

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

Printed Name: _____ Title: _____

Signature: Todd Wells Date: _____

email: _____ Telephone: _____

OCD Only

Received by: Robert Hamlet Date: 3/2/2022

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

Closure Approved by: Robert Hamlet Date: 3/2/2022

Printed Name: Robert Hamlet Title: Environmental Specialist - Advanced

SITE INFORMATION

Report Type: Closure Report NAPP2106648279

Site:	Medano VA State #13					
Company:	EOG Resources					
Section, Township and Range	Unit K	Sec. 16	T 23S	R 31E		
Lease Number:						
County:	Eddy County					
GPS:	32.302939			-103.784454		
Surface Owner:	State					
Mineral Owner:						
Directions:	From the intersection of Twin Wells Rd and 128, follow 128 south for 0.95 miles. Turn left onto lease road, follow for 1.28 miles to location.					

Release Data:	
Date Released:	2/23/2021
Type Release:	Oil & Produced Water
Source of Contamination:	Flowline
Fluid Released:	5 bbl oil & 5 bbl water
Fluids Recovered:	3 bbl oil & 1 bbl water

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

Site Characterization	
Depth to Groundwater:	>55.0' below surface
Karst Potential:	Low

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



October 25, 2021

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

Re: Closure Report for the EOG Resources, Medano VA State #13, Unit K, Section 16, Township 23 South, Range 31 East, Eddy County, New Mexico. NAPP2106648279

Oil Conservation Division:

Tetra Tech, Inc. (Tetra Tech) was contacted by EOG Resources (EOG) to assess and remediate a release that occurred at the EOG Resources, Medano VA State #13, Unit K, Section 16, Township 23 South, Range 31 East, Eddy County, New Mexico (Site). The site coordinates are 32.302939°, -103.784454°. The site location is shown on Figures 1 and 2.

Background

According to the State of New Mexico C-141 Initial Report, the release was discovered on February 23, 2021, and released approximately 5 barrels of crude oil and 5 barrels of produced water due to a hole that developed in a poly line. Approximately 3 barrels of crude oil and 1 barrel of produced water were recovered. The release occurred on a pipeline ROW, impacting an area measuring approximately 146' X 9'. The C-141 form is included in Appendix A.

Site Characterization

A site characterization was performed for the site and no lakebeds, sinkholes, playa lakes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the specified distances. Additionally, the site is located in a low karst potential area. The nearest well is listed on the USGS National Water Information System is in section 17 approximately 1.29 miles from the site, and has a reported depth to groundwater of 128.64' below surface. Site characterization information is found in Appendix B.

Depth to Water Determination

On December 28, 2020, Scarborough Drilling, Inc was onsite to drill a groundwater determination borehole to 55' below ground surface and within a ½ mile radius of the location. The borehole was left open for 72 hours and checked for the presence of groundwater. No

Tetra Tech

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

Tel 432.682.4559 Fax 432.682.3946 www.tetrattech.com



TETRA TECH

water was detected in the borehole at 55' below surface. The borehole coordinates are 32.301536, -103.779162. The driller log and borehole figure is shown in Appendix B.

Regulatory

A risk-based evaluation was performed for the site following the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills, and Releases, updated August 14, 2018. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene, and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the site characterization, beyond the top 4.0' of soil, the proposed RRAL for TPH is 2,500 mg/kg (GRO + DRO + ORO) and 1,000 mg/kg (GRO + DRO). Additionally, based on the site characterization, beyond the top 4.0' of soil, the proposed RRAL for chlorides is 10,000 mg/kg.

Soil Assessment and Analytical Results

On February 24, 2021, Tetra Tech personnel were onsite to evaluate and sample the release area. A total of five (5) auger holes (AH-1 through AH-5) were installed in the release footprint with depths ranging from surface to 5.0' below surface. Selected samples were submitted to the laboratory for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B, and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The results of the sampling are summarized in Table 1. The sample locations are shown in Figure 3.

Referring to Table 1, none of the samples reported benzene or total BTEX concentrations above the RRALs. However, the areas of auger holes (AH-1 through AH-3, and AH-5) reported TPH concentrations above the RRALs at surface depths, with concentrations ranging from 131 mg/kg to 2,120 mg/kg. The areas of auger holes (AH-1, and AH-3 through AH-5) reported chloride concentrations above the RRALs, with concentrations ranging from 1,350 mg/kg to 16,700 mg/kg, at depths ranging from surface to 5.0' below surface.

Remediation and Reclamation Activities

Initial Remediation Activities

Tetra Tech personnel were onsite May 10, 2021 through June 3, 2021, to supervise the remediation and collect confirmation samples. The impacted areas were excavated to depths ranging from 1.5' below surface and 4.5' below surface, as shown on Figure 4 and Table 2.

Confirmation bottom hole and sidewall samples were collected every 200 square feet, a total of nine (9) bottom hole samples (BH-1 through BH-9) and sixteen (16) sidewall samples (SW-1 through SW-16) were collected to ensure proper removal of the impacted soils. The samples were submitted to the laboratory to be analyzed for TPH method 8015 modified, BTEX method 8021B, and Chloride by EPA Method 300.0. The sampling results are summarized in Table 2. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The excavation depths, and sample locations are shown in Figure 4.



Referring to Table 2, all final confirmation samples collected, with the exception of SW-9, showed benzene, total BTEX, TPH, and chloride concentrations below the RRALs.

Additional Sampling Activities

The confirmation sidewall (SW-9) sample showed a chloride concentration slightly above the 600 mg/kg threshold, at 4.5' below surface, with a concentration of 692 mg/kg. Tetra Tech returned to the site on August 19, 2021 to reassess the area of SW-9 by installing a 5-point composite sample at 4.5' below surface. The sample was submitted to the laboratory to be analyzed for TPH method 8015 modified, BTEX method 8021B, and Chloride by EPA Method 300.0. The sampling results are summarized in Table 2. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The sample locations are shown in Figure 4.

Referring to Table 2, the 5-point composite sample (SW-9) collected, showed benzene, total BTEX, TPH, and chloride concentrations below the RRALs.

Approximately 215 cubic yards of material was excavated and transported offsite for proper disposal. The areas were then backfilled with clean material to surface grade.

Conclusion

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

Respectfully submitted,
TETRA TECH

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

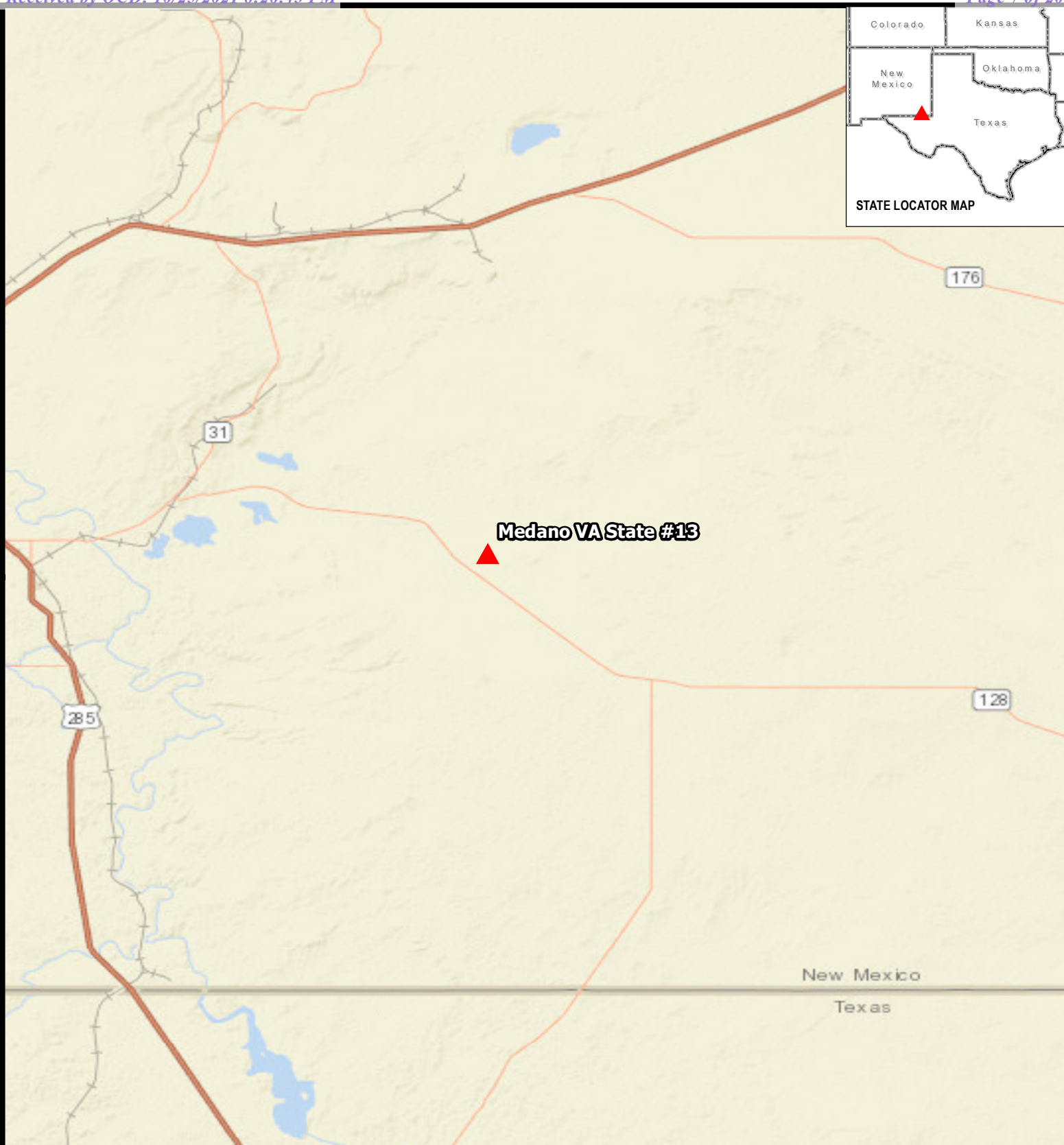
Brittany Long,
Project Manager

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

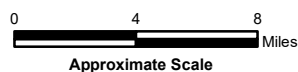
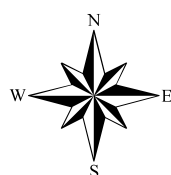
Clair Gonzales, P.G.
Senior Project Manager



Figures



▲ SITE LOCATION



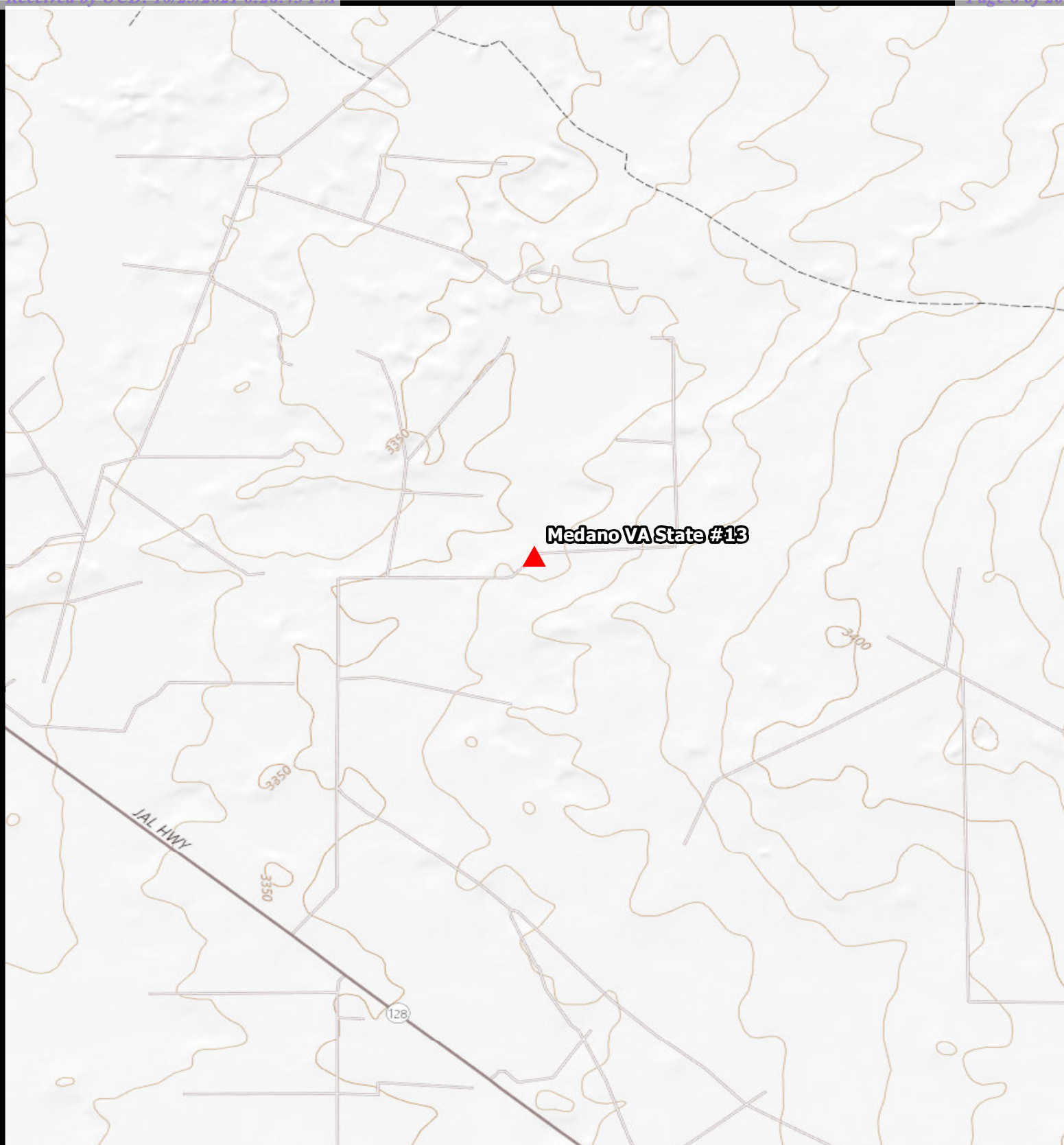
Service Layer Credits: ESRI Basemap - Streets, 2021.

OVERVIEW MAP
MEDANO VA STATE #13
Property located at coordinates 32.30269°, -103.7845598°
EDDY COUNTY, NEW MEXICO

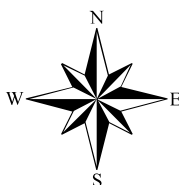


Project #:
212C-MD-02456

FIGURE
1



▲ SITE LOCATION



0 500 1,000 2,000

Approximate Scale in Feet

TOPOGRAPHIC MAP
MEDANO VA STATE #13
Property located at coordinates 32.30269°, -103.7845598°
EDDY COUNTY, NEW MEXICO

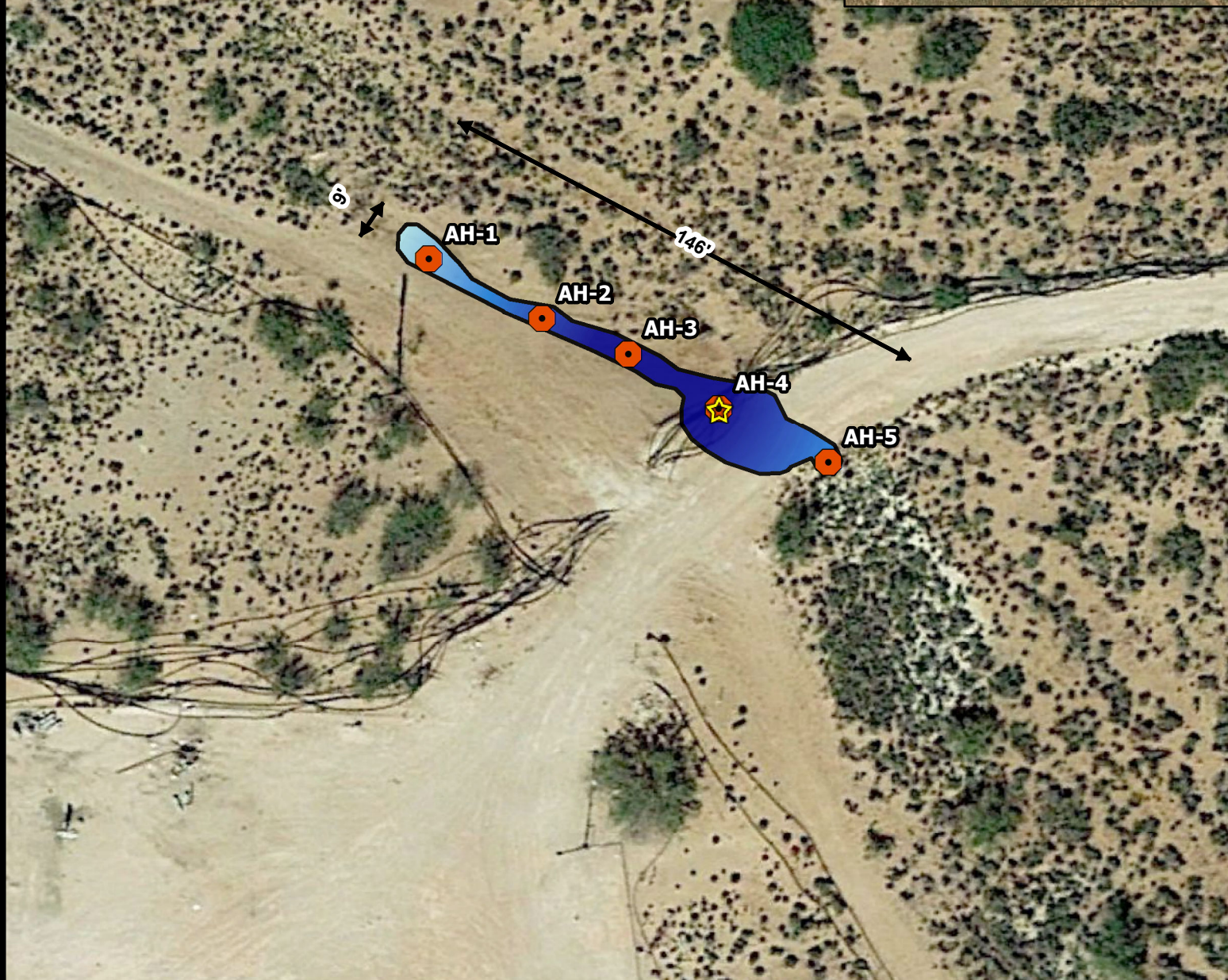
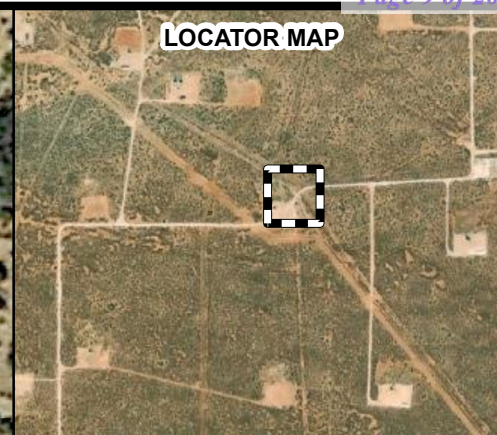


Project #:
212C-MD-02456

FIGURE
2

Service Layer Credits: USGS, The National Map,
Topo Base, 2021.

SAMPLE DESIGNATION	LATITUDE	LONGITUDE
AH-1	32.3030688°	-103.784716435°
AH-2	32.303015311°	-103.784614548°
AH-3	32.302983499°	-103.78453676°
AH-4	32.302934626°	-103.784455266°
AH-5	32.30288585°	-103.78435672°



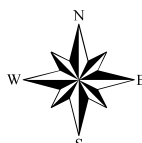
RELEASE POINT



AUGERHOLE SAMPLE LOCATIONS



AFFECTED AREA



0 15 30 60
Approximate Scale in Feet

Service Layer Credits: Google Maps.
ESRI Basemap - Imagery 2020.

SPILL ASSESSMENT MAP

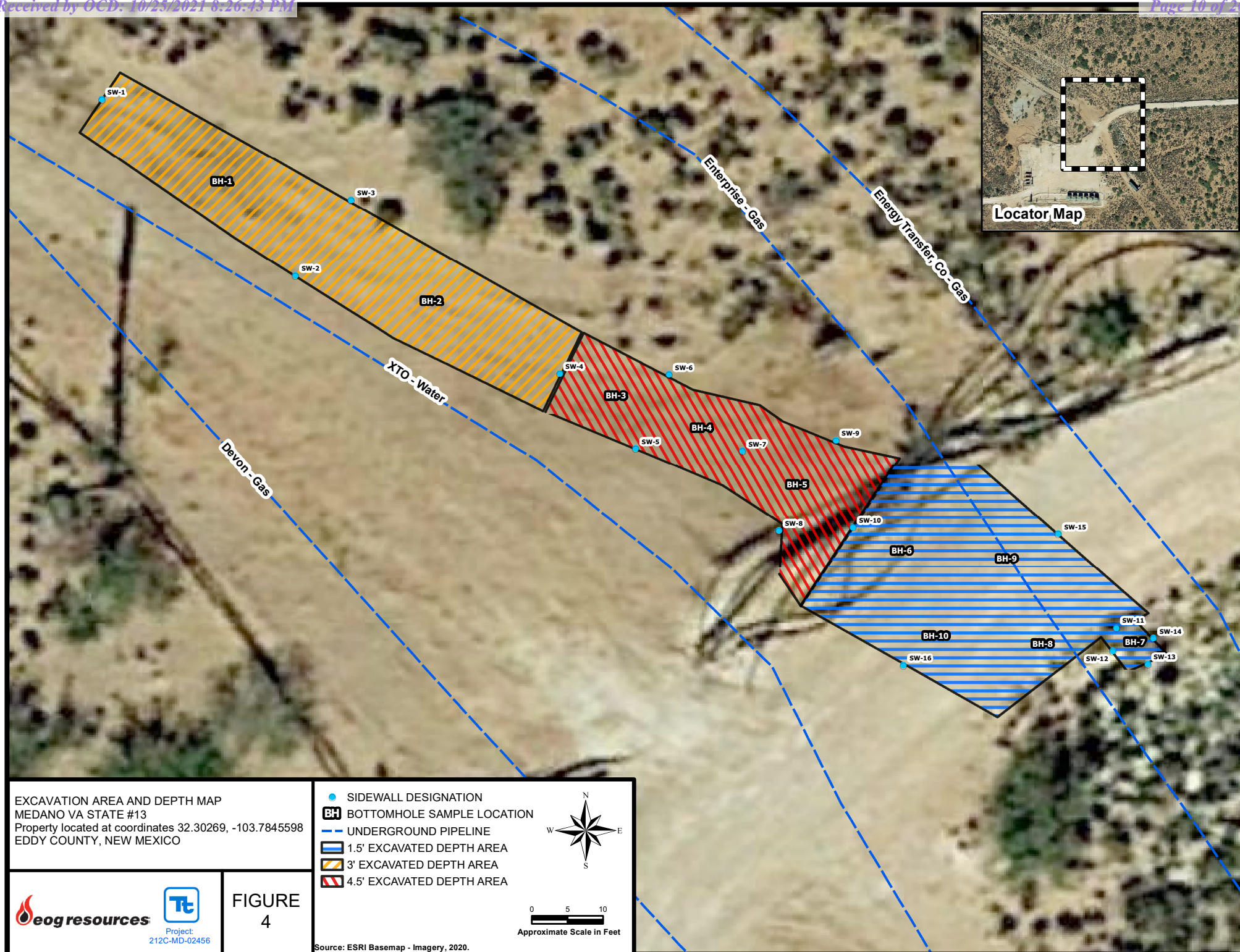
MEDANO VA STATE #13

Property located at coordinates 32.30269°, -103.7845598°
EDDY COUNTY, NEW MEXICO



Project #:
212C-MD-02456

FIGURE
3





Tables

Table 1
EOG
Medano VA State #13
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	2/24/2021	0-1		X	<250	1,830	290	2,120	<0.00198	0.0202	0.00949	0.0384	0.0681	16,700
	"	1.5-2		X	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	2,490
	"	2.5-3	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	44.1
	"	3.5-4	X		<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	117
AH-2	2/24/2021	0-1		X	<49.8	131	<49.8	131	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	136
	"	1.5-2	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	57.3
	"	2.5-3	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	38.6
	"	3.5-4	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	41.6
AH-3	2/24/2021	0-1		X	<50.0	1,420	174	1,590	<0.00199	0.00308	<0.00199	<0.00199	0.00308	2,510
	"	1.5-2		X	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	1,350
	"	2.5-3		X	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	2,830
	"	3.5-4		X	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	5,830
	"	4.5-5			<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	4,480
AH-4	2/24/2021	0-1		X	<49.9	83.9	<49.9	83.9	<0.00201	<0.00201	0.00227	0.00703	0.00930	4,520
	"	1.5-2	X		<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	246
	"	2.5-3	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	492
	"	3.5-4	X		<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	588
	"	4.5-5	X		<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	945
AH-5	2/24/2021	0-1		X	<49.8	1,440	175	1,620	<0.00202	0.00453	0.00653	0.0259	0.0369	8,040
	"	1-1.5	X		<50.0	55.1	<50.0	55.1	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	500

(-)



Not Analyzed
Remediated

Table 2
EOG
Medano VA State #13
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						
BH-1	5/13/2021	1.5	-	X	<49.9	332	71	403	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	702
	6/2/2021	3.0	X	-	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	309
BH-2	5/13/2021	1.5	-	X	<49.8	67.5	<49.8	67.5	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	2,400
	6/2/2021	3.0	X	-	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	438
BH-3	5/13/2021	4.5	X	-	<49.8	61.9	<49.8	61.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	3,650
BH-4	5/13/2021	4.5	X	-	<49.9	121	<49.9	121	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,430
BH-5	5/13/2021	1.5	-	X	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	2,770
	6/3/2021	4.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	1,050
BH-6	5/13/2021	1.5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	482
BH-7	5/13/2021	1.5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	461
BH-8	5/13/2021	1.5	-	X	<49.9	110	<49.9	110	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	462
	6/2/2021	1.5	X	-	<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	154
BH-9	6/2/2021	1.5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	180
SW-1	5/13/2021	1.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	152
SW-2	5/13/2021	1.5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	153
SW-3	5/13/2021	1.5	X	-	<50.0	<50.0	<50.0	<50.0	0.0184	0.00887	0.179	0.306	0.512	181
SW-4	5/13/2021	4.5	X	-	<50.0	76	<50.0	76	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	158
SW-5	5/13/2021	4.5	X	-	<49.9	106	<49.9	106	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	155
SW-6	5/13/2021	4.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	157
SW-7	5/13/2021	4.5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	173
SW-8	5/13/2021	1.5	-	X	<50.0	118	<50.0	118	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	382
	6/3/2021	4.5	X	-	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	398

