2 BT	Total/NA	Solid	8021B	2955
890-653-12	AH-2 North	Total/NA	Solid	8021B	2955
890-653-13	AH-2 East	Total/NA	Solid	8021B	2955
890-653-14	AH-2 South	Total/NA	Solid	8021B	2955
890-653-15	AH-2 West	Total/NA	Solid	8021B	2955
MB 880-2940/5-A	Method Blank	Total/NA	Solid	8021B	2940
MB 880-2955/5-A	Method Blank	Total/NA	Solid	8021B	2955
LCS 880-2955/1-A	Lab Control Sample	Total/NA	Solid	8021B	2955
LCSD 880-2955/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	2955

Analysis Batch: 2938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-653-1	AH-1 BT	Total/NA	Solid	8021B	2967
890-653-2	AH-1 North	Total/NA	Solid	8021B	2967
890-653-3	AH-1 East	Total/NA	Solid	8021B	2967
MB 880-2967/5-A	Method Blank	Total/NA	Solid	8021B	2967
LCS 880-2967/1-A	Lab Control Sample	Total/NA	Solid	8021B	2967
LCSD 880-2967/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	2967

Prep Batch: 2940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-2940/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 2955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-653-4	AH-1 South	Total/NA	Solid	5035	
890-653-5	AH-1 West	Total/NA	Solid	5035	
890-653-6	AH-3 BT	Total/NA	Solid	5035	
890-653-7	AH-3 North	Total/NA	Solid	5035	
890-653-8	AH-3 East	Total/NA	Solid	5035	
890-653-9	AH-3 South	Total/NA	Solid	5035	
890-653-10	AH-3 West	Total/NA	Solid	5035	
890-653-11	AH-2 BT	Total/NA	Solid	5035	
890-653-12	AH-2 North	Total/NA	Solid	5035	
890-653-13	AH-2 East	Total/NA	Solid	5035	
890-653-14	AH-2 South	Total/NA	Solid	5035	
890-653-15	AH-2 West	Total/NA	Solid	5035	
MB 880-2955/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-2955/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-2955/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Prep Batch: 2967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-653-1	AH-1 BT	Total/NA	Solid	5035	

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QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Fed #1.

Job ID: 890-653-1
SDG: Eddy County NM

GC VOA (Continued)

Prep Batch: 2967 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-653-2	AH-1 North	Total/NA	Solid	5035	
890-653-3	AH-1 East	Total/NA	Solid	5035	
MB 880-2967/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-2967/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-2967/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

GC Semi VOA

Analysis Batch: 3004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-653-1	AH-1 BT	Total/NA	Solid	8015B NM	3008
890-653-2	AH-1 North	Total/NA	Solid	8015B NM	3008
890-653-3	AH-1 East	Total/NA	Solid	8015B NM	3008
890-653-4	AH-1 South	Total/NA	Solid	8015B NM	3008
890-653-5	AH-1 West	Total/NA	Solid	8015B NM	3008
890-653-6	AH-3 BT	Total/NA	Solid	8015B NM	3008
890-653-7	AH-3 North	Total/NA	Solid	8015B NM	3008
890-653-8	AH-3 East	Total/NA	Solid	8015B NM	3008
MB 880-3008/1-A	Method Blank	Total/NA	Solid	8015B NM	3008
LCS 880-3008/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	3008
LCSD 880-3008/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	3008
890-653-1 MS	AH-1 BT	Total/NA	Solid	8015B NM	3008
890-653-1 MSD	AH-1 BT	Total/NA	Solid	8015B NM	3008

Analysis Batch: 3006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-653-9	AH-3 South	Total/NA	Solid	8015B NM	3010
890-653-10	AH-3 West	Total/NA	Solid	8015B NM	3010
890-653-11	AH-2 BT	Total/NA	Solid	8015B NM	3010
890-653-12	AH-2 North	Total/NA	Solid	8015B NM	3010
890-653-13	AH-2 East	Total/NA	Solid	8015B NM	3010
890-653-14	AH-2 South	Total/NA	Solid	8015B NM	3010
890-653-15	AH-2 West	Total/NA	Solid	8015B NM	3010
MB 880-3010/1-A	Method Blank	Total/NA	Solid	8015B NM	3010
LCS 880-3010/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	3010
LCSD 880-3010/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	3010
890-653-9 MS	AH-3 South	Total/NA	Solid	8015B NM	3010
890-653-9 MSD	AH-3 South	Total/NA	Solid	8015B NM	3010