Table 2
EOG
Medano VA State #13
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						
SW-9	5/13/2021	1.5	-	X	<49.8	220	50.3	270	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	415
	6/3/2021	4.5	X	-	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	692
	8/19/2021	4.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	37.2
SW-10	5/13/2021	1.5	-	X	<49.9	138	<49.9	138	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	496
	6/2/2021	1.5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	401
SW-11	5/13/2021	1.5	-	X	<49.9	157	<49.9	157	0.0185	0.0647	0.0174	0.319	0.42	708
	6/3/2021	1.5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	174
SW-12	5/13/2021	1.5	-	X	<49.9	195	57.1	252	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	2,110
	6/3/2021	1.5	X	-	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	224
SW-13	5/13/2021	1.5	-	X	<50.0	357	92	449	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	2,210
	6/3/2021	1.5	X	-	<50.0	61.9	<50.0	61.9	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	221
SW-14	5/13/2021	1.5	-	X	<49.9	283	<49.9	283	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	1,510
	6/3/2021	1.5	X	-	<49.7	<49.7	<49.7	<49.7	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	230
SW-15	6/2/2021	1.5	X	-	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	166
SW-16	6/2/2021	1.5	X	-	<49.7	<49.7	<49.7	<49.7	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	227

(-)

Not Analyzed

Remediated



Photographic Documentation

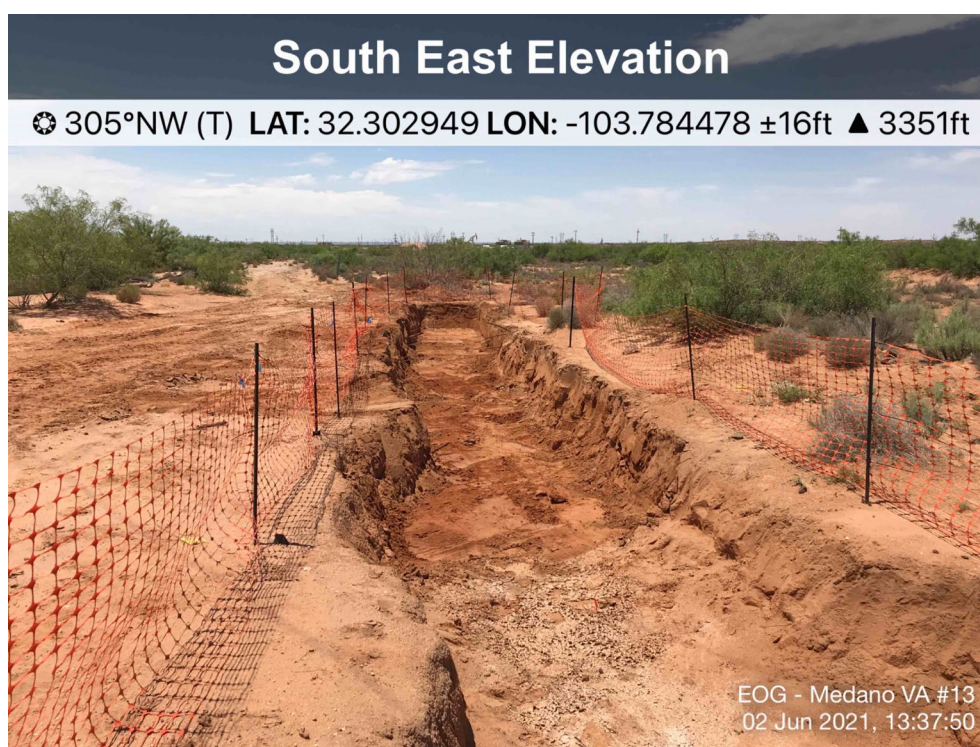
EOG Resources
Medano VA State #13
Eddy County, New Mexico



TETRA TECH



View of Remediation Activities – View Northwest



View of Remediation Activities – View Northwest

EOG Resources
Medano VA State #13
Eddy County, New Mexico



TETRA TECH



View of Remediation Activities – View West



View of Remediation Activities – View Southeast



Appendix A

C-141 Document

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

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

Incident ID	NAPP2106648279
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

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

Location of Release Source

Latitude 32.302939° Longitude -103.784454°
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Medano VA State #13	Site Type Flow Line
Date Release Discovered 2/23/21	API# (if applicable) 30-015-33239

Unit Letter	Section	Township	Range	County
K	16	23S	31E	Eddy

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

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls) 5	Volume Recovered (bbls) 3
☒ Produced Water	Volume Released (bbls) 5	Volume Recovered (bbls) 1
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☒ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: The LO arrived on location and discovered a hole that developed in the poly flow line. Approximately 10 bbls of produced water and oil was released from the flow line and 4 bbls recovered.

Incident ID	
District RP	
Facility ID	
Application ID	

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

Initial Response

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

☒ The source of the release has been stopped. ☒ The impacted area has been secured to protect human health and the environment. ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. ☒ All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> been undertaken, explain why:
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. Printed Name: <u>Todd Wells</u> Title: <u>Environmental Specialist</u> Signature: <u>Todd Wells</u> Date: <u>3-7-21</u> email: <u>Todd_Wells@eogresources.com</u> Telephone: <u>(432) 686-3613</u>
<u>OCD Only</u> Received by: _____ Date: _____

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.

Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature: Todd Wells Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

Printed Name: _____ Title: _____

Signature: Todd Wells Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

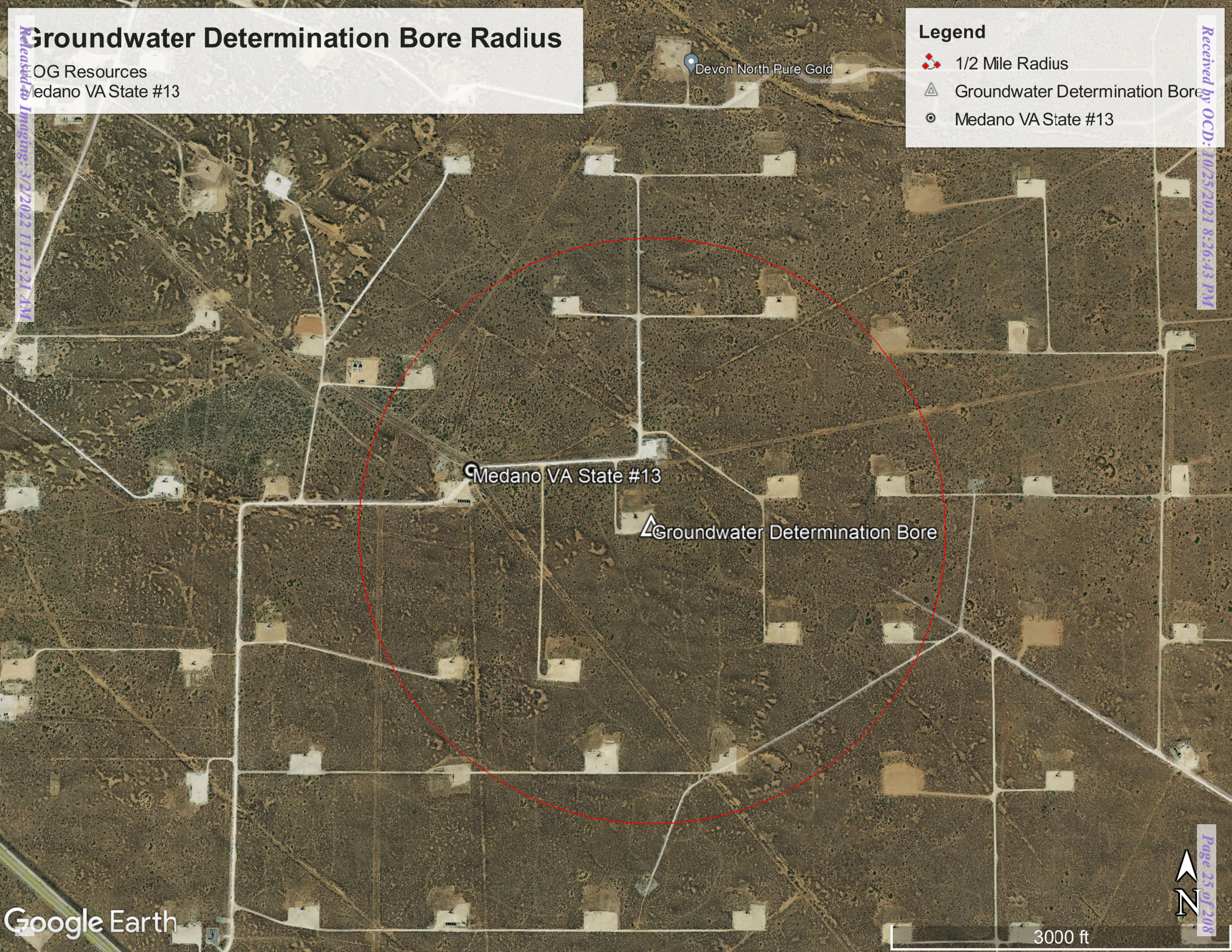


Appendix B

Site Characterization Documents

Legend

- 1/2 Mile Radius
- Groundwater Determination Bore
- Medano VA State #13



TEST HOLES • WATER WELLS

WELL LOG

From	To	FORMATION
0	11	Top Soil
11	22	Caliche
22	55	Red Shale
		Red Clay
		BH-1
		EOG-Medano-VA#10
		Plugged w/ Hole Plug
		32,301536,-103,779162

Date 12-28-2020 Driller

La Searcy

GIBBS PRINTING CO.-LAMESA, TX



USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category:
Groundwater

Geographic Area:
New Mexico

GO

Click to hideNews Bulletins

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

Groundwater levels for New Mexico

Click to hide state-specific text

Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 321809103481801

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

USGS 321809103481801 23S.31E.17.31141

Eddy County, New Mexico
Latitude 32°18'11.3", Longitude 103°48'23.4" NAD83
Land-surface elevation 3,326.00 feet above NGVD29
The depth of the well is 354 feet below land surface.
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1959-02-04			D 110.84			2	P	U			U A
1987-10-15			D 111.20			2		U			U A
1992-11-04			D 109.68			2		S			U A
2013-01-16	16:30 MST	m	128.64			2	R	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
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Status	P	Site was being pumped.
Status	R	Site had been pumped recently.
Method of measurement	S	Steel-tape measurement.
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Measuring agency	USGS	U.S. Geological Survey
Source of measurement	S	Measured by personnel of reporting agency.
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.

- [Questions about sites/data?](#)
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[Automated retrievals](#)
[Help](#)

[Data Tips](#)
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[Subscribe for system changes](#)
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[Accessibility](#) [FOIA](#) [Privacy](#) [Policies and Notices](#)

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

Title: Groundwater for New Mexico: Water Levels

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

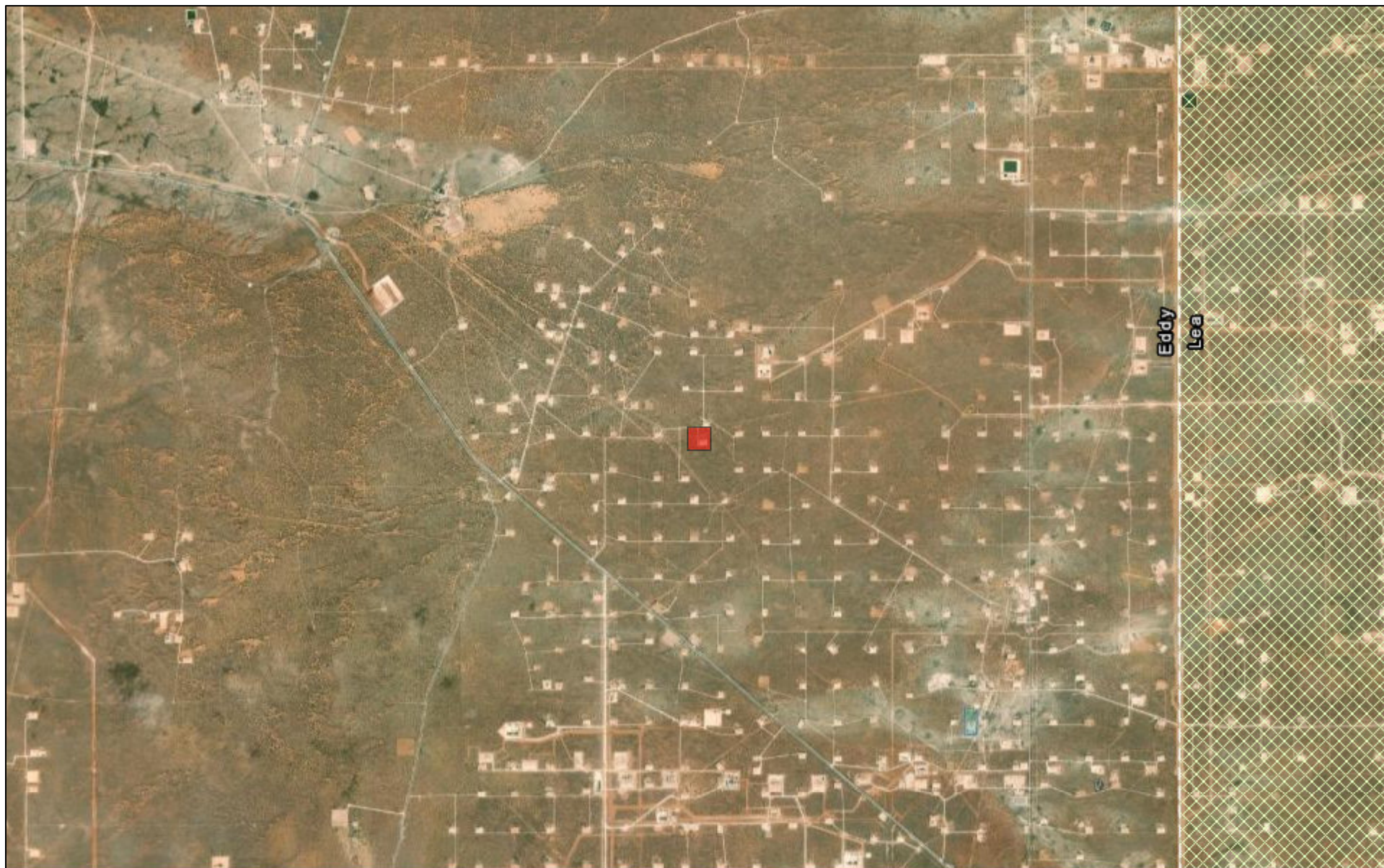


Page Contact Information: [New Mexico Water Data Maintainer](#)

Page Last Modified: 2020-10-20 22:51:03 EDT

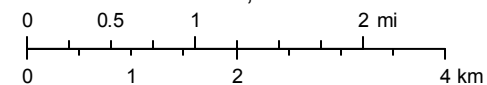
0.28 0.25 nadww01

New Mexico NFHL Data



March 2, 2021

1:72,224



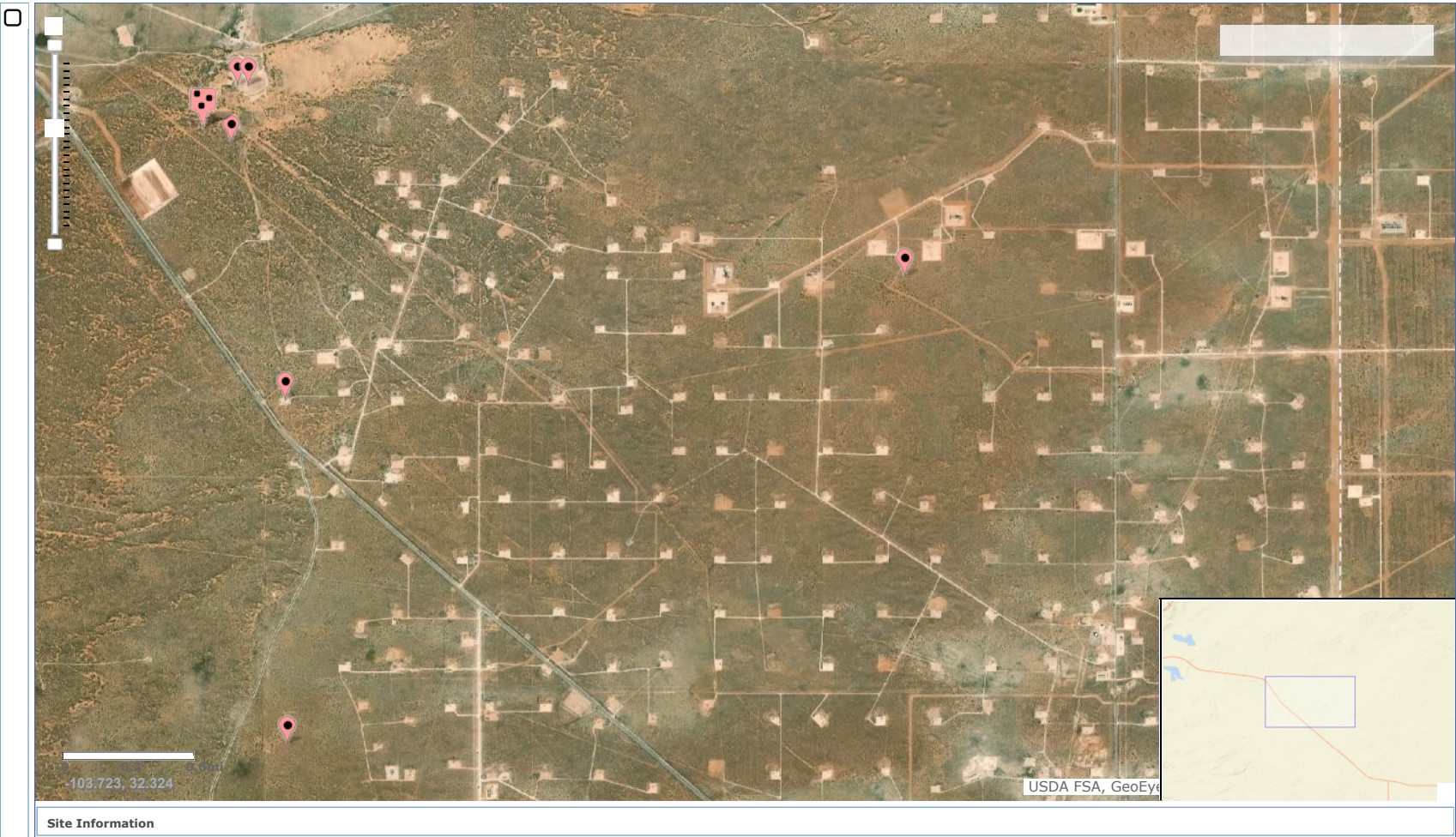
Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



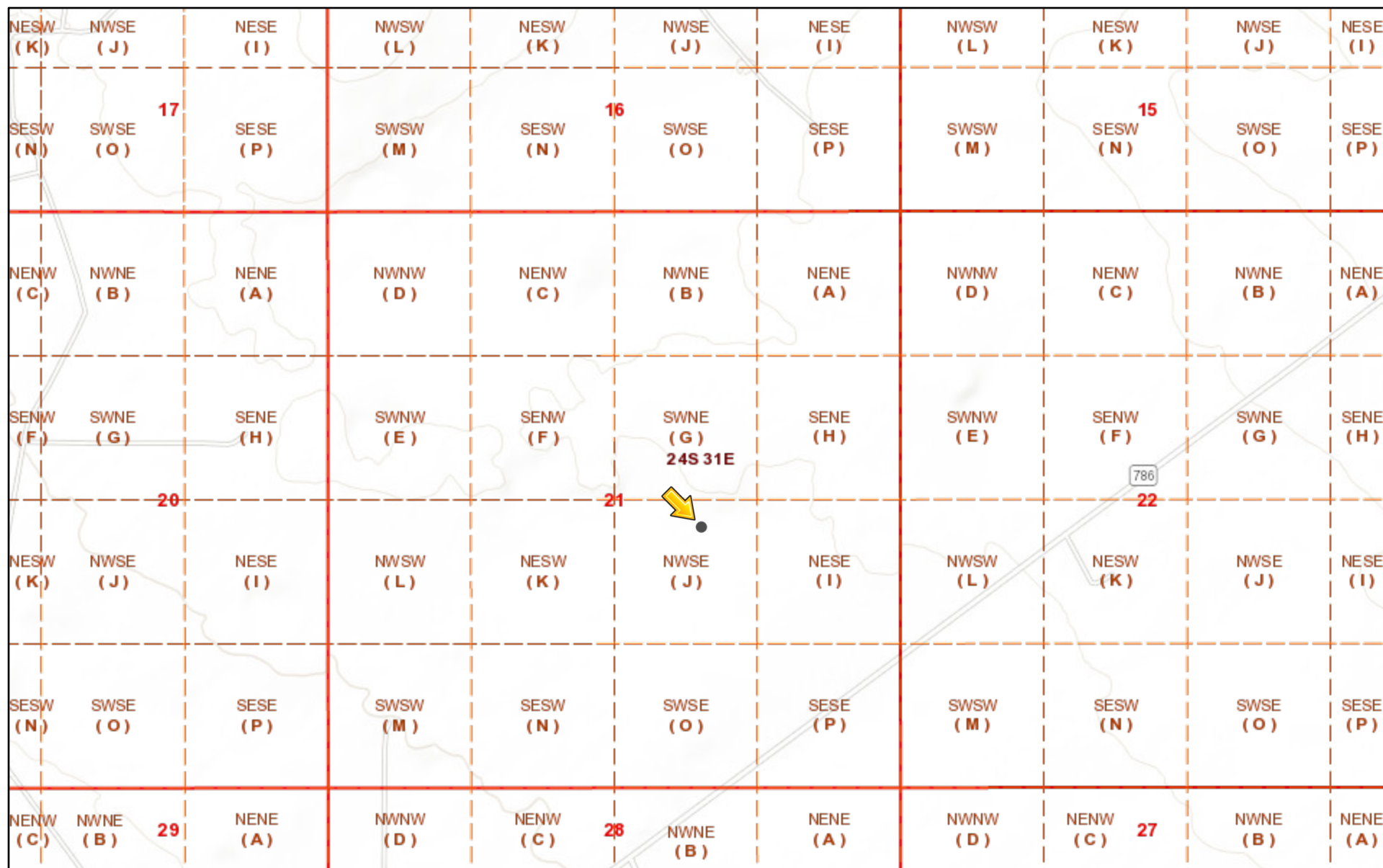
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National Water Information System: Mapper

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Medano VA State #13



3/2/2021, 1:42:58 PM



Override 1



PLSS Second Division



PLJV Probable Playas



OCD District Offices



PLSS Townships



OSE Streams

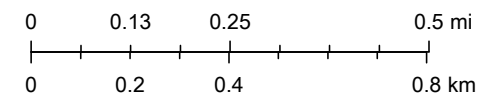


PLSS First Division



OSE Water-bodies

1:18,056



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

New Mexico Oil Conservation Division

NM OCD Oil and Gas Map. <http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=4d017f2306164de29fd2fb9f8f35ca75>: New Mexico Oil Conservation Division

Karst Potential

Medano VA State #13

Legend

-  High
-  Low
-  Medano VA State #13
-  Medium
-  Waste Isolation Pilot Plant

 Medano VA State #13





Appendix C

Laboratory Reports

Certificate of Analysis Summary 689233



Tetra Tech- Midland, Midland, TX

Project Name: Medano VA State #13

Project Id:

Date Received in Lab: Thu 02.25.2021 09:35

Contact: Clair Gonzales

Report Date: 03.01.2021 15:52

Project Location: Eddy County, New Mexico

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	689233-001	689233-002	689233-003	689233-004	689233-005	689233-006
	<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>	02.24.2021 00:00	02.24.2021 00:00	02.24.2021 00:00	02.24.2021 00:00	02.24.2021 00:00	02.24.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	02.26.2021 14:00	02.26.2021 14:00	02.26.2021 14:00	02.26.2021 14:00	02.27.2021 17:00	02.27.2021 17:00
	<i>Analyzed:</i>	02.27.2021 10:23	02.27.2021 10:43	02.27.2021 11:04	02.27.2021 11:25	02.28.2021 06:06	02.28.2021 06:26
	<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	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Toluene		0.0202 0.00198	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Ethylbenzene		0.00949 0.00198	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
m,p-Xylenes		0.0243 0.00396	<0.00404 0.00404	<0.00401 0.00401	<0.00398 0.00398	<0.00399 0.00399	<0.00398 0.00398
o-Xylene		0.0141 0.00198	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Total Xylenes		0.0384 0.00198	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Total BTEX		0.0681 0.00198	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	02.25.2021 19:35	02.25.2021 19:35	02.25.2021 19:35	02.25.2021 19:35	02.25.2021 19:35	02.25.2021 19:35
	<i>Analyzed:</i>	02.26.2021 07:28	02.26.2021 07:33	02.26.2021 07:38	02.26.2021 07:44	02.26.2021 08:00	02.26.2021 08:05
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		16700 249	2490 24.8	44.1 4.95	117 4.95	136 4.99	57.3 5.03
TPH By SW8015 Mod	<i>Extracted:</i>	02.26.2021 16:00	02.26.2021 16:00	02.26.2021 16:00	02.26.2021 16:00	02.26.2021 16:00	02.26.2021 16:00
	<i>Analyzed:</i>	02.27.2021 05:02	02.26.2021 21:14	02.26.2021 22:18	02.26.2021 22:39	02.26.2021 23:00	02.26.2021 23:22
	<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)		<250 250	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Diesel Range Organics (DRO)		1830 250	<49.9 49.9	<50.0 50.0	<49.9 49.9	131 49.8	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		290 250	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Total TPH		2120 250	<49.9 49.9	<50.0 50.0	<49.9 49.9	131 49.8	<50.0 50.0

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 689233



Tetra Tech- Midland, Midland, TX

Project Name: Medano VA State #13

Project Id:

Date Received in Lab: Thu 02.25.2021 09:35

Contact: Clair Gonzales

Report Date: 03.01.2021 15:52

Project Location: Eddy County, New Mexico

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	689233-007	689233-008	689233-009	689233-010	689233-011	689233-012
	<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 (3.5'-4')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	02.24.2021 00:00	02.24.2021 00:00	02.24.2021 00:00	02.24.2021 00:00	02.24.2021 00:00	02.24.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	02.27.2021 17:00	02.27.2021 17:00	02.27.2021 17:00	02.27.2021 17:00	02.27.2021 17:00	02.27.2021 17:00
	<i>Analyzed:</i>	02.28.2021 06:47	02.28.2021 07:07	02.28.2021 07:28	02.28.2021 07:48	02.28.2021 08:09	02.28.2021 08:29
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00199 0.00199	<0.00200 0.00200	0.00308 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00398 0.00398	<0.00400 0.00400	<0.00398 0.00398	<0.00403 0.00403	<0.00401 0.00401	<0.00399 0.00399
o-Xylene		<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00199 0.00199	<0.00200 0.00200	0.00308 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	02.25.2021 19:35	02.25.2021 19:35	02.25.2021 19:35	02.25.2021 19:35	02.25.2021 19:35	02.25.2021 19:35
	<i>Analyzed:</i>	02.26.2021 08:21	02.26.2021 08:26	02.26.2021 08:32	02.26.2021 08:37	02.26.2021 08:42	02.26.2021 08:48
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		38.6 4.97	41.6 4.95	2510 24.9	1350 5.00	2830 25.0	5830 50.0
TPH By SW8015 Mod	<i>Extracted:</i>	02.26.2021 16:00	02.26.2021 16:00	02.26.2021 16:00	02.26.2021 16:00	02.26.2021 16:00	02.26.2021 16:00
	<i>Analyzed:</i>	02.26.2021 23:43	02.27.2021 00:04	02.27.2021 04:19	02.27.2021 00:26	02.27.2021 00:47	02.27.2021 01:08
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0	<49.9 49.9	1420 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	174 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Total TPH		<50.0 50.0	<49.9 49.9	1590 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 689233



Tetra Tech- Midland, Midland, TX

Project Name: Medano VA State #13

Project Id:

Date Received in Lab: Thu 02.25.2021 09:35

Contact: Clair Gonzales

Report Date: 03.01.2021 15:52

Project Location: Eddy County, New Mexico

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	689233-013	689233-014	689233-015	689233-016	689233-017	689233-018
	<i>Field Id:</i>	AH-3(4.5'-5')	AH-4 (0'-1')	AH-4 (1.5-2')	AH-4 (2.5'-3')	AH-4 (3.5'-4')	AH-4 (4.5'-5')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	02.24.2021 00:00	02.24.2021 00:00	02.24.2021 00:00	02.24.2021 00:00	02.24.2021 00:00	02.24.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	02.27.2021 17:00	02.27.2021 17:00	02.27.2021 17:00	02.27.2021 17:00	02.27.2021 17:00	02.27.2021 17:00
	<i>Analyzed:</i>	02.28.2021 08:50	02.28.2021 10:34	02.28.2021 10:55	02.28.2021 11:15	02.28.2021 11:35	02.28.2021 11:56
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199
Toluene		<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199
Ethylbenzene		<0.00200 0.00200	0.00227 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199
m,p-Xylenes		<0.00400 0.00400	0.00410 0.00402	<0.00398 0.00398	<0.00400 0.00400	<0.00396 0.00396	<0.00398 0.00398
o-Xylene		<0.00200 0.00200	0.00293 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199
Total Xylenes		<0.00200 0.00200	0.00703 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199
Total BTEX		<0.00200 0.00200	0.00930 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	02.25.2021 19:35	02.25.2021 20:15	02.25.2021 20:15	02.25.2021 20:15	02.25.2021 20:15	02.25.2021 20:15
	<i>Analyzed:</i>	02.26.2021 08:53	03.01.2021 04:33	03.01.2021 04:49	03.01.2021 04:54	03.01.2021 04:59	03.01.2021 05:04
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		4480 25.2	4520 25.3	246 4.98	492 4.97	588 5.02	945 4.99
TPH By SW8015 Mod	<i>Extracted:</i>	02.26.2021 16:00	02.26.2021 16:00	02.26.2021 16:00	02.26.2021 16:00	02.26.2021 16:00	02.26.2021 16:00
	<i>Analyzed:</i>	02.27.2021 01:51	02.27.2021 02:12	02.27.2021 02:33	02.27.2021 02:54	02.27.2021 03:15	02.27.2021 03:37
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<50.0 50.0	83.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9
Total TPH		<50.0 50.0	83.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 689233

Tetra Tech- Midland, Midland, TX

Project Name: Medano VA State #13

Project Id:

Date Received in Lab: Thu 02.25.2021 09:35

Contact: Clair Gonzales

Report Date: 03.01.2021 15:52

Project Location: Eddy County, New Mexico

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	689233-019	689233-020				
	Field Id:	AH-5 (0'-1')	AH-5 (1'-1.5')				
	Depth:						
	Matrix:	SOIL	SOIL				
	Sampled:	02.24.2021 00:00	02.24.2021 00:00				
BTEX by EPA 8021B	Extracted:	02.27.2021 17:00	02.27.2021 17:00				
	Analyzed:	02.28.2021 12:16	02.28.2021 12:37				
	Units/RL:	mg/kg RL	mg/kg RL				
Benzene		<0.00202 0.00202	<0.00200 0.00200				
Toluene		0.00453 0.00202	<0.00200 0.00200				
Ethylbenzene		0.00653 0.00202	<0.00200 0.00200				
m,p-Xylenes		0.0160 0.00404	<0.00399 0.00399				
o-Xylene		0.00987 0.00202	<0.00200 0.00200				
Total Xylenes		0.0259 0.00202	<0.00200 0.00200				
Total BTEX		0.0369 0.00202	<0.00200 0.00200				
Inorganic Anions by EPA 300/300.1	Extracted:	02.25.2021 20:15	02.25.2021 20:15				
	Analyzed:	03.01.2021 05:20	03.01.2021 05:26				
	Units/RL:	mg/kg RL	mg/kg RL				
Chloride		8040 50.4	500 4.95				
TPH By SW8015 Mod	Extracted:	02.26.2021 16:00	02.26.2021 16:00				
	Analyzed:	02.27.2021 04:41	02.27.2021 03:58				
	Units/RL:	mg/kg RL	mg/kg RL				
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<50.0 50.0				
Diesel Range Organics (DRO)		1440 49.8	55.1 50.0				
Motor Oil Range Hydrocarbons (MRO)		175 49.8	<50.0 50.0				
Total TPH		1620 49.8	55.1 50.0				

BRL - Below Reporting Limit

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



Analytical Report 689233

for

Tetra Tech- Midland

Project Manager: Clair Gonzales

Medano VA State #13

03.01.2021

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)



03.01.2021

Project Manager: **Clair Gonzales**

Tetra Tech- Midland

901 West Wall ST

Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **689233**

Medano VA State #13

Project Address: Eddy County, New Mexico

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) 689233. 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. 689233 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 689233****Tetra Tech- Midland, Midland, TX**

Medano VA State #13

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
AH-1 (0'-1')	S	02.24.2021 00:00		689233-001
AH-1 (1.5'-2')	S	02.24.2021 00:00		689233-002
AH-1 (2.5'-3')	S	02.24.2021 00:00		689233-003
AH-1 (3.5'-4')	S	02.24.2021 00:00		689233-004
AH-2 (0'-1')	S	02.24.2021 00:00		689233-005
AH-2 (1.5'-2')	S	02.24.2021 00:00		689233-006
AH-2 (2.5'-3')	S	02.24.2021 00:00		689233-007
AH-2 (3.5'-4')	S	02.24.2021 00:00		689233-008
AH-3 (0'-1')	S	02.24.2021 00:00		689233-009
AH-3 (1.5'-2')	S	02.24.2021 00:00		689233-010
AH-3 (2.5'-3')	S	02.24.2021 00:00		689233-011
AH-3 (3.5'-4')	S	02.24.2021 00:00		689233-012
AH-3(4.5'-5')	S	02.24.2021 00:00		689233-013
AH-4 (0'-1')	S	02.24.2021 00:00		689233-014
AH-4 (1.5'-2')	S	02.24.2021 00:00		689233-015
AH-4 (2.5'-3')	S	02.24.2021 00:00		689233-016
AH-4 (3.5'-4')	S	02.24.2021 00:00		689233-017
AH-4 (4.5'-5')	S	02.24.2021 00:00		689233-018
AH-5 (0'-1')	S	02.24.2021 00:00		689233-019
AH-5 (1'-1.5')	S	02.24.2021 00:00		689233-020

**CASE NARRATIVE****Client Name: Tetra Tech- Midland****Project Name: Medano VA State #13**Project ID:
Work Order Number(s): 689233Report Date: 03.01.2021
Date Received: 02.25.2021

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3151991 BTEX by EPA 8021B

Lab Sample ID 689233-005 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 689233-005, -006, -007, -008, -009, -010, -011, -012, -013, -014, -015, -016, -017, -018, -019, -020.

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



Certificate of Analytical Results 689233

Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-001

Date Collected: 02.24.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 02.25.2021 19:35

% Moisture:

Seq Number: 3151852

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16700	249	mg/kg	02.26.2021 07:28		50

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.26.2021 16:00

% Moisture:

Seq Number: 3152047

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<250	250	mg/kg	02.27.2021 05:02	U	5
Diesel Range Organics (DRO)	C10C28DRO	1830	250	mg/kg	02.27.2021 05:02		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	290	250	mg/kg	02.27.2021 05:02		5
Total TPH	PHC635	2120	250	mg/kg	02.27.2021 05:02		5
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	89	%	70-130	02.27.2021 05:02		
o-Terphenyl	84-15-1	105	%	70-130	02.27.2021 05:02		



Certificate of Analytical Results 689233

Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-001

Date Collected: 02.24.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.26.2021 14:00

% Moisture:

Seq Number: 3151974

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.27.2021 10:23	U	1
Toluene	108-88-3	0.0202	0.00198	mg/kg	02.27.2021 10:23		1
Ethylbenzene	100-41-4	0.00949	0.00198	mg/kg	02.27.2021 10:23		1
m,p-Xylenes	179601-23-1	0.0243	0.00396	mg/kg	02.27.2021 10:23		1
o-Xylene	95-47-6	0.0141	0.00198	mg/kg	02.27.2021 10:23		1
Total Xylenes	1330-20-7	0.0384	0.00198	mg/kg	02.27.2021 10:23		1
Total BTEX		0.0681	0.00198	mg/kg	02.27.2021 10:23		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.27.2021 10:23		
4-Bromofluorobenzene	460-00-4	106	%	70-130	02.27.2021 10:23		



Certificate of Analytical Results 689233

Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-002

Date Collected: 02.24.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 02.25.2021 19:35

% Moisture:

Seq Number: 3151852

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2490	24.8	mg/kg	02.26.2021 07:33		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.26.2021 16:00

% Moisture:

Seq Number: 3152047

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.26.2021 21:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.26.2021 21:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.26.2021 21:14	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.26.2021 21:14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	87	%	70-130	02.26.2021 21:14		
o-Terphenyl	84-15-1	100	%	70-130	02.26.2021 21:14		



Certificate of Analytical Results 689233

Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-002

Date Collected: 02.24.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.26.2021 14:00

% Moisture:

Seq Number: 3151974

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.27.2021 10:43	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.27.2021 10:43	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.27.2021 10:43	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	02.27.2021 10:43	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.27.2021 10:43	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	02.27.2021 10:43	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.27.2021 10:43	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	108	%	70-130	02.27.2021 10:43		
4-Bromofluorobenzene	460-00-4	94	%	70-130	02.27.2021 10:43		



Certificate of Analytical Results 689233

Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-003

Date Collected: 02.24.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 02.25.2021 19:35

% Moisture:

Seq Number: 3151852

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	44.1	4.95	mg/kg	02.26.2021 07:38		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.26.2021 16:00

% Moisture:

Seq Number: 3152047

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.26.2021 22:18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.26.2021 22:18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.26.2021 22:18	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.26.2021 22:18	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	103	%	70-130	02.26.2021 22:18		
o-Terphenyl	84-15-1	115	%	70-130	02.26.2021 22:18		



Certificate of Analytical Results 689233

Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-003

Date Collected: 02.24.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.26.2021 14:00

% Moisture:

Seq Number: 3151974

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.27.2021 11:04	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.27.2021 11:04	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.27.2021 11:04	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.27.2021 11:04	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.27.2021 11:04	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.27.2021 11:04	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.27.2021 11:04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	02.27.2021 11:04		
4-Bromofluorobenzene	460-00-4	80	%	70-130	02.27.2021 11:04		



Certificate of Analytical Results 689233

Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-004

Date Collected: 02.24.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 02.25.2021 19:35

% Moisture:

Seq Number: 3151852

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	117	4.95	mg/kg	02.26.2021 07:44		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.26.2021 16:00

% Moisture:

Seq Number: 3152047

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.26.2021 22:39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.26.2021 22:39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.26.2021 22:39	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.26.2021 22:39	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	87	%	70-130	02.26.2021 22:39		
o-Terphenyl	84-15-1	101	%	70-130	02.26.2021 22:39		



Certificate of Analytical Results 689233

Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-004

Date Collected: 02.24.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.26.2021 14:00

% Moisture:

Seq Number: 3151974

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.27.2021 11:25	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.27.2021 11:25	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.27.2021 11:25	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.27.2021 11:25	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.27.2021 11:25	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.27.2021 11:25	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.27.2021 11:25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	105	%	70-130	02.27.2021 11:25		
4-Bromofluorobenzene	460-00-4	80	%	70-130	02.27.2021 11:25		



Certificate of Analytical Results 689233

Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-005

Date Collected: 02.24.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 02.25.2021 19:35

% Moisture:

Seq Number: 3151852

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	136	4.99	mg/kg	02.26.2021 08:00		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.26.2021 16:00

% Moisture:

Seq Number: 3152047

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.26.2021 23:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	131	49.8	mg/kg	02.26.2021 23:00		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.26.2021 23:00	U	1
Total TPH	PHC635	131	49.8	mg/kg	02.26.2021 23:00		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-130	02.26.2021 23:00	
o-Terphenyl	84-15-1	92	%	70-130	02.26.2021 23:00	



Certificate of Analytical Results 689233

Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-005

Date Collected: 02.24.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.27.2021 17:00

% Moisture:

Seq Number: 3151991

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.28.2021 06:06	UX	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.28.2021 06:06	UX	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.28.2021 06:06	UX	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.28.2021 06:06	UX	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.28.2021 06:06	UX	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.28.2021 06:06	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.28.2021 06:06	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	96	%	70-130	02.28.2021 06:06		
4-Bromofluorobenzene	460-00-4	107	%	70-130	02.28.2021 06:06		



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Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-006

Date Collected: 02.24.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 02.25.2021 19:35

% Moisture:

Seq Number: 3151852

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	57.3	5.03	mg/kg	02.26.2021 08:05		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.26.2021 16:00

% Moisture:

Seq Number: 3152047

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.26.2021 23:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.26.2021 23:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.26.2021 23:22	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.26.2021 23:22	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	85	%	70-130	02.26.2021 23:22		
o-Terphenyl	84-15-1	96	%	70-130	02.26.2021 23:22		



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Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-006

Date Collected: 02.24.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.27.2021 17:00

% Moisture:

Seq Number: 3151991

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.28.2021 06:26	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.28.2021 06:26	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.28.2021 06:26	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.28.2021 06:26	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.28.2021 06:26	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.28.2021 06:26	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.28.2021 06:26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	02.28.2021 06:26		
1,4-Difluorobenzene	540-36-3	95	%	70-130	02.28.2021 06:26		



Certificate of Analytical Results 689233

Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-007

Date Collected: 02.24.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 02.25.2021 19:35

% Moisture:

Seq Number: 3151852

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	38.6	4.97	mg/kg	02.26.2021 08:21		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.26.2021 16:00

% Moisture:

Seq Number: 3152047

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.26.2021 23:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.26.2021 23:43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.26.2021 23:43	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.26.2021 23:43	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	82	%	70-130	02.26.2021 23:43		
o-Terphenyl	84-15-1	95	%	70-130	02.26.2021 23:43		



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Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-007

Date Collected: 02.24.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.27.2021 17:00

% Moisture:

Seq Number: 3151991

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.28.2021 06:47	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.28.2021 06:47	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.28.2021 06:47	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.28.2021 06:47	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.28.2021 06:47	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.28.2021 06:47	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.28.2021 06:47	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	97	%	70-130	02.28.2021 06:47		
4-Bromofluorobenzene	460-00-4	117	%	70-130	02.28.2021 06:47		



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Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-008

Date Collected: 02.24.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 02.25.2021 19:35

% Moisture:

Seq Number: 3151852

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	41.6	4.95	mg/kg	02.26.2021 08:26		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.26.2021 16:00

% Moisture:

Seq Number: 3152047

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.27.2021 00:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.27.2021 00:04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.27.2021 00:04	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.27.2021 00:04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	89	%	70-130	02.27.2021 00:04		
o-Terphenyl	84-15-1	105	%	70-130	02.27.2021 00:04		



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Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-008

Date Collected: 02.24.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.27.2021 17:00

% Moisture:

Seq Number: 3151991

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.28.2021 07:07	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.28.2021 07:07	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.28.2021 07:07	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.28.2021 07:07	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.28.2021 07:07	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.28.2021 07:07	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.28.2021 07:07	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	106	%	70-130	02.28.2021 07:07		
1,4-Difluorobenzene	540-36-3	96	%	70-130	02.28.2021 07:07		



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Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-009

Date Collected: 02.24.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 02.25.2021 19:35

% Moisture:

Seq Number: 3151852

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2510	24.9	mg/kg	02.26.2021 08:32		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.26.2021 16:00

% Moisture:

Seq Number: 3152047

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.27.2021 04:19	U	1
Diesel Range Organics (DRO)	C10C28DRO	1420	50.0	mg/kg	02.27.2021 04:19		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	174	50.0	mg/kg	02.27.2021 04:19		1
Total TPH	PHC635	1590	50.0	mg/kg	02.27.2021 04:19		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	87	%	70-130	02.27.2021 04:19		
o-Terphenyl	84-15-1	102	%	70-130	02.27.2021 04:19		



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Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-009

Date Collected: 02.24.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.27.2021 17:00

% Moisture:

Seq Number: 3151991

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.28.2021 07:28	U	1
Toluene	108-88-3	0.00308	0.00199	mg/kg	02.28.2021 07:28		1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.28.2021 07:28	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.28.2021 07:28	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.28.2021 07:28	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.28.2021 07:28	U	1
Total BTEX		0.00308	0.00199	mg/kg	02.28.2021 07:28		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	02.28.2021 07:28		
1,4-Difluorobenzene	540-36-3	104	%	70-130	02.28.2021 07:28		



Certificate of Analytical Results 689233

Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-010

Date Collected: 02.24.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 02.25.2021 19:35

% Moisture:

Seq Number: 3151852

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1350	5.00	mg/kg	02.26.2021 08:37		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.26.2021 16:00

% Moisture:

Seq Number: 3152047

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.27.2021 00:26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.27.2021 00:26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.27.2021 00:26	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.27.2021 00:26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	82	%	70-130	02.27.2021 00:26		
o-Terphenyl	84-15-1	96	%	70-130	02.27.2021 00:26		



Certificate of Analytical Results 689233

Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-010

Date Collected: 02.24.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.27.2021 17:00

% Moisture:

Seq Number: 3151991

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.28.2021 07:48	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.28.2021 07:48	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.28.2021 07:48	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	02.28.2021 07:48	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.28.2021 07:48	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	02.28.2021 07:48	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.28.2021 07:48	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	98	%	70-130	02.28.2021 07:48		
4-Bromofluorobenzene	460-00-4	117	%	70-130	02.28.2021 07:48		



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Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-011

Date Collected: 02.24.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 02.25.2021 19:35

% Moisture:

Seq Number: 3151852

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2830	25.0	mg/kg	02.26.2021 08:42		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.26.2021 16:00

% Moisture:

Seq Number: 3152047

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.27.2021 00:47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.27.2021 00:47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.27.2021 00:47	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.27.2021 00:47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-130	02.27.2021 00:47	
o-Terphenyl	84-15-1	105	%	70-130	02.27.2021 00:47	



Certificate of Analytical Results 689233

Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-011

Date Collected: 02.24.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.27.2021 17:00

% Moisture:

Seq Number: 3151991

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.28.2021 08:09	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.28.2021 08:09	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.28.2021 08:09	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.28.2021 08:09	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.28.2021 08:09	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.28.2021 08:09	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.28.2021 08:09	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	97	%	70-130	02.28.2021 08:09		
4-Bromofluorobenzene	460-00-4	104	%	70-130	02.28.2021 08:09		



Certificate of Analytical Results 689233

Tetra Tech- Midland, Midland, TX

Medano VA State #13

Sample Id: **AH-3 (3.5'-4')**

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-012

Date Collected: 02.24.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 02.25.2021 19:35

% Moisture:

Seq Number: 3151852

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5830	50.0	mg/kg	02.26.2021 08:48		10

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.26.2021 16:00

% Moisture:

Seq Number: 3152047

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.27.2021 01:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.27.2021 01:08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.27.2021 01:08	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.27.2021 01:08	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	97	%	70-130	02.27.2021 01:08		
o-Terphenyl	84-15-1	113	%	70-130	02.27.2021 01:08		



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Tetra Tech- Midland, Midland, TX

Medano VA State #13

Sample Id: **AH-3 (3.5'-4')**

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-012

Date Collected: 02.24.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.27.2021 17:00

% Moisture:

Seq Number: 3151991

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.28.2021 08:29	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.28.2021 08:29	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.28.2021 08:29	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.28.2021 08:29	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.28.2021 08:29	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.28.2021 08:29	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.28.2021 08:29	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	97	%	70-130	02.28.2021 08:29		
4-Bromofluorobenzene	460-00-4	114	%	70-130	02.28.2021 08:29		



Certificate of Analytical Results 689233

Tetra Tech- Midland, Midland, TX

Medano VA State #13

Sample Id: **AH-3(4.5'-5')**

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-013

Date Collected: 02.24.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 02.25.2021 19:35

% Moisture:

Seq Number: 3151852

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4480	25.2	mg/kg	02.26.2021 08:53		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.26.2021 16:00

% Moisture:

Seq Number: 3152047

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.27.2021 01:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.27.2021 01:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.27.2021 01:51	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.27.2021 01:51	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	82	%	70-130	02.27.2021 01:51		
o-Terphenyl	84-15-1	96	%	70-130	02.27.2021 01:51		



Certificate of Analytical Results 689233

Tetra Tech- Midland, Midland, TX

Medano VA State #13

Sample Id: **AH-3(4.5'-5')**

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-013

Date Collected: 02.24.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.27.2021 17:00

% Moisture:

Seq Number: 3151991

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.28.2021 08:50	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.28.2021 08:50	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.28.2021 08:50	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.28.2021 08:50	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.28.2021 08:50	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.28.2021 08:50	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.28.2021 08:50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	95	%	70-130	02.28.2021 08:50		
4-Bromofluorobenzene	460-00-4	114	%	70-130	02.28.2021 08:50		



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Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-014

Date Collected: 02.24.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 02.25.2021 20:15

% Moisture:

Seq Number: 3152001

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4520	25.3	mg/kg	03.01.2021 04:33		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.26.2021 16:00

% Moisture:

Seq Number: 3152047

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.27.2021 02:12	U	1
Diesel Range Organics (DRO)	C10C28DRO	83.9	49.9	mg/kg	02.27.2021 02:12		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.27.2021 02:12	U	1
Total TPH	PHC635	83.9	49.9	mg/kg	02.27.2021 02:12		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	86	%	70-130	02.27.2021 02:12		
o-Terphenyl	84-15-1	102	%	70-130	02.27.2021 02:12		



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Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-014

Date Collected: 02.24.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.27.2021 17:00

% Moisture:

Seq Number: 3151991

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.28.2021 10:34	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.28.2021 10:34	U	1
Ethylbenzene	100-41-4	0.00227	0.00201	mg/kg	02.28.2021 10:34		1
m,p-Xylenes	179601-23-1	0.00410	0.00402	mg/kg	02.28.2021 10:34		1
o-Xylene	95-47-6	0.00293	0.00201	mg/kg	02.28.2021 10:34		1
Total Xylenes	1330-20-7	0.00703	0.00201	mg/kg	02.28.2021 10:34		1
Total BTEX		0.00930	0.00201	mg/kg	02.28.2021 10:34		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	105	%	70-130	02.28.2021 10:34		
1,4-Difluorobenzene	540-36-3	99	%	70-130	02.28.2021 10:34		



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Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-015

Date Collected: 02.24.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 02.25.2021 20:15

% Moisture:

Seq Number: 3152001

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	246	4.98	mg/kg	03.01.2021 04:49		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.26.2021 16:00

% Moisture:

Seq Number: 3152047

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.27.2021 02:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.27.2021 02:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.27.2021 02:33	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.27.2021 02:33	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	82	%	70-130	02.27.2021 02:33		
o-Terphenyl	84-15-1	93	%	70-130	02.27.2021 02:33		



Certificate of Analytical Results 689233

Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-015

Date Collected: 02.24.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.27.2021 17:00

% Moisture:

Seq Number: 3151991

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.28.2021 10:55	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.28.2021 10:55	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.28.2021 10:55	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.28.2021 10:55	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.28.2021 10:55	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.28.2021 10:55	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.28.2021 10:55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	115	%	70-130	02.28.2021 10:55		
1,4-Difluorobenzene	540-36-3	98	%	70-130	02.28.2021 10:55		



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Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-016

Date Collected: 02.24.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 02.25.2021 20:15

% Moisture:

Seq Number: 3152001

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	492	4.97	mg/kg	03.01.2021 04:54		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.26.2021 16:00

% Moisture:

Seq Number: 3152047

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.27.2021 02:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.27.2021 02:54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.27.2021 02:54	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.27.2021 02:54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	83	%	70-130	02.27.2021 02:54		
o-Terphenyl	84-15-1	96	%	70-130	02.27.2021 02:54		



Certificate of Analytical Results 689233

Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-016

Date Collected: 02.24.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.27.2021 17:00

% Moisture:

Seq Number: 3151991

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.28.2021 11:15	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.28.2021 11:15	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.28.2021 11:15	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.28.2021 11:15	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.28.2021 11:15	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.28.2021 11:15	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.28.2021 11:15	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	98	%	70-130	02.28.2021 11:15		
4-Bromofluorobenzene	460-00-4	112	%	70-130	02.28.2021 11:15		



Certificate of Analytical Results 689233

Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-017

Date Collected: 02.24.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 02.25.2021 20:15

% Moisture:

Seq Number: 3152001

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	588	5.02	mg/kg	03.01.2021 04:59		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.26.2021 16:00

% Moisture:

Seq Number: 3152047

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.27.2021 03:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.27.2021 03:15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.27.2021 03:15	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.27.2021 03:15	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	85	%	70-130	02.27.2021 03:15		
o-Terphenyl	84-15-1	98	%	70-130	02.27.2021 03:15		



Certificate of Analytical Results 689233

Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-017

Date Collected: 02.24.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.27.2021 17:00

% Moisture:

Seq Number: 3151991

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.28.2021 11:35	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	02.28.2021 11:35	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	02.28.2021 11:35	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	02.28.2021 11:35	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	02.28.2021 11:35	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	02.28.2021 11:35	U	1
Total BTEX		<0.00198	0.00198	mg/kg	02.28.2021 11:35	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	105	%	70-130	02.28.2021 11:35		
1,4-Difluorobenzene	540-36-3	97	%	70-130	02.28.2021 11:35		



Certificate of Analytical Results 689233

Tetra Tech- Midland, Midland, TX

Medano VA State #13

Sample Id: **AH-4 (4.5'-5')**

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-018

Date Collected: 02.24.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 02.25.2021 20:15

% Moisture:

Seq Number: 3152001

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	945	4.99	mg/kg	03.01.2021 05:04		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.26.2021 16:00

% Moisture:

Seq Number: 3152047

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.27.2021 03:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.27.2021 03:37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.27.2021 03:37	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.27.2021 03:37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	96	%	70-130	02.27.2021 03:37		
o-Terphenyl	84-15-1	110	%	70-130	02.27.2021 03:37		



Certificate of Analytical Results 689233

Tetra Tech- Midland, Midland, TX

Medano VA State #13

Sample Id: **AH-4 (4.5'-5')**

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-018

Date Collected: 02.24.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.27.2021 17:00

% Moisture:

Seq Number: 3151991

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.28.2021 11:56	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.28.2021 11:56	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.28.2021 11:56	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.28.2021 11:56	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.28.2021 11:56	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.28.2021 11:56	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.28.2021 11:56	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	107	%	70-130	02.28.2021 11:56		
1,4-Difluorobenzene	540-36-3	98	%	70-130	02.28.2021 11:56		



Certificate of Analytical Results 689233

Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-019

Date Collected: 02.24.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 02.25.2021 20:15

% Moisture:

Seq Number: 3152001

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8040	50.4	mg/kg	03.01.2021 05:20		10

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.26.2021 16:00

% Moisture:

Seq Number: 3152047

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.27.2021 04:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	1440	49.8	mg/kg	02.27.2021 04:41		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	175	49.8	mg/kg	02.27.2021 04:41		1
Total TPH	PHC635	1620	49.8	mg/kg	02.27.2021 04:41		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	97	%	70-130	02.27.2021 04:41		
o-Terphenyl	84-15-1	110	%	70-130	02.27.2021 04:41		



Certificate of Analytical Results 689233

Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-019

Date Collected: 02.24.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.27.2021 17:00

% Moisture:

Seq Number: 3151991

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.28.2021 12:16	U	1
Toluene	108-88-3	0.00453	0.00202	mg/kg	02.28.2021 12:16		1
Ethylbenzene	100-41-4	0.00653	0.00202	mg/kg	02.28.2021 12:16		1
m,p-Xylenes	179601-23-1	0.0160	0.00404	mg/kg	02.28.2021 12:16		1
o-Xylene	95-47-6	0.00987	0.00202	mg/kg	02.28.2021 12:16		1
Total Xylenes	1330-20-7	0.0259	0.00202	mg/kg	02.28.2021 12:16		1
Total BTEX		0.0369	0.00202	mg/kg	02.28.2021 12:16		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	116	%	70-130	02.28.2021 12:16		
1,4-Difluorobenzene	540-36-3	99	%	70-130	02.28.2021 12:16		



Certificate of Analytical Results 689233

Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-020

Date Collected: 02.24.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 02.25.2021 20:15

% Moisture:

Seq Number: 3152001

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	500	4.95	mg/kg	03.01.2021 05:26		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.26.2021 16:00

% Moisture:

Seq Number: 3152047

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.27.2021 03:58	U	1
Diesel Range Organics (DRO)	C10C28DRO	55.1	50.0	mg/kg	02.27.2021 03:58		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.27.2021 03:58	U	1
Total TPH	PHC635	55.1	50.0	mg/kg	02.27.2021 03:58		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	78	%	70-130	02.27.2021 03:58		
o-Terphenyl	84-15-1	91	%	70-130	02.27.2021 03:58		



Certificate of Analytical Results 689233

Tetra Tech- Midland, Midland, TX

Medano VA State #13

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

Matrix: Soil

Date Received: 02.25.2021 09:35

Lab Sample Id: 689233-020

Date Collected: 02.24.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.27.2021 17:00

% Moisture:

Seq Number: 3151991

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.28.2021 12:37	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.28.2021 12:37	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.28.2021 12:37	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.28.2021 12:37	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.28.2021 12:37	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.28.2021 12:37	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.28.2021 12:37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	114	%	70-130	02.28.2021 12:37		
1,4-Difluorobenzene	540-36-3	100	%	70-130	02.28.2021 12:37		

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

Medano VA State #13

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3151852

Matrix: Solid

Prep Method: E300P

Date Prep: 02.25.2021

MB Sample Id: 7722036-1-BLK

LCS Sample Id: 7722036-1-BKS

LCSD Sample Id: 7722036-1-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	245	98	247	99	90-110	1	20	mg/kg	02.26.2021 06:19	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3152001

Matrix: Solid

Prep Method: E300P

Date Prep: 02.25.2021

MB Sample Id: 7722038-1-BLK

LCS Sample Id: 7722038-1-BKS

LCSD Sample Id: 7722038-1-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	246	98	243	97	90-110	1	20	mg/kg	03.01.2021 04:22	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3151852

Matrix: Soil

Prep Method: E300P

Date Prep: 02.25.2021

Parent Sample Id: 689232-022

MS Sample Id: 689232-022 S

MSD Sample Id: 689232-022 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	9.36	250	268	103	269	104	90-110	0	20	mg/kg	02.26.2021 06:35	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3151852

Matrix: Soil

Prep Method: E300P

Date Prep: 02.25.2021

Parent Sample Id: 689233-004

MS Sample Id: 689233-004 S

MSD Sample Id: 689233-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	117	248	378	105	378	105	90-110	0	20	mg/kg	02.26.2021 07:49	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3152001

Matrix: Soil

Prep Method: E300P

Date Prep: 02.25.2021

Parent Sample Id: 688874-006

MS Sample Id: 688874-006 S

MSD Sample Id: 688874-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	51.2	248	288	95	287	95	90-110	0	20	mg/kg	03.01.2021 05:52	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3152001

Matrix: Soil

Prep Method: E300P

Date Prep: 02.25.2021

Parent Sample Id: 689233-014

MS Sample Id: 689233-014 S

MSD Sample Id: 689233-014 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	4520	1260	5680	92	5690	93	90-110	0	20	mg/kg	03.01.2021 04:38	

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

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

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

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



Tetra Tech- Midland

Medano VA State #13

Analytical Method: TPH By SW8015 Mod

Seq Number: 3152047

Matrix: Solid

Prep Method: SW8015P

Date Prep: 02.26.2021

MB Sample Id: 7722125-1-BLK

LCS Sample Id: 7722125-1-BKS

LCSD Sample Id: 7722125-1-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	1080	108	1050	105	70-130	3	20	mg/kg	02.26.2021 20:32	
Diesel Range Organics (DRO)	<50.0	1000	1000	100	1010	101	70-130	1	20	mg/kg	02.26.2021 20:32	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	113		116		107		70-130	%	02.26.2021 20:32
o-Terphenyl	130		119		115		70-130	%	02.26.2021 20:32

Analytical Method: TPH By SW8015 Mod

Seq Number: 3152047

Matrix: Solid

Prep Method: SW8015P

Date Prep: 02.26.2021

MB Sample Id: 7722125-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	02.26.2021 20:10	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3152047

Matrix: Soil

Prep Method: SW8015P

Date Prep: 02.26.2021

Parent Sample Id: 689233-002

MS Sample Id: 689233-002 S

MSD Sample Id: 689233-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.8	996	907	91	910	91	70-130	0	20	mg/kg	02.26.2021 21:36	
Diesel Range Organics (DRO)	<49.8	996	832	84	818	82	70-130	2	20	mg/kg	02.26.2021 21:36	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	85		85		70-130	%	02.26.2021 21:36
o-Terphenyl	90		89		70-130	%	02.26.2021 21:36

Analytical Method: BTEX by EPA 8021B

Seq Number: 3151974

Matrix: Solid

Prep Method: SW5035A

Date Prep: 02.26.2021

MB Sample Id: 7722134-1-BLK

LCS Sample Id: 7722134-1-BKS

LCSD Sample Id: 7722134-1-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	0.125	125	0.118	118	70-130	6	35	mg/kg	02.27.2021 01:26	
Toluene	<0.00200	0.100	0.106	106	0.105	105	70-130	1	35	mg/kg	02.27.2021 01:26	
Ethylbenzene	<0.00200	0.100	0.0985	99	0.101	101	70-130	3	35	mg/kg	02.27.2021 01:26	
m,p-Xylenes	<0.00400	0.200	0.206	103	0.207	104	70-130	0	35	mg/kg	02.27.2021 01:26	
o-Xylene	<0.00200	0.100	0.0981	98	0.0973	97	70-130	1	35	mg/kg	02.27.2021 01:26	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	127		103		107		70-130	%	02.27.2021 01:26
4-Bromofluorobenzene	71		89		90		70-130	%	02.27.2021 01:26

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 Medano VA State #13

Analytical Method: BTEX by EPA 8021B

Seq Number: 3151991

Matrix: Solid

Prep Method: SW5035A

Date Prep: 02.27.2021

MB Sample Id: 7722147-1-BLK

LCS Sample Id: 7722147-1-BKS

LCSD Sample Id: 7722147-1-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	0.0932	93	0.0996	100	70-130	7	35	mg/kg	02.28.2021 03:45	
Toluene	<0.00200	0.100	0.0882	88	0.0950	95	70-130	7	35	mg/kg	02.28.2021 03:45	
Ethylbenzene	<0.00200	0.100	0.0945	95	0.101	101	70-130	7	35	mg/kg	02.28.2021 03:45	
m,p-Xylenes	<0.00400	0.200	0.184	92	0.198	99	70-130	7	35	mg/kg	02.28.2021 03:45	
o-Xylene	<0.00200	0.100	0.0937	94	0.100	100	70-130	7	35	mg/kg	02.28.2021 03:45	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	88		102		101		70-130	%	02.28.2021 03:45
4-Bromofluorobenzene	99		103		100		70-130	%	02.28.2021 03:45

Analytical Method: BTEX by EPA 8021B

Seq Number: 3151974

Matrix: Soil

Prep Method: SW5035A

Date Prep: 02.26.2021

Parent Sample Id: 689232-013

MS Sample Id: 689232-013 S

MSD Sample Id: 689232-013 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0992	0.103	104	0.117	117	70-130	13	35	mg/kg	02.27.2021 02:08	
Toluene	<0.00198	0.0992	0.0966	97	0.0979	98	70-130	1	35	mg/kg	02.27.2021 02:08	
Ethylbenzene	<0.00198	0.0992	0.0927	93	0.0932	93	70-130	1	35	mg/kg	02.27.2021 02:08	
m,p-Xylenes	<0.00397	0.198	0.199	101	0.193	97	70-130	3	35	mg/kg	02.27.2021 02:08	
o-Xylene	<0.00198	0.0992	0.0912	92	0.0898	90	70-130	2	35	mg/kg	02.27.2021 02:08	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	95		110		70-130	%	02.27.2021 02:08
4-Bromofluorobenzene	89		93		70-130	%	02.27.2021 02:08

Analytical Method: BTEX by EPA 8021B

Seq Number: 3151991

Matrix: Soil

Prep Method: SW5035A

Date Prep: 02.27.2021

Parent Sample Id: 689233-005

MS Sample Id: 689233-005 S

MSD Sample Id: 689233-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0990	0.0620	63	0.0681	68	70-130	9	35	mg/kg	02.28.2021 04:25	X
Toluene	<0.00198	0.0990	0.0496	50	0.0545	55	70-130	9	35	mg/kg	02.28.2021 04:25	X
Ethylbenzene	<0.00198	0.0990	0.0436	44	0.0471	47	70-130	8	35	mg/kg	02.28.2021 04:25	X
m,p-Xylenes	<0.00396	0.198	0.0833	42	0.0886	44	70-130	6	35	mg/kg	02.28.2021 04:25	X
o-Xylene	<0.00198	0.0990	0.0402	41	0.0443	44	70-130	10	35	mg/kg	02.28.2021 04:25	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		101		70-130	%	02.28.2021 04:25
4-Bromofluorobenzene	104		105		70-130	%	02.28.2021 04:25

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

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

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

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

Analysis Request of Custody Record

Page 1 of 2



Tetra Tech, Inc.

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

Client Name:

EOG

Site Manager:

Clair Gonzales

Project Name:

Medano VA State #13

Project Location:

Eddy County, New Mexico

Project #:

Invoice to:

Todd Wells

Receiving Laboratory:

Xenco

Sampler Signature:

Devin Dominguez

Comments:

 LAB #
 (LAB USE ONLY)

SAMPLE IDENTIFICATION

SAMPLING

YEAR: 2021

DATE

TIME

MATRIX

PRESERVATIVE METHOD

 WATER
 SOIL
 HCL
 HNO₃
 ICE
 None

CONTAINERS

FILTERED (Y/N)

BTX 8021B BTX 8260B

TPH TX1005 (Ext to C35)

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

PAH 8270C

Total Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8260B / 624

GC/MS Semi. Vol. 8270C/625

PCB's 8082 / 608

NORM

PLM (Asbestos)

Chloride

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

TPH 8015R

Hold

 ANALYSIS REQUEST
 (Circle or Specify Method No.)

489233

Relinquished by:

Date: Time:

Received by:

Date: Time:

LAB USE ONLY

REMARKS:

STANDARD

Relinquished by:

Date: Time:

Received by:

Date: Time:

Sample Temperature

REMARKS:

RUSH: Same Day 24 hr 48 hr

Rush Charges Authorized

Special Report Limits or TRRP Report

Relinquished by:

Date: Time:

Received by:

Date: Time:

5.2

(Circle) HAND DELIVERED

FEDEX UPS Tracking #:

ORIGINAL COPY

Analysis Request of Chain of Custody Record

**Tetra Tech, Inc.**900 West Wall Street, Ste 100
Midland, Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

Page 2 of 2

Client Name:

EOG

Site Manager:

Clair Gonzales

Project Name:

Medano VA State #13

Project Location:

(county, state) Eddy County, New Mexico

Project #:

Invoice to:

Todd Wells

Receiving Laboratory:

Xenco

Sampler Signature:

Devin Dominguez

Comments:

SAMPLE IDENTIFICATIONLAB #
(LAB USE ONLY)**SAMPLING**

YEAR: 2021

DATE

TIME

MATRIX**PRESERVATIVE METHOD**WATER
SOIL
HCL
HNO₃
ICE
None

CONTAINERS

FILTERED (Y/N)

AH-3 (2.5'-3')	2/24/2021		X		X					1	N
AH-3 (3.5'-4')	2/24/2021		X		X					1	N
AH-3 (4.5'-5')	2/24/2021		X		X					1	N
AH-4 (0-1')	2/24/2021		X		X					1	N
AH-4 (1.5'-2')	2/24/2021		X		X					1	N
AH-4 (2.5'-3')	2/24/2021		X		X					1	N
AH-4 (3.5'-4')	2/24/2021		X		X					1	N
AH-4 (4.5'-5')	2/24/2021		X		X					1	N
AH-5 (0-1')	2/24/2021		X		X					1	N
AH-5 (1'-1.5')	2/24/2021		X		X					1	N

Relinquished by:

Date: Time:

01/05 935

Relinquished by:

Date: Time:

01/05 935

Relinquished by:

Date: Time:

Received by:

Date: Time:

Received by:

Date: Time:

LAB USE ONLY

REMARKS:

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

Sample Temperature

5.2

STANDARD DELIVERED

FEDEX UPS Tracking #:

ORIGINAL COPY

ANALYSIS REQUEST

(Circle or Specify Method No.)

U84233

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

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 02.25.2021 09.35.00 AM

Work Order #: 689233

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	5.2
#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: 02.25.2021

Checklist reviewed by:



Jessica Kramer

Date: 02.25.2021



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-2160-1

Laboratory Sample Delivery Group: Eddy County, New Mexico
Client Project/Site: EOG - Medano VA #13

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:
5/19/2021 8:22:30 PM

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

LINKS

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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: EOG - Medano VA #13

Laboratory Job ID: 880-2160-1
SDG: Eddy County, New Mexico

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Definitions/Glossary

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

Job ID: 880-2160-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative 880-2160-1

Comments

No additional comments.

Receipt

The samples were received on 5/14/2021 8:24 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 6.0° C.

GC VOA

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-3118 recovered above the upper control limit for Benzene and Toluene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-3118/20).

Method 8021B: Surrogate recovery for the following samples were outside control limits: BH-3 (4.5') (880-2160-3) and SW-11 (1.5') (880-2160-18). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Internal standard responses were outside of acceptance limits for the following samples: SW-7 (4.5') (880-2160-14), SW-8 (1.5') (880-2160-15), SW-9 (1.5') (880-2160-16) and SW-11 (1.5') (880-2160-18). The sample(s) shows evidence of matrix interference.

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

GC Semi VOA

Method 8015B NM: The sample performed as the MS/MSD received a detection in the diesel range. Due to data being biased high in the diesel range this sample will be reanalyzed for confirmation.

BH-1 (1.5') (880-2160-1)

Method 8015B NM: The continuing calibration verification (CCV) associated with batch 880-3111 recovered above the upper control limit for Diesel Range Organics (Over C10-C28). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

General Chemistry

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

Organic Prep

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

VOA Prep

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

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

Client Sample ID: BH-1 (1.5')

Lab Sample ID: 880-2160-1

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Sample Depth: (1.5')

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		05/14/21 10:11	05/14/21 13:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 13:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 13:45	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		05/14/21 10:11	05/14/21 13:45	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 13:45	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		05/14/21 10:11	05/14/21 13:45	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		05/14/21 10:11	05/14/21 13:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	05/14/21 10:11	05/14/21 13:45	1
1,4-Difluorobenzene (Surr)	99		70 - 130	05/14/21 10:11	05/14/21 13:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/14/21 10:34	05/14/21 15:43	1
Diesel Range Organics (Over C10-C28)	332		49.9		mg/Kg		05/14/21 10:34	05/14/21 15:43	1
Oil Range Organics (Over C28-C36)	71.0		49.9		mg/Kg		05/14/21 10:34	05/14/21 15:43	1
Total TPH	403		49.9		mg/Kg		05/14/21 10:34	05/14/21 15:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130	05/14/21 10:34	05/14/21 15:43	1
o-Terphenyl	101		70 - 130	05/14/21 10:34	05/14/21 15:43	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	702	F1	5.04		mg/Kg			05/14/21 16:08	1

Client Sample ID: BH-2 (1.5')

Lab Sample ID: 880-2160-2

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Sample Depth: (1.5')

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		05/14/21 10:11	05/14/21 14:05	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 14:05	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 14:05	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/14/21 10:11	05/14/21 14:05	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 14:05	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/14/21 10:11	05/14/21 14:05	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		05/14/21 10:11	05/14/21 14:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	05/14/21 10:11	05/14/21 14:05	1
1,4-Difluorobenzene (Surr)	103		70 - 130	05/14/21 10:11	05/14/21 14:05	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

Client Sample ID: BH-2 (1.5')

Lab Sample ID: 880-2160-2

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Sample Depth: (1.5')

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		05/17/21 09:43	05/17/21 14:12	1
Diesel Range Organics (Over C10-C28)	67.5		49.8		mg/Kg		05/17/21 09:43	05/17/21 14:12	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/17/21 09:43	05/17/21 14:12	1
Total TPH	67.5		49.8		mg/Kg		05/17/21 09:43	05/17/21 14:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130	05/17/21 09:43	05/17/21 14:12	1
o-Terphenyl	92		70 - 130	05/17/21 09:43	05/17/21 14:12	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2400		24.9		mg/Kg			05/14/21 16:23	5

Client Sample ID: BH-3 (4.5')

Lab Sample ID: 880-2160-3

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Sample Depth: (4.5')

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		05/14/21 10:11	05/14/21 14:26	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/14/21 10:11	05/14/21 14:26	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/14/21 10:11	05/14/21 14:26	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/14/21 10:11	05/14/21 14:26	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/14/21 10:11	05/14/21 14:26	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/14/21 10:11	05/14/21 14:26	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/14/21 10:11	05/14/21 14:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	05/14/21 10:11	05/14/21 14:26	1
1,4-Difluorobenzene (Surr)	104		70 - 130	05/14/21 10:11	05/14/21 14:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		05/17/21 09:43	05/17/21 14:34	1
Diesel Range Organics (Over C10-C28)	61.9		49.8		mg/Kg		05/17/21 09:43	05/17/21 14:34	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/17/21 09:43	05/17/21 14:34	1
Total TPH	61.9		49.8		mg/Kg		05/17/21 09:43	05/17/21 14:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130	05/17/21 09:43	05/17/21 14:34	1
o-Terphenyl	94		70 - 130	05/17/21 09:43	05/17/21 14:34	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3650		24.9		mg/Kg			05/14/21 16:28	5

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

Client Sample ID: BH-4 (4.5')

Lab Sample ID: 880-2160-4

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Sample Depth: (4.5')

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		05/14/21 10:11	05/14/21 14:46	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/14/21 10:11	05/14/21 14:46	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/14/21 10:11	05/14/21 14:46	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/14/21 10:11	05/14/21 14:46	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/14/21 10:11	05/14/21 14:46	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/14/21 10:11	05/14/21 14:46	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/14/21 10:11	05/14/21 14:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	05/14/21 10:11	05/14/21 14:46	1
1,4-Difluorobenzene (Surr)	102		70 - 130	05/14/21 10:11	05/14/21 14:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/17/21 09:43	05/17/21 14:56	1
Diesel Range Organics (Over C10-C28)	121		49.9		mg/Kg		05/17/21 09:43	05/17/21 14:56	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/17/21 09:43	05/17/21 14:56	1
Total TPH	121		49.9		mg/Kg		05/17/21 09:43	05/17/21 14:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130	05/17/21 09:43	05/17/21 14:56	1
o-Terphenyl	94		70 - 130	05/17/21 09:43	05/17/21 14:56	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1430		5.00		mg/Kg			05/14/21 16:34	1

Client Sample ID: BH-5 (1.5')

Lab Sample ID: 880-2160-5

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Sample Depth: (1.5')

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		05/14/21 10:11	05/14/21 15:07	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/14/21 10:11	05/14/21 15:07	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/14/21 10:11	05/14/21 15:07	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		05/14/21 10:11	05/14/21 15:07	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/14/21 10:11	05/14/21 15:07	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		05/14/21 10:11	05/14/21 15:07	1
Total BTEX	<0.00396	U	0.00396		mg/Kg		05/14/21 10:11	05/14/21 15:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	05/14/21 10:11	05/14/21 15:07	1
1,4-Difluorobenzene (Surr)	101		70 - 130	05/14/21 10:11	05/14/21 15:07	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

Client Sample ID: BH-5 (1.5')

Lab Sample ID: 880-2160-5

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Sample Depth: (1.5')

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		05/17/21 09:43	05/17/21 15:18	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/17/21 09:43	05/17/21 15:18	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/17/21 09:43	05/17/21 15:18	1
Total TPH	<49.9	U	49.9		mg/Kg		05/17/21 09:43	05/17/21 15:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130	05/17/21 09:43	05/17/21 15:18	1
o-Terphenyl	94		70 - 130	05/17/21 09:43	05/17/21 15:18	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2770		25.0		mg/Kg			05/14/21 16:39	5

Client Sample ID: BH-6 (1.5')

Lab Sample ID: 880-2160-6

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Sample Depth: (1.5')

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		05/14/21 10:11	05/14/21 15:27	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/14/21 10:11	05/14/21 15:27	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/14/21 10:11	05/14/21 15:27	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		05/14/21 10:11	05/14/21 15:27	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/14/21 10:11	05/14/21 15:27	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		05/14/21 10:11	05/14/21 15:27	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		05/14/21 10:11	05/14/21 15:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	05/14/21 10:11	05/14/21 15:27	1
1,4-Difluorobenzene (Surr)	103		70 - 130	05/14/21 10:11	05/14/21 15:27	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	<49.9	U	49.9		mg/Kg		05/14/21 10:34	05/14/21 18:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/14/21 10:34	05/14/21 18:11	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/14/21 10:34	05/14/21 18:11	1
Total TPH	<49.9	U	49.9		mg/Kg		05/14/21 10:34	05/14/21 18:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130	05/14/21 10:34	05/14/21 18:11	1
o-Terphenyl	106		70 - 130	05/14/21 10:34	05/14/21 18:11	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	482		4.99		mg/Kg			05/14/21 16:54	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

Client Sample ID: BH-7 (1.5')

Lab Sample ID: 880-2160-7

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Sample Depth: (1.5')

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		05/14/21 10:11	05/14/21 15:48	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 15:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 15:48	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/14/21 10:11	05/14/21 15:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 15:48	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/14/21 10:11	05/14/21 15:48	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		05/14/21 10:11	05/14/21 15:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	05/14/21 10:11	05/14/21 15:48	1
1,4-Difluorobenzene (Surr)	100		70 - 130	05/14/21 10:11	05/14/21 15:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/17/21 09:43	05/17/21 15:40	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/17/21 09:43	05/17/21 15:40	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/17/21 09:43	05/17/21 15:40	1
Total TPH	<49.9	U	49.9		mg/Kg		05/17/21 09:43	05/17/21 15:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130	05/17/21 09:43	05/17/21 15:40	1
o-Terphenyl	90		70 - 130	05/17/21 09:43	05/17/21 15:40	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	461		4.99		mg/Kg			05/14/21 16:59	1