Prep Batch: 3008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-653-1	AH-1 BT	Total/NA	Solid	8015NM Prep	
890-653-2	AH-1 North	Total/NA	Solid	8015NM Prep	
890-653-3	AH-1 East	Total/NA	Solid	8015NM Prep	
890-653-4	AH-1 South	Total/NA	Solid	8015NM Prep	
890-653-5	AH-1 West	Total/NA	Solid	8015NM Prep	
890-653-6	AH-3 BT	Total/NA	Solid	8015NM Prep	
890-653-7	AH-3 North	Total/NA	Solid	8015NM Prep	
890-653-8	AH-3 East	Total/NA	Solid	8015NM Prep	
MB 880-3008/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-3008/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Fed #1.

Job ID: 890-653-1
SDG: Eddy County NM

GC Semi VOA (Continued)

Prep Batch: 3008 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-3008/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-653-1 MS	AH-1 BT	Total/NA	Solid	8015NM Prep	
890-653-1 MSD	AH-1 BT	Total/NA	Solid	8015NM Prep	

Prep Batch: 3010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-653-9	AH-3 South	Total/NA	Solid	8015NM Prep	
890-653-10	AH-3 West	Total/NA	Solid	8015NM Prep	
890-653-11	AH-2 BT	Total/NA	Solid	8015NM Prep	
890-653-12	AH-2 North	Total/NA	Solid	8015NM Prep	
890-653-13	AH-2 East	Total/NA	Solid	8015NM Prep	
890-653-14	AH-2 South	Total/NA	Solid	8015NM Prep	
890-653-15	AH-2 West	Total/NA	Solid	8015NM Prep	
MB 880-3010/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-3010/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-3010/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-653-9 MS	AH-3 South	Total/NA	Solid	8015NM Prep	
890-653-9 MSD	AH-3 South	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 2942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-653-1	AH-1 BT	Soluble	Solid	DI Leach	
890-653-2	AH-1 North	Soluble	Solid	DI Leach	
890-653-3	AH-1 East	Soluble	Solid	DI Leach	
890-653-4	AH-1 South	Soluble	Solid	DI Leach	
890-653-5	AH-1 West	Soluble	Solid	DI Leach	
890-653-6	AH-3 BT	Soluble	Solid	DI Leach	
890-653-7	AH-3 North	Soluble	Solid	DI Leach	
890-653-8	AH-3 East	Soluble	Solid	DI Leach	
890-653-9	AH-3 South	Soluble	Solid	DI Leach	
890-653-10	AH-3 West	Soluble	Solid	DI Leach	
890-653-11	AH-2 BT	Soluble	Solid	DI Leach	
890-653-12	AH-2 North	Soluble	Solid	DI Leach	
890-653-13	AH-2 East	Soluble	Solid	DI Leach	
890-653-14	AH-2 South	Soluble	Solid	DI Leach	
890-653-15	AH-2 West	Soluble	Solid	DI Leach	
MB 880-2942/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-2942/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-2942/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-653-6 MS	AH-3 BT	Soluble	Solid	DI Leach	
890-653-6 MSD	AH-3 BT	Soluble	Solid	DI Leach	

Analysis Batch: 2988

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-653-1	AH-1 BT	Soluble	Solid	300.0	2942
890-653-2	AH-1 North	Soluble	Solid	300.0	2942
890-653-3	AH-1 East	Soluble	Solid	300.0	2942
890-653-4	AH-1 South	Soluble	Solid	300.0	2942
890-653-5	AH-1 West	Soluble	Solid	300.0	2942

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QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Fed #1.