Client Sample ID: SW-1 (1.5')

Lab Sample ID: 880-2160-8

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Sample Depth: (1.5')

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		05/14/21 10:11	05/14/21 16:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 16:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 16:08	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		05/14/21 10:11	05/14/21 16:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 16:08	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		05/14/21 10:11	05/14/21 16:08	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		05/14/21 10:11	05/14/21 16:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	05/14/21 10:11	05/14/21 16:08	1
1,4-Difluorobenzene (Surr)	103		70 - 130	05/14/21 10:11	05/14/21 16:08	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

Client Sample ID: SW-1 (1.5')

Lab Sample ID: 880-2160-8

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Sample Depth: (1.5')

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		05/14/21 10:34	05/14/21 18:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/14/21 10:34	05/14/21 18:53	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/14/21 10:34	05/14/21 18:53	1
Total TPH	<50.0	U	50.0		mg/Kg		05/14/21 10:34	05/14/21 18:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	05/14/21 10:34	05/14/21 18:53	1
o-Terphenyl	111		70 - 130	05/14/21 10:34	05/14/21 18:53	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	152		5.02		mg/Kg			05/14/21 17:05	1

Client Sample ID: SW-2 (1.5')

Lab Sample ID: 880-2160-9

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Sample Depth: (1.5')

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		05/14/21 10:11	05/14/21 16:28	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/14/21 10:11	05/14/21 16:28	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/14/21 10:11	05/14/21 16:28	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		05/14/21 10:11	05/14/21 16:28	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/14/21 10:11	05/14/21 16:28	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		05/14/21 10:11	05/14/21 16:28	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		05/14/21 10:11	05/14/21 16:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	05/14/21 10:11	05/14/21 16:28	1
1,4-Difluorobenzene (Surr)	102		70 - 130	05/14/21 10:11	05/14/21 16:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/14/21 10:34	05/14/21 19:14	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/14/21 10:34	05/14/21 19:14	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/14/21 10:34	05/14/21 19:14	1
Total TPH	<49.9	U	49.9		mg/Kg		05/14/21 10:34	05/14/21 19:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130	05/14/21 10:34	05/14/21 19:14	1
o-Terphenyl	99		70 - 130	05/14/21 10:34	05/14/21 19:14	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	153		5.04		mg/Kg			05/14/21 17:10	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

Client Sample ID: SW-3 (1.5')

Lab Sample ID: 880-2160-10

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Sample Depth: (1.5')

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0184		0.00202		mg/Kg		05/14/21 10:11	05/14/21 16:49	1
Toluene	0.00887		0.00202		mg/Kg		05/14/21 10:11	05/14/21 16:49	1
Ethylbenzene	0.179		0.00202		mg/Kg		05/14/21 10:11	05/14/21 16:49	1
m-Xylene & p-Xylene	0.105		0.00404		mg/Kg		05/14/21 10:11	05/14/21 16:49	1
o-Xylene	0.201		0.00202		mg/Kg		05/14/21 10:11	05/14/21 16:49	1
Xylenes, Total	0.306		0.00404		mg/Kg		05/14/21 10:11	05/14/21 16:49	1
Total BTEX	0.512		0.00404		mg/Kg		05/14/21 10:11	05/14/21 16:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	16231	S1+	70 - 130	05/14/21 10:11	05/14/21 16:49	1
1,4-Difluorobenzene (Surr)	11195	S1+	70 - 130	05/14/21 10:11	05/14/21 16:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/14/21 10:34	05/14/21 19:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/14/21 10:34	05/14/21 19:35	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/14/21 10:34	05/14/21 19:35	1
Total TPH	<50.0	U	50.0		mg/Kg		05/14/21 10:34	05/14/21 19:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130	05/14/21 10:34	05/14/21 19:35	1
o-Terphenyl	100		70 - 130	05/14/21 10:34	05/14/21 19:35	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	181		5.05		mg/Kg			05/14/21 17:15	1

Client Sample ID: SW-4 (4.5')

Lab Sample ID: 880-2160-11

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Sample Depth: (4.5')

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		05/14/21 10:11	05/14/21 18:39	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/14/21 10:11	05/14/21 18:39	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/14/21 10:11	05/14/21 18:39	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		05/14/21 10:11	05/14/21 18:39	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/14/21 10:11	05/14/21 18:39	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		05/14/21 10:11	05/14/21 18:39	1
Total BTEX	<0.00396	U	0.00396		mg/Kg		05/14/21 10:11	05/14/21 18:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	05/14/21 10:11	05/14/21 18:39	1
1,4-Difluorobenzene (Surr)	100		70 - 130	05/14/21 10:11	05/14/21 18:39	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

Client Sample ID: SW-4 (4.5')

Lab Sample ID: 880-2160-11

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Sample Depth: (4.5')

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		05/17/21 09:43	05/17/21 16:01	1
Diesel Range Organics (Over C10-C28)	76.0		50.0		mg/Kg		05/17/21 09:43	05/17/21 16:01	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/17/21 09:43	05/17/21 16:01	1
Total TPH	76.0		50.0		mg/Kg		05/17/21 09:43	05/17/21 16:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130	05/17/21 09:43	05/17/21 16:01	1
o-Terphenyl	98		70 - 130	05/17/21 09:43	05/17/21 16:01	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	158		4.97		mg/Kg			05/14/21 17:20	1

Client Sample ID: SW-5 (4.5')

Lab Sample ID: 880-2160-12

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Sample Depth: (4.5')

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		05/14/21 10:11	05/14/21 19:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 19:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 19:00	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/14/21 10:11	05/14/21 19:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 19:00	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/14/21 10:11	05/14/21 19:00	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		05/14/21 10:11	05/14/21 19:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	05/14/21 10:11	05/14/21 19:00	1
1,4-Difluorobenzene (Surr)	101		70 - 130	05/14/21 10:11	05/14/21 19:00	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		05/14/21 10:34	05/14/21 20:37	1
Diesel Range Organics (Over C10-C28)	106		49.9		mg/Kg		05/14/21 10:34	05/14/21 20:37	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/14/21 10:34	05/14/21 20:37	1
Total TPH	106		49.9		mg/Kg		05/14/21 10:34	05/14/21 20:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	05/14/21 10:34	05/14/21 20:37	1
o-Terphenyl	115		70 - 130	05/14/21 10:34	05/14/21 20:37	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	155		4.98		mg/Kg			05/14/21 17:36	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

Client Sample ID: SW-6 (4.5')

Lab Sample ID: 880-2160-13

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Sample Depth: (4.5')

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		05/14/21 10:11	05/14/21 19:20	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/14/21 10:11	05/14/21 19:20	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/14/21 10:11	05/14/21 19:20	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/14/21 10:11	05/14/21 19:20	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/14/21 10:11	05/14/21 19:20	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/14/21 10:11	05/14/21 19:20	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		05/14/21 10:11	05/14/21 19:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	05/14/21 10:11	05/14/21 19:20	1
1,4-Difluorobenzene (Surr)	99		70 - 130	05/14/21 10:11	05/14/21 19:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/17/21 09:43	05/17/21 16:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/17/21 09:43	05/17/21 16:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/17/21 09:43	05/17/21 16:23	1
Total TPH	<50.0	U	50.0		mg/Kg		05/17/21 09:43	05/17/21 16:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130	05/17/21 09:43	05/17/21 16:23	1
o-Terphenyl	86		70 - 130	05/17/21 09:43	05/17/21 16:23	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	157		4.96		mg/Kg			05/14/21 17:41	1

Client Sample ID: SW-7 (4.5')

Lab Sample ID: 880-2160-14

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Sample Depth: (4.5')

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		05/14/21 10:11	05/14/21 19:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 19:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 19:40	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		05/14/21 10:11	05/14/21 19:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 19:40	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		05/14/21 10:11	05/14/21 19:40	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		05/14/21 10:11	05/14/21 19:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	05/14/21 10:11	05/14/21 19:40	1
1,4-Difluorobenzene (Surr)	104		70 - 130	05/14/21 10:11	05/14/21 19:40	1

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Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

Client Sample ID: SW-7 (4.5')

Lab Sample ID: 880-2160-14

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Sample Depth: (4.5')

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		05/17/21 09:43	05/17/21 16:45	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/17/21 09:43	05/17/21 16:45	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/17/21 09:43	05/17/21 16:45	1
Total TPH	<49.9	U	49.9		mg/Kg		05/17/21 09:43	05/17/21 16:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130	05/17/21 09:43	05/17/21 16:45	1
o-Terphenyl	90		70 - 130	05/17/21 09:43	05/17/21 16:45	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	173		4.95		mg/Kg			05/14/21 17:56	1

Client Sample ID: SW-8 (1.5')

Lab Sample ID: 880-2160-15

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Sample Depth: (1.5')

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		05/14/21 10:11	05/14/21 20:01	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 20:01	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 20:01	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/14/21 10:11	05/14/21 20:01	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 20:01	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/14/21 10:11	05/14/21 20:01	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		05/14/21 10:11	05/14/21 20:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130	05/14/21 10:11	05/14/21 20:01	1
1,4-Difluorobenzene (Surr)	95		70 - 130	05/14/21 10:11	05/14/21 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	<50.0	U	50.0		mg/Kg		05/17/21 09:43	05/17/21 17:06	1
Diesel Range Organics (Over C10-C28)	118		50.0		mg/Kg		05/17/21 09:43	05/17/21 17:06	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/17/21 09:43	05/17/21 17:06	1
Total TPH	118		50.0		mg/Kg		05/17/21 09:43	05/17/21 17:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130	05/17/21 09:43	05/17/21 17:06	1
o-Terphenyl	90		70 - 130	05/17/21 09:43	05/17/21 17:06	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	382		5.04		mg/Kg			05/14/21 18:01	1

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Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

Client Sample ID: SW-9 (1.5')

Lab Sample ID: 880-2160-16

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Sample Depth: (1.5')

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		05/14/21 10:11	05/14/21 20:21	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/14/21 10:11	05/14/21 20:21	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/14/21 10:11	05/14/21 20:21	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/14/21 10:11	05/14/21 20:21	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/14/21 10:11	05/14/21 20:21	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/14/21 10:11	05/14/21 20:21	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/14/21 10:11	05/14/21 20:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130	05/14/21 10:11	05/14/21 20:21	1
1,4-Difluorobenzene (Surr)	89		70 - 130	05/14/21 10:11	05/14/21 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	<49.8	U	49.8		mg/Kg		05/17/21 09:43	05/17/21 17:50	1
Diesel Range Organics (Over C10-C28)	220		49.8		mg/Kg		05/17/21 09:43	05/17/21 17:50	1
Oil Range Organics (Over C28-C36)	50.3		49.8		mg/Kg		05/17/21 09:43	05/17/21 17:50	1
Total TPH	270		49.8		mg/Kg		05/17/21 09:43	05/17/21 17:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130	05/17/21 09:43	05/17/21 17:50	1
o-Terphenyl	92		70 - 130	05/17/21 09:43	05/17/21 17:50	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	415		5.02		mg/Kg			05/14/21 18:07	1

Client Sample ID: SW-10 (1.5')

Lab Sample ID: 880-2160-17

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Sample Depth: (1.5')

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		05/14/21 10:11	05/14/21 20:42	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/14/21 10:11	05/14/21 20:42	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/14/21 10:11	05/14/21 20:42	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/14/21 10:11	05/14/21 20:42	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/14/21 10:11	05/14/21 20:42	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/14/21 10:11	05/14/21 20:42	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/14/21 10:11	05/14/21 20:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	05/14/21 10:11	05/14/21 20:42	1
1,4-Difluorobenzene (Surr)	102		70 - 130	05/14/21 10:11	05/14/21 20:42	1

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Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

Client Sample ID: SW-10 (1.5')

Lab Sample ID: 880-2160-17

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Sample Depth: (1.5')

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		05/17/21 09:43	05/17/21 18:11	1
Diesel Range Organics (Over C10-C28)	138		49.9		mg/Kg		05/17/21 09:43	05/17/21 18:11	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/17/21 09:43	05/17/21 18:11	1
Total TPH	138		49.9		mg/Kg		05/17/21 09:43	05/17/21 18:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130	05/17/21 09:43	05/17/21 18:11	1
o-Terphenyl	91		70 - 130	05/17/21 09:43	05/17/21 18:11	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	496		5.03		mg/Kg			05/14/21 18:12	1

Client Sample ID: SW-11 (1.5')

Lab Sample ID: 880-2160-18

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Sample Depth: (1.5')

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0185		0.00198		mg/Kg		05/14/21 10:11	05/14/21 21:02	1
Toluene	0.0647		0.00198		mg/Kg		05/14/21 10:11	05/14/21 21:02	1
Ethylbenzene	0.0174		0.00198		mg/Kg		05/14/21 10:11	05/14/21 21:02	1
m-Xylene & p-Xylene	0.112		0.00397		mg/Kg		05/14/21 10:11	05/14/21 21:02	1
o-Xylene	0.207		0.00198		mg/Kg		05/14/21 10:11	05/14/21 21:02	1
Xylenes, Total	0.319		0.00397		mg/Kg		05/14/21 10:11	05/14/21 21:02	1
Total BTEX	0.420		0.00397		mg/Kg		05/14/21 10:11	05/14/21 21:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	3550	S1+	70 - 130	05/14/21 10:11	05/14/21 21:02	1
1,4-Difluorobenzene (Surr)	123		70 - 130	05/14/21 10:11	05/14/21 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	<49.9	U	49.9		mg/Kg		05/17/21 09:43	05/17/21 18:33	1
Diesel Range Organics (Over C10-C28)	157		49.9		mg/Kg		05/17/21 09:43	05/17/21 18:33	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/17/21 09:43	05/17/21 18:33	1
Total TPH	157		49.9		mg/Kg		05/17/21 09:43	05/17/21 18:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130	05/17/21 09:43	05/17/21 18:33	1
o-Terphenyl	101		70 - 130	05/17/21 09:43	05/17/21 18:33	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	708		5.05		mg/Kg			05/14/21 18:17	1

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Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

Client Sample ID: SW-12 (1.5')

Lab Sample ID: 880-2160-19

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Sample Depth: (1.5')

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		05/14/21 10:11	05/14/21 21:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 21:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 21:22	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/14/21 10:11	05/14/21 21:22	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 21:22	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/14/21 10:11	05/14/21 21:22	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		05/14/21 10:11	05/14/21 21:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	05/14/21 10:11	05/14/21 21:22	1
1,4-Difluorobenzene (Surr)	98		70 - 130	05/14/21 10:11	05/14/21 21:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/17/21 09:43	05/17/21 18:55	1
Diesel Range Organics (Over C10-C28)	195		49.9		mg/Kg		05/17/21 09:43	05/17/21 18:55	1
Oil Range Organics (Over C28-C36)	57.1		49.9		mg/Kg		05/17/21 09:43	05/17/21 18:55	1
Total TPH	252		49.9		mg/Kg		05/17/21 09:43	05/17/21 18:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130	05/17/21 09:43	05/17/21 18:55	1
o-Terphenyl	88		70 - 130	05/17/21 09:43	05/17/21 18:55	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2110		25.0		mg/Kg			05/14/21 18:22	5

Client Sample ID: SW-13 (1.5')

Lab Sample ID: 880-2160-20

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Sample Depth: (1.5')

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		05/14/21 10:11	05/14/21 21:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 21:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 21:43	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/14/21 10:11	05/14/21 21:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 21:43	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/14/21 10:11	05/14/21 21:43	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		05/14/21 10:11	05/14/21 21:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	05/14/21 10:11	05/14/21 21:43	1
1,4-Difluorobenzene (Surr)	101		70 - 130	05/14/21 10:11	05/14/21 21:43	1

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Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

Client Sample ID: SW-13 (1.5')

Lab Sample ID: 880-2160-20

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Sample Depth: (1.5')

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		05/17/21 09:43	05/17/21 19:16	1
Diesel Range Organics (Over C10-C28)	357		50.0		mg/Kg		05/17/21 09:43	05/17/21 19:16	1
Oil Range Organics (Over C28-C36)	92.0		50.0		mg/Kg		05/17/21 09:43	05/17/21 19:16	1
Total TPH	449		50.0		mg/Kg		05/17/21 09:43	05/17/21 19:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130	05/17/21 09:43	05/17/21 19:16	1
o-Terphenyl	99		70 - 130	05/17/21 09:43	05/17/21 19:16	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2210		25.0		mg/Kg			05/14/21 18:27	5

Client Sample ID: SW-14 (1.5')

Lab Sample ID: 880-2160-21

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Sample Depth: (1.5')

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		05/14/21 10:38	05/14/21 14:44	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/14/21 10:38	05/14/21 14:44	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/14/21 10:38	05/14/21 14:44	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		05/14/21 10:38	05/14/21 14:44	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/14/21 10:38	05/14/21 14:44	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		05/14/21 10:38	05/14/21 14:44	1
Total BTEX	<0.00404	U	0.00404		mg/Kg		05/14/21 10:38	05/14/21 14:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130	05/14/21 10:38	05/14/21 14:44	1
1,4-Difluorobenzene (Surr)	98		70 - 130	05/14/21 10:38	05/14/21 14:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/14/21 10:49	05/14/21 23:45	1
Diesel Range Organics (Over C10-C28)	283		49.9		mg/Kg		05/14/21 10:49	05/14/21 23:45	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/14/21 10:49	05/14/21 23:45	1
Total TPH	283		49.9		mg/Kg		05/14/21 10:49	05/14/21 23:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	05/14/21 10:49	05/14/21 23:45	1
o-Terphenyl	101		70 - 130	05/14/21 10:49	05/14/21 23:45	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1510		5.04		mg/Kg			05/14/21 19:24	1

Eurofins Xenco, Midland

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
880-2160-1	BH-1 (1.5')	103	99
880-2160-1 MS	BH-1 (1.5')	106	98
880-2160-1 MSD	BH-1 (1.5')	113	96
880-2160-2	BH-2 (1.5')	114	103
880-2160-3	BH-3 (4.5')	116	104
880-2160-4	BH-4 (4.5')	110	102
880-2160-5	BH-5 (1.5')	109	101
880-2160-6	BH-6 (1.5')	112	103
880-2160-7	BH-7 (1.5')	110	100
880-2160-8	SW-1 (1.5')	113	103
880-2160-9	SW-2 (1.5')	110	102
880-2160-10	SW-3 (1.5')	16231	11195
		S1+	S1+
880-2160-11	SW-4 (4.5')	108	100
880-2160-12	SW-5 (4.5')	110	101
880-2160-13	SW-6 (4.5')	116	99
880-2160-14	SW-7 (4.5')	116	104
880-2160-15	SW-8 (1.5')	123	95
880-2160-16	SW-9 (1.5')	125	89
880-2160-17	SW-10 (1.5')	112	102
880-2160-18	SW-11 (1.5')	3550 S1+	123
880-2160-19	SW-12 (1.5')	110	98
880-2160-20	SW-13 (1.5')	113	101
880-2160-21	SW-14 (1.5')	122	98
LCS 880-3104/1-A	Lab Control Sample	104	99
LCS 880-3114/1-A	Lab Control Sample	97	106
LCSD 880-3104/2-A	Lab Control Sample Dup	104	97
LCSD 880-3114/2-A	Lab Control Sample Dup	81	114
MB 880-3104/5-A	Method Blank	106	94
MB 880-3114/5-A	Method Blank	73	82
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1	OTPH1
		(70-130)	(70-130)
880-2160-1	BH-1 (1.5')	88	101
880-2160-1 MS	BH-1 (1.5')	86	93
880-2160-1 MS	BH-1 (1.5')	91	82
880-2160-1 MSD	BH-1 (1.5')	80	89
880-2160-1 MSD	BH-1 (1.5')	90	78
880-2160-2	BH-2 (1.5')	85	92
880-2160-3	BH-3 (4.5')	87	94
880-2160-4	BH-4 (4.5')	88	94
880-2160-5	BH-5 (1.5')	84	94
880-2160-6	BH-6 (1.5')	91	106

Eurofins Xenco, Midland

Surrogate Summary

Client: Tetra Tech, Inc.

Job ID: 880-2160-1

Project/Site: EOG - Medano VA #13

SDG: Eddy County, New Mexico

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-2160-7	BH-7 (1.5')	83	90
880-2160-8	SW-1 (1.5')	103	111
880-2160-9	SW-2 (1.5')	86	99
880-2160-10	SW-3 (1.5')	88	100
880-2160-11	SW-4 (4.5')	90	98
880-2160-12	SW-5 (4.5')	102	115
880-2160-13	SW-6 (4.5')	83	86
880-2160-14	SW-7 (4.5')	84	90
880-2160-15	SW-8 (1.5')	85	90
880-2160-16	SW-9 (1.5')	87	92
880-2160-17	SW-10 (1.5')	85	91
880-2160-18	SW-11 (1.5')	92	101
880-2160-19	SW-12 (1.5')	87	88
880-2160-20	SW-13 (1.5')	89	99
880-2160-21	SW-14 (1.5')	102	101
LCS 880-3113/2-A	Lab Control Sample	91	103
LCS 880-3117/2-A	Lab Control Sample	99	93
LCS 880-3170/2-A	Lab Control Sample	102	102
LCSD 880-3113/3-A	Lab Control Sample Dup	92	105
LCSD 880-3117/3-A	Lab Control Sample Dup	99	91
LCSD 880-3170/3-A	Lab Control Sample Dup	106	106
MB 880-3113/1-A	Method Blank	111	137 S1+
MB 880-3117/1-A	Method Blank	115	120
MB 880-3170/1-A	Method Blank	87	97

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-3104/5-A

Matrix: Solid

Analysis Batch: 3103

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3104

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 13:16	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 13:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 13:16	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/14/21 10:11	05/14/21 13:16	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:11	05/14/21 13:16	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/14/21 10:11	05/14/21 13:16	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/14/21 10:11	05/14/21 13:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	05/14/21 10:11	05/14/21 13:16	1
1,4-Difluorobenzene (Surr)	94		70 - 130	05/14/21 10:11	05/14/21 13:16	1

Lab Sample ID: LCS 880-3104/1-A

Matrix: Solid

Analysis Batch: 3103

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3104

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08524		mg/Kg		85	70 - 130
Toluene	0.100	0.09538		mg/Kg		95	70 - 130
Ethylbenzene	0.100	0.1015		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	0.200	0.2030		mg/Kg		101	70 - 130
o-Xylene	0.100	0.1036		mg/Kg		104	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 880-3104/2-A

Matrix: Solid

Analysis Batch: 3103

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3104

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.07864		mg/Kg		79	70 - 130	8	35
Toluene	0.100	0.09492		mg/Kg		95	70 - 130	0	35
Ethylbenzene	0.100	0.09947		mg/Kg		99	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.2039		mg/Kg		102	70 - 130	0	35
o-Xylene	0.100	0.1018		mg/Kg		102	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: 880-2160-1 MS

Matrix: Solid

Analysis Batch: 3103

Client Sample ID: BH-1 (1.5')

Prep Type: Total/NA

Prep Batch: 3104

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U	0.0990	0.08979		mg/Kg		91	70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-2160-1 MS

Matrix: Solid

Analysis Batch: 3103

Client Sample ID: BH-1 (1.5')

Prep Type: Total/NA

Prep Batch: 3104

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	<0.00200	U	0.0990	0.09825		mg/Kg		99	70 - 130
Ethylbenzene	<0.00200	U	0.0990	0.09689		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.198	0.1967		mg/Kg		99	70 - 130
o-Xylene	<0.00200	U	0.0990	0.09664		mg/Kg		98	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	106		70 - 130						
1,4-Difluorobenzene (Surr)	98		70 - 130						

Lab Sample ID: 880-2160-1 MSD

Matrix: Solid

Analysis Batch: 3103

Client Sample ID: BH-1 (1.5')

Prep Type: Total/NA

Prep Batch: 3104

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0996	0.08202		mg/Kg		82	70 - 130	9	35
Toluene	<0.00200	U	0.0996	0.09377		mg/Kg		94	70 - 130	5	35
Ethylbenzene	<0.00200	U	0.0996	0.09043		mg/Kg		91	70 - 130	7	35
m-Xylene & p-Xylene	<0.00401	U	0.199	0.1859		mg/Kg		93	70 - 130	6	35
o-Xylene	<0.00200	U	0.0996	0.09258		mg/Kg		93	70 - 130	4	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	113		70 - 130								
1,4-Difluorobenzene (Surr)	96		70 - 130								

Lab Sample ID: MB 880-3114/5-A

Matrix: Solid

Analysis Batch: 3118

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3114

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:38	05/14/21 13:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:38	05/14/21 13:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:38	05/14/21 13:53	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/14/21 10:38	05/14/21 13:53	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/14/21 10:38	05/14/21 13:53	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/14/21 10:38	05/14/21 13:53	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/14/21 10:38	05/14/21 13:53	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130				05/14/21 10:38	05/14/21 13:53	1
1,4-Difluorobenzene (Surr)	82		70 - 130				05/14/21 10:38	05/14/21 13:53	1

Lab Sample ID: LCS 880-3114/1-A

Matrix: Solid

Analysis Batch: 3118

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3114

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1097		mg/Kg		110	70 - 130
Toluene	0.100	0.1009		mg/Kg		101	70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: LCS 880-3114/1-A

Matrix: Solid

Analysis Batch: 3118

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3114

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	0.100	0.1105		mg/Kg		110	70 - 130
m-Xylene & p-Xylene	0.200	0.2129		mg/Kg		106	70 - 130
o-Xylene	0.100	0.1002		mg/Kg		100	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: LCSD 880-3114/2-A

Matrix: Solid

Analysis Batch: 3118

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3114

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1006		mg/Kg		101	70 - 130	9	35
Toluene	0.100	0.09776		mg/Kg		98	70 - 130	3	35
Ethylbenzene	0.100	0.1072		mg/Kg		107	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.2092		mg/Kg		105	70 - 130	2	35
o-Xylene	0.100	0.1007		mg/Kg		101	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	81		70 - 130
1,4-Difluorobenzene (Surr)	114		70 - 130

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

Lab Sample ID: MB 880-3113/1-A

Matrix: Solid

Analysis Batch: 3111

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3113

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		05/14/21 10:34	05/14/21 14:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/14/21 10:34	05/14/21 14:41	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/14/21 10:34	05/14/21 14:41	1
Total TPH	<50.0	U	50.0		mg/Kg		05/14/21 10:34	05/14/21 14:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130	05/14/21 10:34	05/14/21 14:41	1
o-Terphenyl	137	S1+	70 - 130	05/14/21 10:34	05/14/21 14:41	1

Lab Sample ID: LCS 880-3113/2-A

Matrix: Solid

Analysis Batch: 3111

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3113

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	844.5		mg/Kg		84	70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: LCS 880-3113/2-A

Matrix: Solid

Analysis Batch: 3111

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3113

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics (Over C10-C28)	1000	1036		mg/Kg		104	70 - 130

	LCS %Recovery	LCS Qualifier	Limits
Surrogate			
1-Chlorooctane	91		70 - 130
o-Terphenyl	103		70 - 130

Lab Sample ID: LCSD 880-3113/3-A

Matrix: Solid

Analysis Batch: 3111

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3113

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	868.1		mg/Kg		87	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	1070		mg/Kg		107	70 - 130	3	20

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

Lab Sample ID: 880-2160-1 MS

Matrix: Solid

Analysis Batch: 3111

Client Sample ID: BH-1 (1.5')

Prep Type: Total/NA

Prep Batch: 3113

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	917.8		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)	332		996	1154		mg/Kg		83	70 - 130

	MS %Recovery	MS Qualifier	Limits
Surrogate			
1-Chlorooctane	86		70 - 130
o-Terphenyl	93		70 - 130

Lab Sample ID: 880-2160-1 MSD

Matrix: Solid

Analysis Batch: 3111

Client Sample ID: BH-1 (1.5')

Prep Type: Total/NA

Prep Batch: 3113

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	824.5		mg/Kg		83	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	332		996	1093		mg/Kg		76	70 - 130	5	20

	MSD %Recovery	MSD Qualifier	Limits
Surrogate			
1-Chlorooctane	80		70 - 130
o-Terphenyl	89		70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: MB 880-3117/1-A

Matrix: Solid

Analysis Batch: 3108

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3117

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		05/14/21 10:49	05/14/21 16:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/14/21 10:49	05/14/21 16:04	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/14/21 10:49	05/14/21 16:04	1
Total TPH	<50.0	U	50.0		mg/Kg		05/14/21 10:49	05/14/21 16:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130	05/14/21 10:49	05/14/21 16:04	1
o-Terphenyl	120		70 - 130	05/14/21 10:49	05/14/21 16:04	1

Lab Sample ID: LCS 880-3117/2-A

Matrix: Solid

Analysis Batch: 3108

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3117

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	856.8		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	1000	998.8		mg/Kg		100	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	93		70 - 130

Lab Sample ID: LCSD 880-3117/3-A

Matrix: Solid

Analysis Batch: 3108

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3117

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	858.8		mg/Kg		86	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	1000	996.5		mg/Kg		100	70 - 130	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	91		70 - 130

Lab Sample ID: MB 880-3170/1-A

Matrix: Solid

Analysis Batch: 3162

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3170

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		05/17/21 09:43	05/17/21 12:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/17/21 09:43	05/17/21 12:03	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/17/21 09:43	05/17/21 12:03	1
Total TPH	<50.0	U	50.0		mg/Kg		05/17/21 09:43	05/17/21 12:03	1

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130	05/17/21 09:43	05/17/21 12:03	1
o-Terphenyl	97		70 - 130	05/17/21 09:43	05/17/21 12:03	1

Lab Sample ID: LCS 880-3170/2-A

Matrix: Solid

Analysis Batch: 3162

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3170

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	847.6		mg/Kg		85	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1130		mg/Kg		113	70 - 130

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

Lab Sample ID: LCSD 880-3170/3-A

Matrix: Solid

Analysis Batch: 3162

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3170

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	876.6		mg/Kg		88	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	1185		mg/Kg		118	70 - 130	5	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	106		70 - 130
o-Terphenyl	106		70 - 130

Lab Sample ID: 880-2160-1 MS

Matrix: Solid

Analysis Batch: 3162

Client Sample ID: BH-1 (1.5')

Prep Type: Total/NA

Prep Batch: 3170

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	881.9		mg/Kg		89	70 - 130
Diesel Range Organics (Over C10-C28)	119		996	1373		mg/Kg		126	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	91		70 - 130
o-Terphenyl	82		70 - 130

Lab Sample ID: 880-2160-1 MSD

Matrix: Solid

Analysis Batch: 3162

Client Sample ID: BH-1 (1.5')

Prep Type: Total/NA

Prep Batch: 3170

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	910.1		mg/Kg		91	70 - 130	3	20

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

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

Lab Sample ID: 880-2160-1 MSD

Matrix: Solid

Analysis Batch: 3162

Client Sample ID: BH-1 (1.5')

Prep Type: Total/NA

Prep Batch: 3170

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)	119		996	1316		mg/Kg		120	70 - 130	4	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	90		70 - 130								
o-Terphenyl	78		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-3093/1-A

Matrix: Solid

Analysis Batch: 3134

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			05/14/21 15:52	1

Lab Sample ID: LCS 880-3093/2-A

Matrix: Solid

Analysis Batch: 3134

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	249.4		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-3093/3-A

Matrix: Solid

Analysis Batch: 3134

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	245.9		mg/Kg		98	90 - 110	1	20

Lab Sample ID: 880-2160-1 MS

Matrix: Solid

Analysis Batch: 3134

Client Sample ID: BH-1 (1.5')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	702	F1	252	918.4	F1	mg/Kg		86	90 - 110

Lab Sample ID: 880-2160-1 MSD

Matrix: Solid

Analysis Batch: 3134

Client Sample ID: BH-1 (1.5')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	702	F1	252	915.6	F1	mg/Kg		85	90 - 110	0	20

Lab Sample ID: 880-2160-11 MS

Matrix: Solid

Analysis Batch: 3134

Client Sample ID: SW-4 (4.5')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	158		249	394.6		mg/Kg		95	90 - 110

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-2160-11 MSD

Matrix: Solid

Analysis Batch: 3134

Client Sample ID: SW-4 (4.5')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	158		249	392.6		mg/Kg		95	90 - 110	1	20

Lab Sample ID: MB 880-3094/1-A

Matrix: Solid

Analysis Batch: 3135

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			05/14/21 18:53	1

Lab Sample ID: LCS 880-3094/2-A

Matrix: Solid

Analysis Batch: 3135

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	251.8		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-3094/3-A

Matrix: Solid

Analysis Batch: 3135

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	244.8		mg/Kg					

Eurofins Xenco, Midland

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

GC VOA

Analysis Batch: 3103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2160-1	BH-1 (1.5')	Total/NA	Solid	8021B	3104
880-2160-2	BH-2 (1.5')	Total/NA	Solid	8021B	3104
880-2160-3	BH-3 (4.5')	Total/NA	Solid	8021B	3104
880-2160-4	BH-4 (4.5')	Total/NA	Solid	8021B	3104
880-2160-5	BH-5 (1.5')	Total/NA	Solid	8021B	3104
880-2160-6	BH-6 (1.5')	Total/NA	Solid	8021B	3104
880-2160-7	BH-7 (1.5')	Total/NA	Solid	8021B	3104
880-2160-8	SW-1 (1.5')	Total/NA	Solid	8021B	3104
880-2160-9	SW-2 (1.5')	Total/NA	Solid	8021B	3104
880-2160-10	SW-3 (1.5')	Total/NA	Solid	8021B	3104
880-2160-11	SW-4 (4.5')	Total/NA	Solid	8021B	3104
880-2160-12	SW-5 (4.5')	Total/NA	Solid	8021B	3104
880-2160-13	SW-6 (4.5')	Total/NA	Solid	8021B	3104
880-2160-14	SW-7 (4.5')	Total/NA	Solid	8021B	3104
880-2160-15	SW-8 (1.5')	Total/NA	Solid	8021B	3104
880-2160-16	SW-9 (1.5')	Total/NA	Solid	8021B	3104
880-2160-17	SW-10 (1.5')	Total/NA	Solid	8021B	3104
880-2160-18	SW-11 (1.5')	Total/NA	Solid	8021B	3104
880-2160-19	SW-12 (1.5')	Total/NA	Solid	8021B	3104
880-2160-20	SW-13 (1.5')	Total/NA	Solid	8021B	3104
MB 880-3104/5-A	Method Blank	Total/NA	Solid	8021B	3104
LCS 880-3104/1-A	Lab Control Sample	Total/NA	Solid	8021B	3104
LCSD 880-3104/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	3104
880-2160-1 MS	BH-1 (1.5')	Total/NA	Solid	8021B	3104
880-2160-1 MSD	BH-1 (1.5')	Total/NA	Solid	8021B	3104

Prep Batch: 3104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2160-1	BH-1 (1.5')	Total/NA	Solid	5035	
880-2160-2	BH-2 (1.5')	Total/NA	Solid	5035	
880-2160-3	BH-3 (4.5')	Total/NA	Solid	5035	
880-2160-4	BH-4 (4.5')	Total/NA	Solid	5035	
880-2160-5	BH-5 (1.5')	Total/NA	Solid	5035	
880-2160-6	BH-6 (1.5')	Total/NA	Solid	5035	
880-2160-7	BH-7 (1.5')	Total/NA	Solid	5035	
880-2160-8	SW-1 (1.5')	Total/NA	Solid	5035	
880-2160-9	SW-2 (1.5')	Total/NA	Solid	5035	
880-2160-10	SW-3 (1.5')	Total/NA	Solid	5035	
880-2160-11	SW-4 (4.5')	Total/NA	Solid	5035	
880-2160-12	SW-5 (4.5')	Total/NA	Solid	5035	
880-2160-13	SW-6 (4.5')	Total/NA	Solid	5035	
880-2160-14	SW-7 (4.5')	Total/NA	Solid	5035	
880-2160-15	SW-8 (1.5')	Total/NA	Solid	5035	
880-2160-16	SW-9 (1.5')	Total/NA	Solid	5035	
880-2160-17	SW-10 (1.5')	Total/NA	Solid	5035	
880-2160-18	SW-11 (1.5')	Total/NA	Solid	5035	
880-2160-19	SW-12 (1.5')	Total/NA	Solid	5035	
880-2160-20	SW-13 (1.5')	Total/NA	Solid	5035	
MB 880-3104/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-3104/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-3104/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

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QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

GC VOA (Continued)

Prep Batch: 3104 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2160-1 MS	BH-1 (1.5')	Total/NA	Solid	5035	
880-2160-1 MSD	BH-1 (1.5')	Total/NA	Solid	5035	

Prep Batch: 3114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2160-21	SW-14 (1.5')	Total/NA	Solid	5035	
MB 880-3114/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-3114/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-3114/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 3118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2160-21	SW-14 (1.5')	Total/NA	Solid	8021B	3114
MB 880-3114/5-A	Method Blank	Total/NA	Solid	8021B	3114
LCS 880-3114/1-A	Lab Control Sample	Total/NA	Solid	8021B	3114
LCSD 880-3114/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	3114

GC Semi VOA

Analysis Batch: 3108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2160-21	SW-14 (1.5')	Total/NA	Solid	8015B NM	3117
MB 880-3117/1-A	Method Blank	Total/NA	Solid	8015B NM	3117
LCS 880-3117/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	3117
LCSD 880-3117/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	3117

Analysis Batch: 3111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2160-1	BH-1 (1.5')	Total/NA	Solid	8015B NM	3113
880-2160-6	BH-6 (1.5')	Total/NA	Solid	8015B NM	3113
880-2160-8	SW-1 (1.5')	Total/NA	Solid	8015B NM	3113
880-2160-9	SW-2 (1.5')	Total/NA	Solid	8015B NM	3113
880-2160-10	SW-3 (1.5')	Total/NA	Solid	8015B NM	3113
880-2160-12	SW-5 (4.5')	Total/NA	Solid	8015B NM	3113
MB 880-3113/1-A	Method Blank	Total/NA	Solid	8015B NM	3113
LCS 880-3113/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	3113
LCSD 880-3113/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	3113
880-2160-1 MS	BH-1 (1.5')	Total/NA	Solid	8015B NM	3113
880-2160-1 MSD	BH-1 (1.5')	Total/NA	Solid	8015B NM	3113

Prep Batch: 3113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2160-1	BH-1 (1.5')	Total/NA	Solid	8015NM Prep	
880-2160-6	BH-6 (1.5')	Total/NA	Solid	8015NM Prep	
880-2160-8	SW-1 (1.5')	Total/NA	Solid	8015NM Prep	
880-2160-9	SW-2 (1.5')	Total/NA	Solid	8015NM Prep	
880-2160-10	SW-3 (1.5')	Total/NA	Solid	8015NM Prep	
880-2160-12	SW-5 (4.5')	Total/NA	Solid	8015NM Prep	
MB 880-3113/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-3113/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-3113/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

GC Semi VOA (Continued)

Prep Batch: 3113 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2160-1 MS	BH-1 (1.5')	Total/NA	Solid	8015NM Prep	
880-2160-1 MSD	BH-1 (1.5')	Total/NA	Solid	8015NM Prep	

Prep Batch: 3117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2160-21	SW-14 (1.5')	Total/NA	Solid	8015NM Prep	
MB 880-3117/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-3117/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-3117/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 3162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2160-2	BH-2 (1.5')	Total/NA	Solid	8015B NM	3170
880-2160-3	BH-3 (4.5')	Total/NA	Solid	8015B NM	3170
880-2160-4	BH-4 (4.5')	Total/NA	Solid	8015B NM	3170
880-2160-5	BH-5 (1.5')	Total/NA	Solid	8015B NM	3170
880-2160-7	BH-7 (1.5')	Total/NA	Solid	8015B NM	3170
880-2160-11	SW-4 (4.5')	Total/NA	Solid	8015B NM	3170
880-2160-13	SW-6 (4.5')	Total/NA	Solid	8015B NM	3170
880-2160-14	SW-7 (4.5')	Total/NA	Solid	8015B NM	3170
880-2160-15	SW-8 (1.5')	Total/NA	Solid	8015B NM	3170
880-2160-16	SW-9 (1.5')	Total/NA	Solid	8015B NM	3170
880-2160-17	SW-10 (1.5')	Total/NA	Solid	8015B NM	3170
880-2160-18	SW-11 (1.5')	Total/NA	Solid	8015B NM	3170
880-2160-19	SW-12 (1.5')	Total/NA	Solid	8015B NM	3170
880-2160-20	SW-13 (1.5')	Total/NA	Solid	8015B NM	3170
MB 880-3170/1-A	Method Blank	Total/NA	Solid	8015B NM	3170
LCS 880-3170/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	3170
LCSD 880-3170/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	3170
880-2160-1 MS	BH-1 (1.5')	Total/NA	Solid	8015B NM	3170
880-2160-1 MSD	BH-1 (1.5')	Total/NA	Solid	8015B NM	3170

Prep Batch: 3170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2160-2	BH-2 (1.5')	Total/NA	Solid	8015NM Prep	
880-2160-3	BH-3 (4.5')	Total/NA	Solid	8015NM Prep	
880-2160-4	BH-4 (4.5')	Total/NA	Solid	8015NM Prep	
880-2160-5	BH-5 (1.5')	Total/NA	Solid	8015NM Prep	
880-2160-7	BH-7 (1.5')	Total/NA	Solid	8015NM Prep	
880-2160-11	SW-4 (4.5')	Total/NA	Solid	8015NM Prep	
880-2160-13	SW-6 (4.5')	Total/NA	Solid	8015NM Prep	
880-2160-14	SW-7 (4.5')	Total/NA	Solid	8015NM Prep	
880-2160-15	SW-8 (1.5')	Total/NA	Solid	8015NM Prep	
880-2160-16	SW-9 (1.5')	Total/NA	Solid	8015NM Prep	
880-2160-17	SW-10 (1.5')	Total/NA	Solid	8015NM Prep	
880-2160-18	SW-11 (1.5')	Total/NA	Solid	8015NM Prep	
880-2160-19	SW-12 (1.5')	Total/NA	Solid	8015NM Prep	
880-2160-20	SW-13 (1.5')	Total/NA	Solid	8015NM Prep	
MB 880-3170/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-3170/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-3170/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Eurofins Xenco, Midland

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

GC Semi VOA (Continued)

Prep Batch: 3170 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2160-1 MS	BH-1 (1.5')	Total/NA	Solid	8015NM Prep	
880-2160-1 MSD	BH-1 (1.5')	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 3093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2160-1	BH-1 (1.5')	Soluble	Solid	DI Leach	
880-2160-2	BH-2 (1.5')	Soluble	Solid	DI Leach	
880-2160-3	BH-3 (4.5')	Soluble	Solid	DI Leach	
880-2160-4	BH-4 (4.5')	Soluble	Solid	DI Leach	
880-2160-5	BH-5 (1.5')	Soluble	Solid	DI Leach	
880-2160-6	BH-6 (1.5')	Soluble	Solid	DI Leach	
880-2160-7	BH-7 (1.5')	Soluble	Solid	DI Leach	
880-2160-8	SW-1 (1.5')	Soluble	Solid	DI Leach	
880-2160-9	SW-2 (1.5')	Soluble	Solid	DI Leach	
880-2160-10	SW-3 (1.5')	Soluble	Solid	DI Leach	
880-2160-11	SW-4 (4.5')	Soluble	Solid	DI Leach	
880-2160-12	SW-5 (4.5')	Soluble	Solid	DI Leach	
880-2160-13	SW-6 (4.5')	Soluble	Solid	DI Leach	
880-2160-14	SW-7 (4.5')	Soluble	Solid	DI Leach	
880-2160-15	SW-8 (1.5')	Soluble	Solid	DI Leach	
880-2160-16	SW-9 (1.5')	Soluble	Solid	DI Leach	
880-2160-17	SW-10 (1.5')	Soluble	Solid	DI Leach	
880-2160-18	SW-11 (1.5')	Soluble	Solid	DI Leach	
880-2160-19	SW-12 (1.5')	Soluble	Solid	DI Leach	
880-2160-20	SW-13 (1.5')	Soluble	Solid	DI Leach	
MB 880-3093/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-3093/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-3093/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-2160-1 MS	BH-1 (1.5')	Soluble	Solid	DI Leach	
880-2160-1 MSD	BH-1 (1.5')	Soluble	Solid	DI Leach	
880-2160-11 MS	SW-4 (4.5')	Soluble	Solid	DI Leach	
880-2160-11 MSD	SW-4 (4.5')	Soluble	Solid	DI Leach	

Leach Batch: 3094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2160-21	SW-14 (1.5')	Soluble	Solid	DI Leach	
MB 880-3094/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-3094/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-3094/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 3134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2160-1	BH-1 (1.5')	Soluble	Solid	300.0	3093
880-2160-2	BH-2 (1.5')	Soluble	Solid	300.0	3093
880-2160-3	BH-3 (4.5')	Soluble	Solid	300.0	3093
880-2160-4	BH-4 (4.5')	Soluble	Solid	300.0	3093
880-2160-5	BH-5 (1.5')	Soluble	Solid	300.0	3093
880-2160-6	BH-6 (1.5')	Soluble	Solid	300.0	3093
880-2160-7	BH-7 (1.5')	Soluble	Solid	300.0	3093

Eurofins Xenco, Midland

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

HPLC/IC (Continued)

Analysis Batch: 3134 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2160-8	SW-1 (1.5')	Soluble	Solid	300.0	3093
880-2160-9	SW-2 (1.5')	Soluble	Solid	300.0	3093
880-2160-10	SW-3 (1.5')	Soluble	Solid	300.0	3093
880-2160-11	SW-4 (4.5')	Soluble	Solid	300.0	3093
880-2160-12	SW-5 (4.5')	Soluble	Solid	300.0	3093
880-2160-13	SW-6 (4.5')	Soluble	Solid	300.0	3093
880-2160-14	SW-7 (4.5')	Soluble	Solid	300.0	3093
880-2160-15	SW-8 (1.5')	Soluble	Solid	300.0	3093
880-2160-16	SW-9 (1.5')	Soluble	Solid	300.0	3093
880-2160-17	SW-10 (1.5')	Soluble	Solid	300.0	3093
880-2160-18	SW-11 (1.5')	Soluble	Solid	300.0	3093
880-2160-19	SW-12 (1.5')	Soluble	Solid	300.0	3093
880-2160-20	SW-13 (1.5')	Soluble	Solid	300.0	3093
MB 880-3093/1-A	Method Blank	Soluble	Solid	300.0	3093
LCS 880-3093/2-A	Lab Control Sample	Soluble	Solid	300.0	3093
LCSD 880-3093/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	3093
880-2160-1 MS	BH-1 (1.5')	Soluble	Solid	300.0	3093
880-2160-1 MSD	BH-1 (1.5')	Soluble	Solid	300.0	3093
880-2160-11 MS	SW-4 (4.5')	Soluble	Solid	300.0	3093
880-2160-11 MSD	SW-4 (4.5')	Soluble	Solid	300.0	3093

Analysis Batch: 3135

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2160-21	SW-14 (1.5')	Soluble	Solid	300.0	3094
MB 880-3094/1-A	Method Blank	Soluble	Solid	300.0	3094
LCS 880-3094/2-A	Lab Control Sample	Soluble	Solid	300.0	3094
LCSD 880-3094/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	3094

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

Client Sample ID: BH-1 (1.5')

Lab Sample ID: 880-2160-1

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3104	05/14/21 10:11	MR	XEN MID
Total/NA	Analysis	8021B		1	3103	05/14/21 13:45	MR	XEN MID
Total/NA	Prep	8015NM Prep			3113	05/14/21 10:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3111	05/14/21 15:43	AJ	XEN MID
Soluble	Leach	DI Leach			3093	05/14/21 09:13	CH	XEN MID
Soluble	Analysis	300.0		1	3134	05/14/21 16:08	CH	XEN MID

Client Sample ID: BH-2 (1.5')

Lab Sample ID: 880-2160-2

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3104	05/14/21 10:11	MR	XEN MID
Total/NA	Analysis	8021B		1	3103	05/14/21 14:05	MR	XEN MID
Total/NA	Prep	8015NM Prep			3170	05/17/21 09:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3162	05/17/21 14:12	AJ	XEN MID
Soluble	Leach	DI Leach			3093	05/14/21 09:13	CH	XEN MID
Soluble	Analysis	300.0		5	3134	05/14/21 16:23	CH	XEN MID

Client Sample ID: BH-3 (4.5')

Lab Sample ID: 880-2160-3

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3104	05/14/21 10:11	MR	XEN MID
Total/NA	Analysis	8021B		1	3103	05/14/21 14:26	MR	XEN MID
Total/NA	Prep	8015NM Prep			3170	05/17/21 09:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3162	05/17/21 14:34	AJ	XEN MID
Soluble	Leach	DI Leach			3093	05/14/21 09:13	CH	XEN MID
Soluble	Analysis	300.0		5	3134	05/14/21 16:28	CH	XEN MID

Client Sample ID: BH-4 (4.5')

Lab Sample ID: 880-2160-4

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3104	05/14/21 10:11	MR	XEN MID
Total/NA	Analysis	8021B		1	3103	05/14/21 14:46	MR	XEN MID
Total/NA	Prep	8015NM Prep			3170	05/17/21 09:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3162	05/17/21 14:56	AJ	XEN MID
Soluble	Leach	DI Leach			3093	05/14/21 09:13	CH	XEN MID
Soluble	Analysis	300.0		1	3134	05/14/21 16:34	CH	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

Client Sample ID: BH-5 (1.5')

Lab Sample ID: 880-2160-5

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3104	05/14/21 10:11	MR	XEN MID
Total/NA	Analysis	8021B		1	3103	05/14/21 15:07	MR	XEN MID
Total/NA	Prep	8015NM Prep			3170	05/17/21 09:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3162	05/17/21 15:18	AJ	XEN MID
Soluble	Leach	DI Leach			3093	05/14/21 09:13	CH	XEN MID
Soluble	Analysis	300.0		5	3134	05/14/21 16:39	CH	XEN MID

Client Sample ID: BH-6 (1.5')

Lab Sample ID: 880-2160-6

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3104	05/14/21 10:11	MR	XEN MID
Total/NA	Analysis	8021B		1	3103	05/14/21 15:27	MR	XEN MID
Total/NA	Prep	8015NM Prep			3113	05/14/21 10:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3111	05/14/21 18:11	AJ	XEN MID
Soluble	Leach	DI Leach			3093	05/14/21 09:13	CH	XEN MID
Soluble	Analysis	300.0		1	3134	05/14/21 16:54	CH	XEN MID

Client Sample ID: BH-7 (1.5')

Lab Sample ID: 880-2160-7

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3104	05/14/21 10:11	MR	XEN MID
Total/NA	Analysis	8021B		1	3103	05/14/21 15:48	MR	XEN MID
Total/NA	Prep	8015NM Prep			3170	05/17/21 09:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3162	05/17/21 15:40	AJ	XEN MID
Soluble	Leach	DI Leach			3093	05/14/21 09:13	CH	XEN MID
Soluble	Analysis	300.0		1	3134	05/14/21 16:59	CH	XEN MID

Client Sample ID: SW-1 (1.5')

Lab Sample ID: 880-2160-8

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3104	05/14/21 10:11	MR	XEN MID
Total/NA	Analysis	8021B		1	3103	05/14/21 16:08	MR	XEN MID
Total/NA	Prep	8015NM Prep			3113	05/14/21 10:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3111	05/14/21 18:53	AJ	XEN MID
Soluble	Leach	DI Leach			3093	05/14/21 09:13	CH	XEN MID
Soluble	Analysis	300.0		1	3134	05/14/21 17:05	CH	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

Client Sample ID: SW-2 (1.5')

Lab Sample ID: 880-2160-9

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3104	05/14/21 10:11	MR	XEN MID
Total/NA	Analysis	8021B		1	3103	05/14/21 16:28	MR	XEN MID
Total/NA	Prep	8015NM Prep			3113	05/14/21 10:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3111	05/14/21 19:14	AJ	XEN MID
Soluble	Leach	DI Leach			3093	05/14/21 09:13	CH	XEN MID
Soluble	Analysis	300.0		1	3134	05/14/21 17:10	CH	XEN MID