Job ID: 890-653-1
SDG: Eddy County NM

HPLC/IC (Continued)

Analysis Batch: 2988 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-653-6	AH-3 BT	Soluble	Solid	300.0	2942
890-653-7	AH-3 North	Soluble	Solid	300.0	2942
890-653-8	AH-3 East	Soluble	Solid	300.0	2942
890-653-9	AH-3 South	Soluble	Solid	300.0	2942
890-653-10	AH-3 West	Soluble	Solid	300.0	2942
890-653-11	AH-2 BT	Soluble	Solid	300.0	2942
890-653-12	AH-2 North	Soluble	Solid	300.0	2942
890-653-13	AH-2 East	Soluble	Solid	300.0	2942
890-653-14	AH-2 South	Soluble	Solid	300.0	2942
890-653-15	AH-2 West	Soluble	Solid	300.0	2942
MB 880-2942/1-A	Method Blank	Soluble	Solid	300.0	2942
LCS 880-2942/2-A	Lab Control Sample	Soluble	Solid	300.0	2942
LCSD 880-2942/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	2942
890-653-6 MS	AH-3 BT	Soluble	Solid	300.0	2942
890-653-6 MSD	AH-3 BT	Soluble	Solid	300.0	2942

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Fed #1.

Job ID: 890-653-1
SDG: Eddy County NM

Client Sample ID: AH-1 BT

Lab Sample ID: 890-653-1

Date Collected: 05/10/21 12:25

Matrix: Solid

Date Received: 05/11/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2967	05/11/21 14:20	MR	XM
Total/NA	Analysis	8021B		1	2938	05/11/21 23:35	KL	XM
Total/NA	Prep	8015NM Prep			3008	05/12/21 07:52	AM	XM
Total/NA	Analysis	8015B NM		1	3004	05/12/21 11:30	AJ	XM
Soluble	Leach	DI Leach			2942	05/11/21 09:31	CH	XM
Soluble	Analysis	300.0		1	2988	05/12/21 00:20	CH	XM

Client Sample ID: AH-1 North

Lab Sample ID: 890-653-2

Date Collected: 05/10/21 12:28

Matrix: Solid

Date Received: 05/11/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2967	05/11/21 14:20	MR	XM
Total/NA	Analysis	8021B		1	2938	05/12/21 00:01	KL	XM
Total/NA	Prep	8015NM Prep			3008	05/12/21 07:52	AM	XM
Total/NA	Analysis	8015B NM		1	3004	05/12/21 12:32	AJ	XM
Soluble	Leach	DI Leach			2942	05/11/21 09:31	CH	XM
Soluble	Analysis	300.0		1	2988	05/12/21 00:25	CH	XM

Client Sample ID: AH-1 East

Lab Sample ID: 890-653-3

Date Collected: 05/10/21 12:35

Matrix: Solid

Date Received: 05/11/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2967	05/11/21 14:20	MR	XM
Total/NA	Analysis	8021B		1	2938	05/12/21 00:27	KL	XM
Total/NA	Prep	8015NM Prep			3008	05/12/21 07:52	AM	XM
Total/NA	Analysis	8015B NM		1	3004	05/12/21 12:52	AJ	XM
Soluble	Leach	DI Leach			2942	05/11/21 09:31	CH	XM
Soluble	Analysis	300.0		1	2988	05/12/21 00:31	CH	XM

Client Sample ID: AH-1 South

Lab Sample ID: 890-653-4

Date Collected: 05/10/21 12:38

Matrix: Solid

Date Received: 05/11/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2955	05/11/21 14:30	KL	XM
Total/NA	Analysis	8021B		1	2936	05/12/21 02:17	MR	XM
Total/NA	Prep	8015NM Prep			3008	05/12/21 07:52	AM	XM
Total/NA	Analysis	8015B NM		1	3004	05/12/21 13:13	AJ	XM
Soluble	Leach	DI Leach			2942	05/11/21 09:31	CH	XM
Soluble	Analysis	300.0		1	2988	05/12/21 00:36	CH	XM

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Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Fed #1.