Client Sample ID: SW-3 (1.5')

Lab Sample ID: 880-2160-10

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3104	05/14/21 10:11	MR	XEN MID
Total/NA	Analysis	8021B		1	3103	05/14/21 16:49	MR	XEN MID
Total/NA	Prep	8015NM Prep			3113	05/14/21 10:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3111	05/14/21 19:35	AJ	XEN MID
Soluble	Leach	DI Leach			3093	05/14/21 09:13	CH	XEN MID
Soluble	Analysis	300.0		1	3134	05/14/21 17:15	CH	XEN MID

Client Sample ID: SW-4 (4.5')

Lab Sample ID: 880-2160-11

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3104	05/14/21 10:11	MR	XEN MID
Total/NA	Analysis	8021B		1	3103	05/14/21 18:39	MR	XEN MID
Total/NA	Prep	8015NM Prep			3170	05/17/21 09:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3162	05/17/21 16:01	AJ	XEN MID
Soluble	Leach	DI Leach			3093	05/14/21 09:13	CH	XEN MID
Soluble	Analysis	300.0		1	3134	05/14/21 17:20	CH	XEN MID

Client Sample ID: SW-5 (4.5')

Lab Sample ID: 880-2160-12

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3104	05/14/21 10:11	MR	XEN MID
Total/NA	Analysis	8021B		1	3103	05/14/21 19:00	MR	XEN MID
Total/NA	Prep	8015NM Prep			3113	05/14/21 10:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3111	05/14/21 20:37	AJ	XEN MID
Soluble	Leach	DI Leach			3093	05/14/21 09:13	CH	XEN MID
Soluble	Analysis	300.0		1	3134	05/14/21 17:36	CH	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

Client Sample ID: SW-6 (4.5')

Lab Sample ID: 880-2160-13

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3104	05/14/21 10:11	MR	XEN MID
Total/NA	Analysis	8021B		1	3103	05/14/21 19:20	MR	XEN MID
Total/NA	Prep	8015NM Prep			3170	05/17/21 09:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3162	05/17/21 16:23	AJ	XEN MID
Soluble	Leach	DI Leach			3093	05/14/21 09:13	CH	XEN MID
Soluble	Analysis	300.0		1	3134	05/14/21 17:41	CH	XEN MID

Client Sample ID: SW-7 (4.5')

Lab Sample ID: 880-2160-14

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3104	05/14/21 10:11	MR	XEN MID
Total/NA	Analysis	8021B		1	3103	05/14/21 19:40	MR	XEN MID
Total/NA	Prep	8015NM Prep			3170	05/17/21 09:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3162	05/17/21 16:45	AJ	XEN MID
Soluble	Leach	DI Leach			3093	05/14/21 09:13	CH	XEN MID
Soluble	Analysis	300.0		1	3134	05/14/21 17:56	CH	XEN MID

Client Sample ID: SW-8 (1.5')

Lab Sample ID: 880-2160-15

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3104	05/14/21 10:11	MR	XEN MID
Total/NA	Analysis	8021B		1	3103	05/14/21 20:01	MR	XEN MID
Total/NA	Prep	8015NM Prep			3170	05/17/21 09:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3162	05/17/21 17:06	AJ	XEN MID
Soluble	Leach	DI Leach			3093	05/14/21 09:13	CH	XEN MID
Soluble	Analysis	300.0		1	3134	05/14/21 18:01	CH	XEN MID

Client Sample ID: SW-9 (1.5')

Lab Sample ID: 880-2160-16

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3104	05/14/21 10:11	MR	XEN MID
Total/NA	Analysis	8021B		1	3103	05/14/21 20:21	MR	XEN MID
Total/NA	Prep	8015NM Prep			3170	05/17/21 09:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3162	05/17/21 17:50	AJ	XEN MID
Soluble	Leach	DI Leach			3093	05/14/21 09:13	CH	XEN MID
Soluble	Analysis	300.0		1	3134	05/14/21 18:07	CH	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

Client Sample ID: SW-10 (1.5')

Lab Sample ID: 880-2160-17

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3104	05/14/21 10:11	MR	XEN MID
Total/NA	Analysis	8021B		1	3103	05/14/21 20:42	MR	XEN MID
Total/NA	Prep	8015NM Prep			3170	05/17/21 09:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3162	05/17/21 18:11	AJ	XEN MID
Soluble	Leach	DI Leach			3093	05/14/21 09:13	CH	XEN MID
Soluble	Analysis	300.0		1	3134	05/14/21 18:12	CH	XEN MID

Client Sample ID: SW-11 (1.5')

Lab Sample ID: 880-2160-18

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3104	05/14/21 10:11	MR	XEN MID
Total/NA	Analysis	8021B		1	3103	05/14/21 21:02	MR	XEN MID
Total/NA	Prep	8015NM Prep			3170	05/17/21 09:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3162	05/17/21 18:33	AJ	XEN MID
Soluble	Leach	DI Leach			3093	05/14/21 09:13	CH	XEN MID
Soluble	Analysis	300.0		1	3134	05/14/21 18:17	CH	XEN MID

Client Sample ID: SW-12 (1.5')

Lab Sample ID: 880-2160-19

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3104	05/14/21 10:11	MR	XEN MID
Total/NA	Analysis	8021B		1	3103	05/14/21 21:22	MR	XEN MID
Total/NA	Prep	8015NM Prep			3170	05/17/21 09:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3162	05/17/21 18:55	AJ	XEN MID
Soluble	Leach	DI Leach			3093	05/14/21 09:13	CH	XEN MID
Soluble	Analysis	300.0		5	3134	05/14/21 18:22	CH	XEN MID

Client Sample ID: SW-13 (1.5')

Lab Sample ID: 880-2160-20

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/14/21 08:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3104	05/14/21 10:11	MR	XEN MID
Total/NA	Analysis	8021B		1	3103	05/14/21 21:43	MR	XEN MID
Total/NA	Prep	8015NM Prep			3170	05/17/21 09:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3162	05/17/21 19:16	AJ	XEN MID
Soluble	Leach	DI Leach			3093	05/14/21 09:13	CH	XEN MID
Soluble	Analysis	300.0		5	3134	05/14/21 18:27	CH	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

Client Sample ID: SW-14 (1.5')
Date Collected: 05/13/21 00:00
Date Received: 05/14/21 08:24

Lab Sample ID: 880-2160-21
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3114	05/14/21 10:38	MR	XEN MID
Total/NA	Analysis	8021B		1	3118	05/14/21 14:44	MR	XEN MID
Total/NA	Prep	8015NM Prep			3117	05/14/21 10:49	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3108	05/14/21 23:45	AJ	XEN MID
Soluble	Leach	DI Leach			3094	05/14/21 09:23	CH	XEN MID
Soluble	Analysis	300.0		1	3135	05/14/21 19:24	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: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

Laboratory: Eurofins Xenco, Midland

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

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

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

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

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

Method Summary

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Eurofins Xenco, Midland

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: EOG - Medano VA #13

Job ID: 880-2160-1
SDG: Eddy County, New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-2160-1	BH-1 (1.5')	Solid	05/13/21 00:00	05/14/21 08:24	(1.5')
880-2160-2	BH-2 (1.5')	Solid	05/13/21 00:00	05/14/21 08:24	(1.5')
880-2160-3	BH-3 (4.5')	Solid	05/13/21 00:00	05/14/21 08:24	(4.5')
880-2160-4	BH-4 (4.5')	Solid	05/13/21 00:00	05/14/21 08:24	(4.5')
880-2160-5	BH-5 (1.5')	Solid	05/13/21 00:00	05/14/21 08:24	(1.5')
880-2160-6	BH-6 (1.5')	Solid	05/13/21 00:00	05/14/21 08:24	(1.5')
880-2160-7	BH-7 (1.5')	Solid	05/13/21 00:00	05/14/21 08:24	(1.5')
880-2160-8	SW-1 (1.5')	Solid	05/13/21 00:00	05/14/21 08:24	(1.5')
880-2160-9	SW-2 (1.5')	Solid	05/13/21 00:00	05/14/21 08:24	(1.5')
880-2160-10	SW-3 (1.5')	Solid	05/13/21 00:00	05/14/21 08:24	(1.5')
880-2160-11	SW-4 (4.5')	Solid	05/13/21 00:00	05/14/21 08:24	(4.5')
880-2160-12	SW-5 (4.5')	Solid	05/13/21 00:00	05/14/21 08:24	(4.5')
880-2160-13	SW-6 (4.5')	Solid	05/13/21 00:00	05/14/21 08:24	(4.5')
880-2160-14	SW-7 (4.5')	Solid	05/13/21 00:00	05/14/21 08:24	(4.5')
880-2160-15	SW-8 (1.5')	Solid	05/13/21 00:00	05/14/21 08:24	(1.5')
880-2160-16	SW-9 (1.5')	Solid	05/13/21 00:00	05/14/21 08:24	(1.5')
880-2160-17	SW-10 (1.5')	Solid	05/13/21 00:00	05/14/21 08:24	(1.5')
880-2160-18	SW-11 (1.5')	Solid	05/13/21 00:00	05/14/21 08:24	(1.5')
880-2160-19	SW-12 (1.5')	Solid	05/13/21 00:00	05/14/21 08:24	(1.5')
880-2160-20	SW-13 (1.5')	Solid	05/13/21 00:00	05/14/21 08:24	(1.5')
880-2160-21	SW-14 (1.5')	Solid	05/13/21 00:00	05/14/21 08:24	(1.5')

Eurofins Xenco, Midland

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.



880-2160 Chain of Custody

880-2160

Page 1 of 1

5/19/2021

Client Name: EOG Resources		Site Manager: Brittany Long	
Project Name: Medano VA #13		Project #: 212C-MD-02456	
Project Location: Eddy County, New Mexico		Project State: NM	
Project Address: EOG, Attn. Todd Wells		Project City: Eddy	
Receiving Laboratory: Eurofins (Xenco)		Sampler Signature: Jaime Pena	
One additional Bottom Hole will be submitted for this project.			

LAB #	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
		DATE	TIME	WATER	SOIL	HCL	HNO ₃		
BH-1 (1.5')		5/13/2021		X				X	
BH-2 (1.5')		5/13/2021		X				X	
BH-3 (4.5')		5/13/2021		X				X	
BH-4 (4.5')		5/13/2021		X				X	
BH-5 (1.5')		5/13/2021		X				X	
BH-6 (1.5')		5/13/2021		X				X	
BH-7 (1.5')		5/13/2021		X				X	
SW-1 (1.5')		5/13/2021		X				X	
SW-2 (1.5')		5/13/2021		X				X	
SW-3 (1.5')		5/13/2021		X				X	

LAB USE ONLY	LAB USE ONLY
Requested by: [Signature]	Requested by: [Signature]
Date: 5/14/21	Date: 5/14/21
Time: 824	Time: 0824
Received by: [Signature]	Received by: [Signature]
Date: 5/14/21	Date: 5/14/21
Time: 0824	Time: 0824

Sample Temperature	58/60
LAB USE ONLY	LAB USE ONLY
REMARKS:	REMARKS:
☒ RUSH Same Day 24 hr 48 hr 72 hr	☒ RUSH Same Day 24 hr 48 hr 72 hr
☐ Rush Charges Authorized	☐ Rush Charges Authorized
☐ Special Report Limits or TRRP Report	☐ Special Report Limits or TRRP Report

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(Circle or Specify Method No.)

ANALYSIS REQUEST

Analysis Request of Chain of Custody Record

Page 2 of 2



Tetra Tech, Inc.

 901 W Wall St. Suite 100
 Midland, Texas 79701
 Tel (432) 682-4559
 Fax (432) 682-3946

Int Name		EOG Resources		Site Manager		Brittany Long				
Project Name:		Medano VA #13		Project #:		212C-MD-02456				
Project Location: (city, state)		Eddy County, New Mexico		Project #:		212C-MD-02456				
Office to		EOG, Attn: Todd Wells		Sampler Signature:		Jaime Pena				
Serving Laboratory:		Eurofins (Xenco)		Sampler Signature:		Jaime Pena				
One additional Bottom Hole will be submitted for this project										
LAB # LAB USE ONLY	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)	ANALYSIS REQUEST (Circle or Specify Method No.)
		DATE	TIME	WATER	SOIL	HCL	HNO ₃			
SW-4 (4.5')		5/13/2021		X				X		BTEX 8021B BTEX 8260B
SW-5 (4.5')		5/13/2021		X				X		TPH TX1005 (Ext to C35)
SW-6 (4.5')		5/13/2021		X				X		TPH 8015M (GRO - DRO - ORO - MRO)
SW-7 (4.5')		5/13/2021		X				X		PAH 8270C
SW-8 (1.5')		5/13/2021		X				X		Total Metals Ag As Ba Cd Cr Pb Se Hg
SW-9 (1.5')		5/13/2021		X				X		TCLP Metals Ag As Ba Cd Cr Pb Se Hg
SW-10 (1.5')		5/13/2021		X				X		TCLP Volatiles
SW-11 (1.5')		5/13/2021		X				X		TCLP Semi Volatiles
SW-12 (1.5')		5/13/2021		X				X		RCI
SW-13 (1.5')		5/13/2021		X				X		GC/MS Vol 8260B / 624
										GC/MS Semi Vol 8270C/625
										PCB's 8082 / 608
										NORM
										PLM (Asbestos)
										Chloride
										Chloride Sulfate TDS
										General Water Chemistry (see attached list)
										Anion/Cation Balance

ORIGINAL COPY



Tetra Tech, Inc.

901 W Wall St. Suite 100
Midland, Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

[illegible]

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 880-2160-1

SDG Number: Eddy County, New Mexico

Login Number: 2160

List Number: 1

Creator: Phillips, Kerianna

List Source: Eurofins Xenco, Midland

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-708-1

Laboratory Sample Delivery Group: 212C-MD-02456
Client Project/Site: Medano VA 13

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:
5/25/2021 4:33:23 PM

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

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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: Medano VA 13

Laboratory Job ID: 890-708-1
SDG: 212C-MD-02456

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Definitions/Glossary

Client: Tetra Tech, Inc.
Project/Site: Medano VA 13

Job ID: 890-708-1
SDG: 212C-MD-02456

Qualifiers

GC VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Eurofins Xenco, Carlsbad

Case Narrative

Client: Tetra Tech, Inc.
Project/Site: Medano VA 13

Job ID: 890-708-1
SDG: 212C-MD-02456

Job ID: 890-708-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-708-1

Comments

No additional comments.

Receipt

The sample was received on 5/20/2021 3:40 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 was 2.0° C.

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for the following sample associated with preparation batch 880-3332 and analytical batch 880-3336 were outside control limits: (LCS 880-3332/1-A), (LCSD 880-3332/2-A), (880-2354-A-21-A MS) and (880-2354-A-21-B MSD). The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-3336 recovered above the upper control limit for Benzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

GC Semi VOA

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

General Chemistry

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

Organic Prep

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

VOA Prep

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

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Medano VA 13

Job ID: 890-708-1
SDG: 212C-MD-02456

Client Sample ID: BH-8

Lab Sample ID: 890-708-1

Date Collected: 05/13/21 00:00

Matrix: Solid

Date Received: 05/20/21 15:40

Sample Depth: - 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *	0.00200		mg/Kg		05/21/21 15:00	05/22/21 11:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/21/21 15:00	05/22/21 11:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/21/21 15:00	05/22/21 11:35	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		05/21/21 15:00	05/22/21 11:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/21/21 15:00	05/22/21 11:35	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		05/21/21 15:00	05/22/21 11:35	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		05/21/21 15:00	05/22/21 11:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	05/21/21 15:00	05/22/21 11:35	1
1,4-Difluorobenzene (Surr)	102		70 - 130	05/21/21 15:00	05/22/21 11:35	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	<49.9	U	49.9		mg/Kg		05/21/21 14:45	05/22/21 21:29	1
Diesel Range Organics (Over C10-C28)	110		49.9		mg/Kg		05/21/21 14:45	05/22/21 21:29	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/21/21 14:45	05/22/21 21:29	1
Total TPH	110		49.9		mg/Kg		05/21/21 14:45	05/22/21 21:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	05/21/21 14:45	05/22/21 21:29	1
o-Terphenyl	101		70 - 130	05/21/21 14:45	05/22/21 21:29	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	462		4.99		mg/Kg			05/25/21 08:21	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: Medano VA 13

Job ID: 890-708-1
SDG: 212C-MD-02456

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)
890-708-1	BH-8	102	102
LCS 880-3332/1-A	Lab Control Sample	113	101
LCSD 880-3332/2-A	Lab Control Sample Dup	99	105
MB 880-3313/5-A	Method Blank	81	80
MB 880-3332/5-A	Method Blank	76	85
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)
890-708-1	BH-8	103	101
LCS 880-3357/2-A	Lab Control Sample	109	94
LCSD 880-3357/3-A	Lab Control Sample Dup	99	95
MB 880-3357/1-A	Method Blank	1 S1-	2 S1-
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Xenco, Carlsbad

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Medano VA 13

Job ID: 890-708-1
SDG: 212C-MD-02456

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-3313/5-A

Matrix: Solid

Analysis Batch: 3336

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3313

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/21/21 11:00	05/21/21 15:57	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/21/21 11:00	05/21/21 15:57	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/21/21 11:00	05/21/21 15:57	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/21/21 11:00	05/21/21 15:57	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/21/21 11:00	05/21/21 15:57	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/21/21 11:00	05/21/21 15:57	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/21/21 11:00	05/21/21 15:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		70 - 130	05/21/21 11:00	05/21/21 15:57	1
1,4-Difluorobenzene (Surr)	80		70 - 130	05/21/21 11:00	05/21/21 15:57	1

Lab Sample ID: MB 880-3332/5-A

Matrix: Solid

Analysis Batch: 3336

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3332

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/21/21 09:47	05/22/21 05:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/21/21 09:47	05/22/21 05:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/21/21 09:47	05/22/21 05:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/21/21 09:47	05/22/21 05:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/21/21 09:47	05/22/21 05:08	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/21/21 09:47	05/22/21 05:08	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/21/21 09:47	05/22/21 05:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	76		70 - 130	05/21/21 09:47	05/22/21 05:08	1
1,4-Difluorobenzene (Surr)	85		70 - 130	05/21/21 09:47	05/22/21 05:08	1

Lab Sample ID: LCS 880-3332/1-A

Matrix: Solid

Analysis Batch: 3336

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3332

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1269		mg/Kg		127	70 - 130
Toluene	0.100	0.1162		mg/Kg		116	70 - 130
Ethylbenzene	0.100	0.1116		mg/Kg		112	70 - 130
m-Xylene & p-Xylene	0.200	0.2178		mg/Kg		109	70 - 130
o-Xylene	0.100	0.1039		mg/Kg		104	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Medano VA 13

Job ID: 890-708-1
SDG: 212C-MD-02456

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

Lab Sample ID: LCSD 880-3332/2-A

Matrix: Solid

Analysis Batch: 3336

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3332

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1350	*+	mg/Kg		135	70 - 130	6	35
Toluene	0.100	0.1082		mg/Kg		108	70 - 130	7	35
Ethylbenzene	0.100	0.1021		mg/Kg		102	70 - 130	9	35
m-Xylene & p-Xylene	0.200	0.1988		mg/Kg		99	70 - 130	9	35
o-Xylene	0.100	0.09510		mg/Kg		95	70 - 130	9	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

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

Lab Sample ID: MB 880-3357/1-A

Matrix: Solid

Analysis Batch: 3365

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3357

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/21/21 14:45	05/22/21 13:21	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/21/21 14:45	05/22/21 13:21	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/21/21 14:45	05/22/21 13:21	1
Total TPH	<50.0	U	50.0		mg/Kg		05/21/21 14:45	05/22/21 13:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	1	S1-	70 - 130	05/21/21 14:45	05/22/21 13:21	1
o-Terphenyl	2	S1-	70 - 130	05/21/21 14:45	05/22/21 13:21	1

Lab Sample ID: LCS 880-3357/2-A

Matrix: Solid

Analysis Batch: 3365

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3357

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1095		mg/Kg		110	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1158		mg/Kg		116	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	109		70 - 130
o-Terphenyl	94		70 - 130

Lab Sample ID: LCSD 880-3357/3-A

Matrix: Solid

Analysis Batch: 3365

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3357

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	968.5		mg/Kg		97	70 - 130	12	20

Eurofins Xenco, Carlsbad

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Medano VA 13

Job ID: 890-708-1
SDG: 212C-MD-02456

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

Lab Sample ID: LCSD 880-3357/3-A

Matrix: Solid

Analysis Batch: 3365

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3357

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)	1000	1126		mg/Kg		113	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	95		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-3422/1-A

Matrix: Solid

Analysis Batch: 3435

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			05/25/21 05:59	1

Lab Sample ID: LCS 880-3422/2-A

Matrix: Solid

Analysis Batch: 3435

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	243.3		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-3422/3-A

Matrix: Solid

Analysis Batch: 3435

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	243.2		mg/Kg		97	90 - 110	0	20

Eurofins Xenco, Carlsbad

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Medano VA 13

Job ID: 890-708-1
SDG: 212C-MD-02456

GC VOA

Prep Batch: 3313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-3313/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 3332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-708-1	BH-8	Total/NA	Solid	5035	
MB 880-3332/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-3332/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-3332/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 3336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-708-1	BH-8	Total/NA	Solid	8021B	3332
MB 880-3313/5-A	Method Blank	Total/NA	Solid	8021B	3313
MB 880-3332/5-A	Method Blank	Total/NA	Solid	8021B	3332
LCS 880-3332/1-A	Lab Control Sample	Total/NA	Solid	8021B	3332
LCSD 880-3332/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	3332

GC Semi VOA

Prep Batch: 3357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-708-1	BH-8	Total/NA	Solid	8015NM Prep	
MB 880-3357/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-3357/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-3357/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 3365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-708-1	BH-8	Total/NA	Solid	8015B NM	3357
MB 880-3357/1-A	Method Blank	Total/NA	Solid	8015B NM	3357
LCS 880-3357/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	3357
LCSD 880-3357/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	3357

HPLC/IC

Leach Batch: 3422

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-708-1	BH-8	Soluble	Solid	DI Leach	
MB 880-3422/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-3422/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-3422/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 3435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-708-1	BH-8	Soluble	Solid	300.0	3422
MB 880-3422/1-A	Method Blank	Soluble	Solid	300.0	3422
LCS 880-3422/2-A	Lab Control Sample	Soluble	Solid	300.0	3422
LCSD 880-3422/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	3422

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Medano VA 13

Job ID: 890-708-1
SDG: 212C-MD-02456

Client Sample ID: BH-8**Lab Sample ID: 890-708-1****Date Collected: 05/13/21 00:00****Matrix: Solid****Date Received: 05/20/21 15:40**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3332	05/21/21 15:00	MR	XEN MID
Total/NA	Analysis	8021B		1	3336	05/22/21 11:35	MR	XEN MID
Total/NA	Prep	8015NM Prep			3357	05/21/21 14:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3365	05/22/21 21:29	AJ	XEN MID
Soluble	Leach	DI Leach			3422	05/24/21 20:52	SC	XEN MID
Soluble	Analysis	300.0		1	3435	05/25/21 08:21	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: Medano VA 13

Job ID: 890-708-1
SDG: 212C-MD-02456

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

Eurofins Xenco, Carlsbad

Method Summary

Client: Tetra Tech, Inc.
Project/Site: Medano VA 13

Job ID: 890-708-1
SDG: 212C-MD-02456

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, Carlsbad

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Medano VA 13

Job ID: 890-708-1
SDG: 212C-MD-02456

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-708-1	BH-8	Solid	05/13/21 00:00	05/20/21 15:40	- 0.5

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Fe

Tetra Tech, Inc.

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

890-708 Chain of Custody

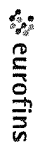
Page 1 of 1[illegible]

ORIGINAL COPY

Eurofins Xenco, Carlsbad

1089 N Canal St.
Carlsbad NM 88220
Phone. 575-988-3199 Fax: 575-988-3199

Chain of Custody Record



Environment Testing
America

[illegible]

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-708-1

SDG Number: 212C-MD-02456

Login Number: 708**List Number: 1****Creator: Clifton, Cloe****List Source: Eurofins Xenco, 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: 890-708-1

SDG Number: 212C-MD-02456

Login Number: 708**List Number: 2****Creator: Copeland, Tatiana****List Source: Eurofins Xenco, Midland****List Creation: 05/21/21 01:27 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, Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-776-1

Laboratory Sample Delivery Group: Eddy County NM
Client Project/Site: Medano VA State #13

For:

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

Attn: Clair Gonzales

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

Authorized for release by:
6/8/2021 3:39:13 PM

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

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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: Medano VA State #13

Laboratory Job ID: 890-776-1
SDG: Eddy County NM

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Definitions/Glossary

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-776-1
SDG: Eddy County NM

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
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: Medano VA State #13

Job ID: 890-776-1
SDG: Eddy County NM

Job ID: 890-776-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-776-1

Comments

No additional comments.

Receipt

The samples were received on 6/3/2021 4:32 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 5.6° C.

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: BH-1 (890-776-1), BH-2 (890-776-2), BH-5 (890-776-3), BH-8 (890-776-4), BH-9 (890-776-5), SW-8 (890-776-6), SW-9 (890-776-7), SW-10 (890-776-8), SW-11 (890-776-9), SW-12 (890-776-10), SW-13 (890-776-11), SW-14 (890-776-12), SW-15 (890-776-13), SW-16 (890-776-14) and (890-776-A-1-B MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

Method 8015B NM: Manual integration was performed on the following samples: BH-1 (890-776-1), BH-2 (890-776-2), BH-5 (890-776-3), BH-8 (890-776-4), BH-9 (890-776-5), SW-8 (890-776-6), SW-9 (890-776-7), SW-10 (890-776-8), SW-11 (890-776-9), SW-12 (890-776-10), SW-13 (890-776-11), SW-14 (890-776-12), SW-15 (890-776-13) and SW-16 (890-776-14). A manual integration was performed on these jobs because baseline rise in the >C12-C28 hydrocarbon range and the >C28-C35 hydrocarbon range created a false detection.