Job ID: 890-653-1
SDG: Eddy County NM

Client Sample ID: AH-1 West

Lab Sample ID: 890-653-5

Date Collected: 05/10/21 12:45

Matrix: Solid

Date Received: 05/11/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2955	05/11/21 14:30	KL	XM
Total/NA	Analysis	8021B		1	2936	05/12/21 02:37	MR	XM
Total/NA	Prep	8015NM Prep			3008	05/12/21 07:52	AM	XM
Total/NA	Analysis	8015B NM		1	3004	05/12/21 13:34	AJ	XM
Soluble	Leach	DI Leach			2942	05/11/21 09:31	CH	XM
Soluble	Analysis	300.0		1	2988	05/12/21 00:41	CH	XM

Client Sample ID: AH-3 BT

Lab Sample ID: 890-653-6

Date Collected: 05/10/21 12:55

Matrix: Solid

Date Received: 05/11/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2955	05/11/21 14:30	KL	XM
Total/NA	Analysis	8021B		1	2936	05/12/21 02:58	MR	XM
Total/NA	Prep	8015NM Prep			3008	05/12/21 07:52	AM	XM
Total/NA	Analysis	8015B NM		1	3004	05/12/21 13:54	AJ	XM
Soluble	Leach	DI Leach			2942	05/11/21 09:31	CH	XM
Soluble	Analysis	300.0		1	2988	05/12/21 00:47	CH	XM

Client Sample ID: AH-3 North

Lab Sample ID: 890-653-7

Date Collected: 05/10/21 12:58

Matrix: Solid

Date Received: 05/11/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2955	05/11/21 14:30	KL	XM
Total/NA	Analysis	8021B		1	2936	05/12/21 03:18	MR	XM
Total/NA	Prep	8015NM Prep			3008	05/12/21 07:52	AM	XM
Total/NA	Analysis	8015B NM		1	3004	05/12/21 14:15	AJ	XM
Soluble	Leach	DI Leach			2942	05/11/21 09:31	CH	XM
Soluble	Analysis	300.0		1	2988	05/12/21 01:03	CH	XM

Client Sample ID: AH-3 East

Lab Sample ID: 890-653-8

Date Collected: 05/10/21 13:05

Matrix: Solid

Date Received: 05/11/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2955	05/11/21 14:30	KL	XM
Total/NA	Analysis	8021B		1	2936	05/12/21 03:38	MR	XM
Total/NA	Prep	8015NM Prep			3008	05/12/21 07:52	AM	XM
Total/NA	Analysis	8015B NM		1	3004	05/12/21 14:35	AJ	XM
Soluble	Leach	DI Leach			2942	05/11/21 09:31	CH	XM
Soluble	Analysis	300.0		1	2988	05/12/21 01:08	CH	XM

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Fed #1.

Job ID: 890-653-1
SDG: Eddy County NM

Client Sample ID: AH-3 South

Lab Sample ID: 890-653-9

Date Collected: 05/10/21 13:08

Matrix: Solid

Date Received: 05/11/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2955	05/11/21 14:30	KL	XM
Total/NA	Analysis	8021B		1	2936	05/12/21 03:59	MR	XM
Total/NA	Prep	8015NM Prep			3010	05/12/21 08:24	DM	XM
Total/NA	Analysis	8015B NM		1	3006	05/12/21 11:30	AJ	XM
Soluble	Leach	DI Leach			2942	05/11/21 09:31	CH	XM
Soluble	Analysis	300.0		1	2988	05/12/21 01:24	CH	XM

Client Sample ID: AH-3 West

Lab Sample ID: 890-653-10

Date Collected: 05/10/21 13:10

Matrix: Solid

Date Received: 05/11/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2955	05/11/21 14:30	KL	XM
Total/NA	Analysis	8021B		1	2936	05/12/21 05:48	MR	XM
Total/NA	Prep	8015NM Prep			3010	05/12/21 08:24	DM	XM
Total/NA	Analysis	8015B NM		1	3006	05/12/21 12:32	AJ	XM
Soluble	Leach	DI Leach			2942	05/11/21 09:31	CH	XM
Soluble	Analysis	300.0		1	2988	05/12/21 01:30	CH	XM

Client Sample ID: AH-2 BT

Lab Sample ID: 890-653-11

Date Collected: 05/10/21 13:20

Matrix: Solid

Date Received: 05/11/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2955	05/11/21 14:30	KL	XM
Total/NA	Analysis	8021B		1	2936	05/12/21 06:09	MR	XM
Total/NA	Prep	8015NM Prep			3010	05/12/21 08:24	DM	XM
Total/NA	Analysis	8015B NM		1	3006	05/12/21 12:52	AJ	XM
Soluble	Leach	DI Leach			2942	05/11/21 09:31	CH	XM
Soluble	Analysis	300.0		1	2988	05/12/21 01:35	CH	XM

Client Sample ID: AH-2 North

Lab Sample ID: 890-653-12

Date Collected: 05/10/21 13:23

Matrix: Solid

Date Received: 05/11/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2955	05/11/21 14:30	KL	XM
Total/NA	Analysis	8021B		1	2936	05/12/21 06:29	MR	XM
Total/NA	Prep	8015NM Prep			3010	05/12/21 08:24	DM	XM
Total/NA	Analysis	8015B NM		1	3006	05/12/21 13:13	AJ	XM
Soluble	Leach	DI Leach			2942	05/11/21 09:31	CH	XM
Soluble	Analysis	300.0		1	2988	05/12/21 01:40	CH	XM

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Fed #1.

Job ID: 890-653-1
SDG: Eddy County NM

Client Sample ID: AH-2 East

Lab Sample ID: 890-653-13

Date Collected: 05/10/21 13:28

Matrix: Solid

Date Received: 05/11/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2955	05/11/21 14:30	KL	XM
Total/NA	Analysis	8021B		1	2936	05/12/21 06:50	MR	XM
Total/NA	Prep	8015NM Prep			3010	05/12/21 08:24	DM	XM
Total/NA	Analysis	8015B NM		1	3006	05/12/21 13:34	AJ	XM
Soluble	Leach	DI Leach			2942	05/11/21 09:31	CH	XM
Soluble	Analysis	300.0		1	2988	05/12/21 01:46	CH	XM

Client Sample ID: AH-2 South

Lab Sample ID: 890-653-14

Date Collected: 05/10/21 13:30

Matrix: Solid

Date Received: 05/11/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2955	05/11/21 14:30	KL	XM
Total/NA	Analysis	8021B		1	2936	05/12/21 07:10	MR	XM
Total/NA	Prep	8015NM Prep			3010	05/12/21 08:24	DM	XM
Total/NA	Analysis	8015B NM		1	3006	05/12/21 13:54	AJ	XM
Soluble	Leach	DI Leach			2942	05/11/21 09:31	CH	XM
Soluble	Analysis	300.0		1	2988	05/12/21 01:51	CH	XM

Client Sample ID: AH-2 West

Lab Sample ID: 890-653-15

Date Collected: 05/10/21 13:35

Matrix: Solid

Date Received: 05/11/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2955	05/11/21 14:30	KL	XM
Total/NA	Analysis	8021B		1	2936	05/12/21 07:30	MR	XM
Total/NA	Prep	8015NM Prep			3010	05/12/21 08:24	DM	XM
Total/NA	Analysis	8015B NM		1	3006	05/12/21 14:15	AJ	XM
Soluble	Leach	DI Leach			2942	05/11/21 09:31	CH	XM
Soluble	Analysis	300.0		1	2988	05/12/21 01:56	CH	XM

Laboratory References:

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

Eurofins Xenco, Carlsbad

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Fed #1.

Job ID: 890-653-1
SDG: Eddy County NM

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Fed #1.

Job ID: 890-653-1
SDG: Eddy County NM

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Fed #1.

Job ID: 890-653-1
SDG: Eddy County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
890-653-1	AH-1 BT	Solid	05/10/21 12:25	05/11/21 08:00	
890-653-2	AH-1 North	Solid	05/10/21 12:28	05/11/21 08:00	
890-653-3	AH-1 East	Solid	05/10/21 12:35	05/11/21 08:00	
890-653-4	AH-1 South	Solid	05/10/21 12:38	05/11/21 08:00	
890-653-5	AH-1 West	Solid	05/10/21 12:45	05/11/21 08:00	
890-653-6	AH-3 BT	Solid	05/10/21 12:55	05/11/21 08:00	
890-653-7	AH-3 North	Solid	05/10/21 12:58	05/11/21 08:00	
890-653-8	AH-3 East	Solid	05/10/21 13:05	05/11/21 08:00	
890-653-9	AH-3 South	Solid	05/10/21 13:08	05/11/21 08:00	
890-653-10	AH-3 West	Solid	05/10/21 13:10	05/11/21 08:00	
890-653-11	AH-2 BT	Solid	05/10/21 13:20	05/11/21 08:00	
890-653-12	AH-2 North	Solid	05/10/21 13:23	05/11/21 08:00	
890-653-13	AH-2 East	Solid	05/10/21 13:28	05/11/21 08:00	
890-653-14	AH-2 South	Solid	05/10/21 13:30	05/11/21 08:00	
890-653-15	AH-2 West	Solid	05/10/21 13:35	05/11/21 08:00	

Analysis Request of Custody Record

Tetra Tech, Inc.

501W Wolf Street, Ste 100
Midland, Texas 79705
Tel (432) 692-4559
Fax (432) 692-3046



890-653 Chain of Custody

Page 1 of 2

Client Name: EOG

Site Manager:

Project Name:

Adeline ALN Fed #1

Project Location:

Eddy County, New Mexico

Project #:

212C-MO-02419

Invoice to:

EOG ATTN: James Kennedy

Receiving Laboratory:

Xeneca Cambada

Sampler Signature:

Comments:

LAB # SAMPLE IDENTIFICATION

LAB #	SAMPLE IDENTIFICATION	SAMPLING		MATRIX	PRESERVATIVE METHOD	# CONTAINERS	FILTERED (Y/N)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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Relinquished by:

Date: 5-11-21

Time: 0800

Received by:

Date: 5-11-21

Time: 0800

Relinquished by:

Date: Time:

Received by:

Date: Time:

Sample Temperature

REMARKS:

☐ STANDARD

☒ Same Day (24 hr) 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-653-1

SDG Number: Eddy County NM

Login Number: 653

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
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	

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-653-1

SDG Number: Eddy County NM

Login Number: 653

List Number: 2

Creator: Copeland, Tatiana

List Source: Eurofins Midland

List Creation: 05/11/21 02:08 PM

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-2755-1

Laboratory Sample Delivery Group: Eddy Co, NM
Client Project/Site: Adeline ALN Federal #1

For:

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

Attn: Clair Gonzales

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

Authorized for release by:
6/8/2021 2:21:53 PM

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

LINKS

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results through

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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: Adeline ALN Federal #1

Laboratory Job ID: 880-2755-1
SDG: Eddy Co, NM

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Definitions/Glossary

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Federal #1

Job ID: 880-2755-1
SDG: Eddy Co, NM

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Federal #1

Job ID: 880-2755-1
SDG: Eddy Co, NM

Job ID: 880-2755-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative
880-2755-1

Receipt

The sample was received on 6/4/2021 4:39 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.1°C

GC VOA

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

GC Semi VOA

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: Adeline ALN Federal #1

Job ID: 880-2755-1
SDG: Eddy Co, NM

Client Sample ID: AH-3 East

Lab Sample ID: 880-2755-1

Date Collected: 06/04/21 00:00

Matrix: Solid

Date Received: 06/04/21 16:39

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		06/04/21 16:45	06/05/21 05:42	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/04/21 16:45	06/05/21 05:42	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/04/21 16:45	06/05/21 05:42	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/04/21 16:45	06/05/21 05:42	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/04/21 16:45	06/05/21 05:42	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/04/21 16:45	06/05/21 05:42	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		06/04/21 16:45	06/05/21 05:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	06/04/21 16:45	06/05/21 05:42	1
1,4-Difluorobenzene (Surr)	102		70 - 130	06/04/21 16:45	06/05/21 05:42	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	<50.0	U	50.0		mg/Kg		06/07/21 14:43	06/08/21 10:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/07/21 14:43	06/08/21 10:40	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/07/21 14:43	06/08/21 10:40	1
Total TPH	<50.0	U	50.0		mg/Kg		06/07/21 14:43	06/08/21 10:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	06/07/21 14:43	06/08/21 10:40	1
o-Terphenyl	100		70 - 130	06/07/21 14:43	06/08/21 10:40	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	54.3		5.02		mg/Kg			06/07/21 09:48	1

Eurofins Xenco, Midland

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Federal #1

Job ID: 880-2755-1
SDG: Eddy Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-2755-1	AH-3 East	118	102
LCS 880-3773/1-B	Lab Control Sample	110	98
LCSD 880-3773/2-B	Lab Control Sample Dup	110	97
MB 880-3773/5-B	Method Blank	110	93
MB 880-3785/5-A	Method Blank	112	94
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-2755-1	AH-3 East	102	100
LCS 880-3863/2-A	Lab Control Sample	97	87
LCSD 880-3863/3-A	Lab Control Sample Dup	99	92
MB 880-3863/1-A	Method Blank	120	116
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Federal #1

Job ID: 880-2755-1
SDG: Eddy Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-3773/5-B

Matrix: Solid

Analysis Batch: 3786

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3773

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/04/21 15:00	06/04/21 23:19	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/04/21 15:00	06/04/21 23:19	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/04/21 15:00	06/04/21 23:19	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/04/21 15:00	06/04/21 23:19	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/04/21 15:00	06/04/21 23:19	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/04/21 15:00	06/04/21 23:19	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/04/21 15:00	06/04/21 23:19	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	06/04/21 15:00	06/04/21 23:19	1
1,4-Difluorobenzene (Surr)	93		70 - 130	06/04/21 15:00	06/04/21 23:19	1

Lab Sample ID: LCS 880-3773/1-B

Matrix: Solid

Analysis Batch: 3786

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3773

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09156		mg/Kg		92	70 - 130
Toluene	0.100	0.1021		mg/Kg		102	70 - 130
Ethylbenzene	0.100	0.1030		mg/Kg		103	70 - 130
m-Xylene & p-Xylene	0.200	0.2105		mg/Kg		105	70 - 130
o-Xylene	0.100	0.1071		mg/Kg		107	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: LCSD 880-3773/2-B

Matrix: Solid

Analysis Batch: 3786

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3773

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09035		mg/Kg		90	70 - 130	1	35
Toluene	0.100	0.1011		mg/Kg		101	70 - 130	1	35
Ethylbenzene	0.100	0.1031		mg/Kg		103	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.2117		mg/Kg		106	70 - 130	1	35
o-Xylene	0.100	0.1087		mg/Kg		109	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: MB 880-3785/5-A

Matrix: Solid

Analysis Batch: 3786

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3785

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/04/21 08:28	06/04/21 11:43	1

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Federal #1

Job ID: 880-2755-1
SDG: Eddy Co, NM

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

Lab Sample ID: MB 880-3785/5-A

Matrix: Solid

Analysis Batch: 3786

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3785

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.00200	U	0.00200		mg/Kg		06/04/21 08:28	06/04/21 11:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/04/21 08:28	06/04/21 11:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/04/21 08:28	06/04/21 11:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/04/21 08:28	06/04/21 11:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/04/21 08:28	06/04/21 11:43	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/04/21 08:28	06/04/21 11:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	06/04/21 08:28	06/04/21 11:43	1
1,4-Difluorobenzene (Surr)	94		70 - 130	06/04/21 08:28	06/04/21 11:43	1

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

Lab Sample ID: MB 880-3863/1-A

Matrix: Solid

Analysis Batch: 3855

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3863

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/07/21 14:43	06/07/21 21:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/07/21 14:43	06/07/21 21:40	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/07/21 14:43	06/07/21 21:40	1
Total TPH	<50.0	U	50.0		mg/Kg		06/07/21 14:43	06/07/21 21:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130	06/07/21 14:43	06/07/21 21:40	1
o-Terphenyl	116		70 - 130	06/07/21 14:43	06/07/21 21:40	1

Lab Sample ID: LCS 880-3863/2-A

Matrix: Solid

Analysis Batch: 3855

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3863

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	809.9		mg/Kg		81	70 - 130
Diesel Range Organics (Over C10-C28)	1000	946.9		mg/Kg		95	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	87		70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Federal #1

Job ID: 880-2755-1
SDG: Eddy Co, NM

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

Lab Sample ID: LCSD 880-3863/3-A

Matrix: Solid

Analysis Batch: 3855

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3863

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	879.0		mg/Kg		88	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	1000	992.3		mg/Kg		99	70 - 130	5	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	99		70 - 130						
o-Terphenyl	92		70 - 130						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-3826/1-A

Matrix: Solid

Analysis Batch: 3828

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			06/07/21 08:43	1

Lab Sample ID: LCS 880-3826/2-A

Matrix: Solid

Analysis Batch: 3828

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	250	241.8		mg/Kg		97	90 - 110		

Lab Sample ID: LCSD 880-3826/3-A

Matrix: Solid

Analysis Batch: 3828

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	242.4		mg/Kg		97	90 - 110	0	20

Eurofins Xenco, Midland

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Federal #1

Job ID: 880-2755-1
SDG: Eddy Co, NM

GC VOA

Prep Batch: 3773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2755-1	AH-3 East	Total/NA	Solid	5035	
MB 880-3773/5-B	Method Blank	Total/NA	Solid	5035	
LCS 880-3773/1-B	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-3773/2-B	Lab Control Sample Dup	Total/NA	Solid	5035	

Prep Batch: 3785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-3785/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 3786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2755-1	AH-3 East	Total/NA	Solid	8021B	3773
MB 880-3773/5-B	Method Blank	Total/NA	Solid	8021B	3773
MB 880-3785/5-A	Method Blank	Total/NA	Solid	8021B	3785
LCS 880-3773/1-B	Lab Control Sample	Total/NA	Solid	8021B	3773
LCSD 880-3773/2-B	Lab Control Sample Dup	Total/NA	Solid	8021B	3773

GC Semi VOA

Analysis Batch: 3855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2755-1	AH-3 East	Total/NA	Solid	8015B NM	3863
MB 880-3863/1-A	Method Blank	Total/NA	Solid	8015B NM	3863
LCS 880-3863/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	3863
LCSD 880-3863/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	3863

Prep Batch: 3863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2755-1	AH-3 East	Total/NA	Solid	8015NM Prep	
MB 880-3863/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-3863/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-3863/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 3826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2755-1	AH-3 East	Soluble	Solid	DI Leach	
MB 880-3826/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-3826/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-3826/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 3828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2755-1	AH-3 East	Soluble	Solid	300.0	3826
MB 880-3826/1-A	Method Blank	Soluble	Solid	300.0	3826
LCS 880-3826/2-A	Lab Control Sample	Soluble	Solid	300.0	3826
LCSD 880-3826/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	3826

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Federal #1

Job ID: 880-2755-1
SDG: Eddy Co, NM

Client Sample ID: AH-3 East
Date Collected: 06/04/21 00:00
Date Received: 06/04/21 16:39

Lab Sample ID: 880-2755-1
Matrix: Solid

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	3773	06/04/21 16:45	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3786	06/05/21 05:42	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	3863	06/07/21 14:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3855	06/08/21 10:40	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	3826	06/07/21 08:00	CH	XEN MID
Soluble	Analysis	300.0		1			3828	06/07/21 09:48	CH	XEN MID

Laboratory References:
XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Federal #1

Job ID: 880-2755-1
SDG: Eddy Co, NM

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Federal #1

Job ID: 880-2755-1
SDG: Eddy Co, NM

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Eurofins Xenco, Midland

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Adeline ALN Federal #1

Job ID: 880-2755-1
SDG: Eddy Co, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
880-2755-1	AH-3 East	Solid	06/04/21 00:00	06/04/21 16:39	

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

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

000-2133 Chain of Custody



2
7
5
5

Page _____ of _____

6/8/2021

[illegible]

ORIGINAL COPY

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 880-2755-1

SDG Number: Eddy Co, NM

Login Number: 2755

List Number: 1

Creator: Teel, Brianna

List Source: Eurofins Xenco, Midland

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

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 55300

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 55300
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bbillings	None	11/1/2021