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

General Chemistry

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

Organic Prep

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

VOA Prep

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

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-776-1
SDG: Eddy County NM

Client Sample ID: BH-1

Lab Sample ID: 890-776-1

Date Collected: 06/02/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Sample Depth: - 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F1	0.00199		mg/Kg		06/04/21 09:27	06/04/21 18:29	1
Toluene	<0.00199	U F1	0.00199		mg/Kg		06/04/21 09:27	06/04/21 18:29	1
Ethylbenzene	<0.00199	U F1	0.00199		mg/Kg		06/04/21 09:27	06/04/21 18:29	1
m-Xylene & p-Xylene	<0.00398	U F1	0.00398		mg/Kg		06/04/21 09:27	06/04/21 18:29	1
o-Xylene	<0.00199	U F1	0.00199		mg/Kg		06/04/21 09:27	06/04/21 18:29	1
Xylenes, Total	<0.00398	U F1	0.00398		mg/Kg		06/04/21 09:27	06/04/21 18:29	1
Total BTEX	<0.00398	U F1 F2	0.00398		mg/Kg		06/04/21 09:27	06/04/21 18:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	06/04/21 09:27	06/04/21 18:29	1
1,4-Difluorobenzene (Surr)	115		70 - 130	06/04/21 09:27	06/04/21 18:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/07/21 15:02	06/07/21 23:51	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/07/21 15:02	06/07/21 23:51	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/07/21 15:02	06/07/21 23:51	1
Total TPH	<49.8	U	49.8		mg/Kg		06/07/21 15:02	06/07/21 23:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	06/07/21 15:02	06/07/21 23:51	1
o-Terphenyl	112		70 - 130	06/07/21 15:02	06/07/21 23:51	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	309		5.04		mg/Kg			06/07/21 17:04	1

Client Sample ID: BH-2

Lab Sample ID: 890-776-2

Date Collected: 06/02/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Sample Depth: - 3

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		06/04/21 09:27	06/04/21 18:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/04/21 09:27	06/04/21 18:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/04/21 09:27	06/04/21 18:50	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		06/04/21 09:27	06/04/21 18:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/04/21 09:27	06/04/21 18:50	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		06/04/21 09:27	06/04/21 18:50	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		06/04/21 09:27	06/04/21 18:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	06/04/21 09:27	06/04/21 18:50	1
1,4-Difluorobenzene (Surr)	132	S1+	70 - 130	06/04/21 09:27	06/04/21 18:50	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-776-1
SDG: Eddy County NM

Client Sample ID: BH-2

Lab Sample ID: 890-776-2

Date Collected: 06/02/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Sample Depth: - 3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/07/21 15:02	06/08/21 00:51	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/07/21 15:02	06/08/21 00:51	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/07/21 15:02	06/08/21 00:51	1
Total TPH	<49.8	U	49.8		mg/Kg		06/07/21 15:02	06/08/21 00:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 130	06/07/21 15:02	06/08/21 00:51	1
o-Terphenyl	119		70 - 130	06/07/21 15:02	06/08/21 00:51	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	438		6.23		mg/Kg			06/07/21 17:09	1

Client Sample ID: BH-5

Lab Sample ID: 890-776-3

Date Collected: 06/03/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Sample Depth: - 4.5

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		06/04/21 09:27	06/04/21 19:11	1
Toluene	<0.00202	U	0.00202		mg/Kg		06/04/21 09:27	06/04/21 19:11	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		06/04/21 09:27	06/04/21 19:11	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		06/04/21 09:27	06/04/21 19:11	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		06/04/21 09:27	06/04/21 19:11	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		06/04/21 09:27	06/04/21 19:11	1
Total BTEX	<0.00404	U	0.00404		mg/Kg		06/04/21 09:27	06/04/21 19:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	06/04/21 09:27	06/04/21 19:11	1
1,4-Difluorobenzene (Surr)	120		70 - 130	06/04/21 09:27	06/04/21 19:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/07/21 15:02	06/08/21 01:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/07/21 15:02	06/08/21 01:11	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/07/21 15:02	06/08/21 01:11	1
Total TPH	<50.0	U	50.0		mg/Kg		06/07/21 15:02	06/08/21 01:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	06/07/21 15:02	06/08/21 01:11	1
o-Terphenyl	109		70 - 130	06/07/21 15:02	06/08/21 01:11	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1050		5.03		mg/Kg			06/07/21 17:14	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-776-1
SDG: Eddy County NM

Client Sample ID: BH-8

Lab Sample ID: 890-776-4

Date Collected: 06/02/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Sample Depth: - 1.5

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		06/04/21 09:27	06/04/21 19:31	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/04/21 09:27	06/04/21 19:31	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/04/21 09:27	06/04/21 19:31	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/04/21 09:27	06/04/21 19:31	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/04/21 09:27	06/04/21 19:31	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/04/21 09:27	06/04/21 19:31	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		06/04/21 09:27	06/04/21 19:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	06/04/21 09:27	06/04/21 19:31	1
1,4-Difluorobenzene (Surr)	119		70 - 130	06/04/21 09:27	06/04/21 19:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/07/21 15:02	06/08/21 01:31	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/07/21 15:02	06/08/21 01:31	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/07/21 15:02	06/08/21 01:31	1
Total TPH	<49.8	U	49.8		mg/Kg		06/07/21 15:02	06/08/21 01:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	06/07/21 15:02	06/08/21 01:31	1
o-Terphenyl	101		70 - 130	06/07/21 15:02	06/08/21 01:31	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	154		5.03		mg/Kg			06/07/21 17:18	1

Client Sample ID: BH-9

Lab Sample ID: 890-776-5

Date Collected: 06/02/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Sample Depth: - 1.5

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		06/04/21 09:27	06/04/21 19:52	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/04/21 09:27	06/04/21 19:52	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/04/21 09:27	06/04/21 19:52	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/04/21 09:27	06/04/21 19:52	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/04/21 09:27	06/04/21 19:52	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/04/21 09:27	06/04/21 19:52	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		06/04/21 09:27	06/04/21 19:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	06/04/21 09:27	06/04/21 19:52	1
1,4-Difluorobenzene (Surr)	121		70 - 130	06/04/21 09:27	06/04/21 19:52	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-776-1
SDG: Eddy County NM

Client Sample ID: BH-9

Lab Sample ID: 890-776-5

Date Collected: 06/02/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Sample Depth: - 1.5

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		06/07/21 15:02	06/08/21 01:52	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/07/21 15:02	06/08/21 01:52	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/07/21 15:02	06/08/21 01:52	1
Total TPH	<49.9	U	49.9		mg/Kg		06/07/21 15:02	06/08/21 01:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	06/07/21 15:02	06/08/21 01:52	1
o-Terphenyl	103		70 - 130	06/07/21 15:02	06/08/21 01:52	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	180		5.00		mg/Kg			06/07/21 17:23	1

Client Sample ID: SW-8

Lab Sample ID: 890-776-6

Date Collected: 06/03/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Sample Depth: - 4.5

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		06/04/21 09:27	06/04/21 20:13	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/04/21 09:27	06/04/21 20:13	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/04/21 09:27	06/04/21 20:13	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/04/21 09:27	06/04/21 20:13	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/04/21 09:27	06/04/21 20:13	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/04/21 09:27	06/04/21 20:13	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/04/21 09:27	06/04/21 20:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	06/04/21 09:27	06/04/21 20:13	1
1,4-Difluorobenzene (Surr)	119		70 - 130	06/04/21 09:27	06/04/21 20:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/07/21 15:02	06/08/21 02:12	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/07/21 15:02	06/08/21 02:12	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/07/21 15:02	06/08/21 02:12	1
Total TPH	<49.8	U	49.8		mg/Kg		06/07/21 15:02	06/08/21 02:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	06/07/21 15:02	06/08/21 02:12	1
o-Terphenyl	109		70 - 130	06/07/21 15:02	06/08/21 02:12	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	398		5.02		mg/Kg			06/07/21 17:38	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-776-1
SDG: Eddy County NM

Client Sample ID: SW-9

Lab Sample ID: 890-776-7

Date Collected: 06/03/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Sample Depth: - 4.5

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 09:27	06/04/21 20:33	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/04/21 09:27	06/04/21 20:33	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/04/21 09:27	06/04/21 20:33	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/04/21 09:27	06/04/21 20:33	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/04/21 09:27	06/04/21 20:33	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/04/21 09:27	06/04/21 20:33	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		06/04/21 09:27	06/04/21 20:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	06/04/21 09:27	06/04/21 20:33	1
1,4-Difluorobenzene (Surr)	120		70 - 130	06/04/21 09:27	06/04/21 20:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/07/21 15:02	06/08/21 02:32	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/07/21 15:02	06/08/21 02:32	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/07/21 15:02	06/08/21 02:32	1
Total TPH	<49.8	U	49.8		mg/Kg		06/07/21 15:02	06/08/21 02:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	06/07/21 15:02	06/08/21 02:32	1
o-Terphenyl	108		70 - 130	06/07/21 15:02	06/08/21 02:32	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	692		5.03		mg/Kg			06/07/21 17:43	1

Client Sample ID: SW-10

Lab Sample ID: 890-776-8

Date Collected: 06/02/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Sample Depth: - 1.5

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		06/04/21 09:27	06/04/21 20:54	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/04/21 09:27	06/04/21 20:54	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/04/21 09:27	06/04/21 20:54	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		06/04/21 09:27	06/04/21 20:54	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/04/21 09:27	06/04/21 20:54	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		06/04/21 09:27	06/04/21 20:54	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		06/04/21 09:27	06/04/21 20:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	06/04/21 09:27	06/04/21 20:54	1
1,4-Difluorobenzene (Surr)	128		70 - 130	06/04/21 09:27	06/04/21 20:54	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-776-1
SDG: Eddy County NM

Client Sample ID: SW-10

Lab Sample ID: 890-776-8

Date Collected: 06/02/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Sample Depth: - 1.5

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		06/07/21 15:02	06/08/21 02:52	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/07/21 15:02	06/08/21 02:52	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/07/21 15:02	06/08/21 02:52	1
Total TPH	<49.9	U	49.9		mg/Kg		06/07/21 15:02	06/08/21 02:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	06/07/21 15:02	06/08/21 02:52	1
o-Terphenyl	102		70 - 130	06/07/21 15:02	06/08/21 02:52	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	401		5.02		mg/Kg			06/07/21 17:58	1

Client Sample ID: SW-11

Lab Sample ID: 890-776-9

Date Collected: 06/03/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Sample Depth: - 1.5

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		06/04/21 09:27	06/04/21 21:15	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/04/21 09:27	06/04/21 21:15	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/04/21 09:27	06/04/21 21:15	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/04/21 09:27	06/04/21 21:15	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/04/21 09:27	06/04/21 21:15	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/04/21 09:27	06/04/21 21:15	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		06/04/21 09:27	06/04/21 21:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	06/04/21 09:27	06/04/21 21:15	1
1,4-Difluorobenzene (Surr)	106		70 - 130	06/04/21 09:27	06/04/21 21:15	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		06/07/21 15:02	06/08/21 03:12	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/07/21 15:02	06/08/21 03:12	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/07/21 15:02	06/08/21 03:12	1
Total TPH	<49.9	U	49.9		mg/Kg		06/07/21 15:02	06/08/21 03:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130	06/07/21 15:02	06/08/21 03:12	1
o-Terphenyl	96		70 - 130	06/07/21 15:02	06/08/21 03:12	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	174		4.99		mg/Kg			06/07/21 18:03	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-776-1
SDG: Eddy County NM

Client Sample ID: SW-12

Lab Sample ID: 890-776-10

Date Collected: 06/03/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Sample Depth: - 1.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		06/04/21 09:27	06/04/21 21:36	1
Toluene	<0.00198	U	0.00198		mg/Kg		06/04/21 09:27	06/04/21 21:36	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		06/04/21 09:27	06/04/21 21:36	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		06/04/21 09:27	06/04/21 21:36	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		06/04/21 09:27	06/04/21 21:36	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		06/04/21 09:27	06/04/21 21:36	1
Total BTEX	<0.00396	U	0.00396		mg/Kg		06/04/21 09:27	06/04/21 21:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	06/04/21 09:27	06/04/21 21:36	1
1,4-Difluorobenzene (Surr)	133	S1+	70 - 130	06/04/21 09:27	06/04/21 21:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/07/21 15:02	06/08/21 03:32	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/07/21 15:02	06/08/21 03:32	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/07/21 15:02	06/08/21 03:32	1
Total TPH	<49.9	U	49.9		mg/Kg		06/07/21 15:02	06/08/21 03:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	06/07/21 15:02	06/08/21 03:32	1
o-Terphenyl	97		70 - 130	06/07/21 15:02	06/08/21 03:32	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	224		4.97		mg/Kg			06/07/21 18:07	1

Client Sample ID: SW-13

Lab Sample ID: 890-776-11

Date Collected: 06/03/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Sample Depth: - 1.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		06/04/21 09:27	06/04/21 23:00	1
Toluene	<0.00198	U	0.00198		mg/Kg		06/04/21 09:27	06/04/21 23:00	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		06/04/21 09:27	06/04/21 23:00	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		06/04/21 09:27	06/04/21 23:00	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		06/04/21 09:27	06/04/21 23:00	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		06/04/21 09:27	06/04/21 23:00	1
Total BTEX	<0.00396	U	0.00396		mg/Kg		06/04/21 09:27	06/04/21 23:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	06/04/21 09:27	06/04/21 23:00	1
1,4-Difluorobenzene (Surr)	125		70 - 130	06/04/21 09:27	06/04/21 23:00	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-776-1
SDG: Eddy County NM

Client Sample ID: SW-13

Lab Sample ID: 890-776-11

Date Collected: 06/03/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Sample Depth: - 1.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/07/21 15:02	06/08/21 04:32	1
Diesel Range Organics (Over C10-C28)	61.9		50.0		mg/Kg		06/07/21 15:02	06/08/21 04:32	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/07/21 15:02	06/08/21 04:32	1
Total TPH	61.9		50.0		mg/Kg		06/07/21 15:02	06/08/21 04:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	06/07/21 15:02	06/08/21 04:32	1
o-Terphenyl	103		70 - 130	06/07/21 15:02	06/08/21 04:32	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	221		4.97		mg/Kg			06/07/21 18:12	1

Client Sample ID: SW-14

Lab Sample ID: 890-776-12

Date Collected: 06/03/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Sample Depth: - 1.5

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		06/04/21 09:27	06/04/21 23:20	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/04/21 09:27	06/04/21 23:20	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/04/21 09:27	06/04/21 23:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/04/21 09:27	06/04/21 23:20	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/04/21 09:27	06/04/21 23:20	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/04/21 09:27	06/04/21 23:20	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/04/21 09:27	06/04/21 23:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	06/04/21 09:27	06/04/21 23:20	1
1,4-Difluorobenzene (Surr)	120		70 - 130	06/04/21 09:27	06/04/21 23:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		06/07/21 15:02	06/08/21 04:52	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		06/07/21 15:02	06/08/21 04:52	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/07/21 15:02	06/08/21 04:52	1
Total TPH	<49.7	U	49.7		mg/Kg		06/07/21 15:02	06/08/21 04:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130	06/07/21 15:02	06/08/21 04:52	1
o-Terphenyl	106		70 - 130	06/07/21 15:02	06/08/21 04:52	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	230		4.97		mg/Kg			06/07/21 18:17	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-776-1
SDG: Eddy County NM

Client Sample ID: SW-15

Lab Sample ID: 890-776-13

Date Collected: 06/02/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Sample Depth: - 1.5

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		06/04/21 09:27	06/04/21 23:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/04/21 09:27	06/04/21 23:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/04/21 09:27	06/04/21 23:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/04/21 09:27	06/04/21 23:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/04/21 09:27	06/04/21 23:41	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/04/21 09:27	06/04/21 23:41	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/04/21 09:27	06/04/21 23:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	06/04/21 09:27	06/04/21 23:41	1
1,4-Difluorobenzene (Surr)	117		70 - 130	06/04/21 09:27	06/04/21 23:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/07/21 15:02	06/08/21 05:12	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/07/21 15:02	06/08/21 05:12	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/07/21 15:02	06/08/21 05:12	1
Total TPH	<49.8	U	49.8		mg/Kg		06/07/21 15:02	06/08/21 05:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130	06/07/21 15:02	06/08/21 05:12	1
o-Terphenyl	102		70 - 130	06/07/21 15:02	06/08/21 05:12	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	166		5.02		mg/Kg			06/07/21 18:22	1

Client Sample ID: SW-16

Lab Sample ID: 890-776-14

Date Collected: 06/02/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Sample Depth: - 1.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		06/04/21 09:27	06/05/21 00:02	1
Toluene	<0.00198	U	0.00198		mg/Kg		06/04/21 09:27	06/05/21 00:02	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		06/04/21 09:27	06/05/21 00:02	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		06/04/21 09:27	06/05/21 00:02	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		06/04/21 09:27	06/05/21 00:02	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		06/04/21 09:27	06/05/21 00:02	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		06/04/21 09:27	06/05/21 00:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	06/04/21 09:27	06/05/21 00:02	1
1,4-Difluorobenzene (Surr)	128		70 - 130	06/04/21 09:27	06/05/21 00:02	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-776-1
SDG: Eddy County NM

Client Sample ID: SW-16

Lab Sample ID: 890-776-14

Date Collected: 06/02/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Sample Depth: - 1.5

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		06/07/21 15:02	06/08/21 05:32	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		06/07/21 15:02	06/08/21 05:32	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/07/21 15:02	06/08/21 05:32	1
Total TPH	<49.7	U	49.7		mg/Kg		06/07/21 15:02	06/08/21 05:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	06/07/21 15:02	06/08/21 05:32	1
o-Terphenyl	103		70 - 130	06/07/21 15:02	06/08/21 05:32	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	227		4.99		mg/Kg			06/07/21 18:27	1

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-776-1
SDG: Eddy County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-776-1	BH-1	96	115
890-776-1 MS	BH-1	88	109
890-776-1 MSD	BH-1	87	110
890-776-2	BH-2	106	132 S1+
890-776-3	BH-5	106	120
890-776-4	BH-8	105	119
890-776-5	BH-9	107	121
890-776-6	SW-8	97	119
890-776-7	SW-9	92	120
890-776-8	SW-10	109	128
890-776-9	SW-11	89	106
890-776-10	SW-12	104	133 S1+
890-776-11	SW-13	97	125
890-776-12	SW-14	107	120
890-776-13	SW-15	97	117
890-776-14	SW-16	108	128
LCS 880-3790/1-A	Lab Control Sample	88	111
LCSD 880-3790/2-A	Lab Control Sample Dup	85	109
MB 880-3790/5-A	Method Blank	101	92
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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-776-1	BH-1	110	112
890-776-1 MS	BH-1	113	104
890-776-1 MSD	BH-1	115	107
890-776-2	BH-2	118	119
890-776-3	BH-5	109	109
890-776-4	BH-8	102	101
890-776-5	BH-9	109	103
890-776-6	SW-8	107	109
890-776-7	SW-9	104	108
890-776-8	SW-10	100	102
890-776-9	SW-11	90	96
890-776-10	SW-12	93	97
890-776-11	SW-13	97	103
890-776-12	SW-14	105	106
890-776-13	SW-15	105	102
890-776-14	SW-16	103	103
LCS 880-3865/2-A	Lab Control Sample	110	105
LCSD 880-3865/3-A	Lab Control Sample Dup	110	104
MB 880-3865/1-A	Method Blank	100	104
Surrogate Legend			

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13
1CO = 1-Chlorooctane
OTPH = o-Terphenyl

Job ID: 890-776-1
SDG: Eddy County NM

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

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-776-1
SDG: Eddy County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-3790/5-A

Matrix: Solid

Analysis Batch: 3809

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3790

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/04/21 09:27	06/04/21 18:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/04/21 09:27	06/04/21 18:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/04/21 09:27	06/04/21 18:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/04/21 09:27	06/04/21 18:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/04/21 09:27	06/04/21 18:08	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/04/21 09:27	06/04/21 18:08	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/04/21 09:27	06/04/21 18:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	06/04/21 09:27	06/04/21 18:08	1
1,4-Difluorobenzene (Surr)	92		70 - 130	06/04/21 09:27	06/04/21 18:08	1

Lab Sample ID: LCS 880-3790/1-A

Matrix: Solid

Analysis Batch: 3809

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3790

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09194		mg/Kg		92	70 - 130
Toluene	0.100	0.09438		mg/Kg		94	70 - 130
Ethylbenzene	0.100	0.09133		mg/Kg		91	70 - 130
m-Xylene & p-Xylene	0.200	0.1842		mg/Kg		92	70 - 130
o-Xylene	0.100	0.08927		mg/Kg		89	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	88		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: LCSD 880-3790/2-A

Matrix: Solid

Analysis Batch: 3809

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3790

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.09062		mg/Kg		91	70 - 130	1	35
Toluene	0.100	0.09219		mg/Kg		92	70 - 130	2	35
Ethylbenzene	0.100	0.09002		mg/Kg		90	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.1835		mg/Kg		92	70 - 130	0	35
o-Xylene	0.100	0.08898		mg/Kg		89	70 - 130	0	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	85		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: 890-776-1 MS

Matrix: Solid

Analysis Batch: 3809

Client Sample ID: BH-1

Prep Type: Total/NA

Prep Batch: 3790

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U F1	0.0996	0.04903	F1	mg/Kg		49	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-776-1
SDG: Eddy County NM

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

Lab Sample ID: 890-776-1 MS

Matrix: Solid

Analysis Batch: 3809

Client Sample ID: BH-1

Prep Type: Total/NA

Prep Batch: 3790

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	<0.00199	U F1	0.0996	0.05418	F1	mg/Kg		54	70 - 130
Ethylbenzene	<0.00199	U F1	0.0996	0.04970	F1	mg/Kg		50	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1	0.199	0.1088	F1	mg/Kg		55	70 - 130
o-Xylene	<0.00199	U F1	0.0996	0.05206	F1	mg/Kg		52	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	88		70 - 130						
1,4-Difluorobenzene (Surr)	109		70 - 130						

Lab Sample ID: 890-776-1 MSD

Matrix: Solid

Analysis Batch: 3809

Client Sample ID: BH-1

Prep Type: Total/NA

Prep Batch: 3790

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U F1	0.101	0.06776	F1	mg/Kg		67	70 - 130	32	35
Toluene	<0.00199	U F1	0.101	0.07244		mg/Kg		72	70 - 130	29	35
Ethylbenzene	<0.00199	U F1	0.101	0.06767	F1	mg/Kg		67	70 - 130	31	35
m-Xylene & p-Xylene	<0.00398	U F1	0.202	0.1338	F1	mg/Kg		66	70 - 130	21	35
o-Xylene	<0.00199	U F1	0.101	0.06548	F1	mg/Kg		65	70 - 130	23	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	87		70 - 130								
1,4-Difluorobenzene (Surr)	110		70 - 130								

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

Lab Sample ID: MB 880-3865/1-A

Matrix: Solid

Analysis Batch: 3831

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3865

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/07/21 15:02	06/07/21 22:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/07/21 15:02	06/07/21 22:50	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/07/21 15:02	06/07/21 22:50	1
Total TPH	<50.0	U	50.0		mg/Kg		06/07/21 15:02	06/07/21 22:50	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130				06/07/21 15:02	06/07/21 22:50	1
o-Terphenyl	104		70 - 130				06/07/21 15:02	06/07/21 22:50	1

Lab Sample ID: LCS 880-3865/2-A

Matrix: Solid

Analysis Batch: 3831

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3865

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	937.2		mg/Kg		94	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-776-1
SDG: Eddy County NM

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

Lab Sample ID: LCS 880-3865/2-A

Matrix: Solid

Analysis Batch: 3831

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3865

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics (Over C10-C28)	1000	1051		mg/Kg		105	70 - 130
Surrogate	%Recovery	LCS Qualifier	LCS	Limits			
1-Chlorooctane	110			70 - 130			
o-Terphenyl	105			70 - 130			

Lab Sample ID: LCSD 880-3865/3-A

Matrix: Solid

Analysis Batch: 3831

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3865

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	931.3		mg/Kg		93	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	1036		mg/Kg		104	70 - 130	1	20
Surrogate	%Recovery	LCSD Qualifier	LCSD	Limits					
1-Chlorooctane	110			70 - 130					
o-Terphenyl	104			70 - 130					

Lab Sample ID: 890-776-1 MS

Matrix: Solid

Analysis Batch: 3831

Client Sample ID: BH-1

Prep Type: Total/NA

Prep Batch: 3865

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	999	983.4		mg/Kg		98	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	999	1047		mg/Kg		105	70 - 130
Surrogate	%Recovery	MS Qualifier	MS	Limits					
1-Chlorooctane	113			70 - 130					
o-Terphenyl	104			70 - 130					

Lab Sample ID: 890-776-1 MSD

Matrix: Solid

Analysis Batch: 3831

Client Sample ID: BH-1

Prep Type: Total/NA

Prep Batch: 3865

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	980.5		mg/Kg		98	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.8	U	998	1089		mg/Kg		109	70 - 130	4	20
Surrogate	%Recovery	MSD Qualifier	MSD	Limits							
1-Chlorooctane	115			70 - 130							
o-Terphenyl	107			70 - 130							

Eurofins Xenco, Carlsbad

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-776-1
SDG: Eddy County NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-3791/1-A

Matrix: Solid

Analysis Batch: 3854

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 16:00	1

Lab Sample ID: LCS 880-3791/2-A

Matrix: Solid

Analysis Batch: 3854

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	252.9		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-3791/3-A

Matrix: Solid

Analysis Batch: 3854

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	253.1		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 890-776-5 MS

Matrix: Solid

Analysis Batch: 3854

Client Sample ID: BH-9

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	180		250	421.7		mg/Kg		97	90 - 110

Lab Sample ID: 890-776-5 MSD

Matrix: Solid

Analysis Batch: 3854

Client Sample ID: BH-9

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	180		250	421.2		mg/Kg		97	90 - 110	0	20

Eurofins Xenco, Carlsbad

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-776-1
SDG: Eddy County NM

GC VOA

Prep Batch: 3790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-776-1	BH-1	Total/NA	Solid	5035	
890-776-2	BH-2	Total/NA	Solid	5035	
890-776-3	BH-5	Total/NA	Solid	5035	
890-776-4	BH-8	Total/NA	Solid	5035	
890-776-5	BH-9	Total/NA	Solid	5035	
890-776-6	SW-8	Total/NA	Solid	5035	
890-776-7	SW-9	Total/NA	Solid	5035	
890-776-8	SW-10	Total/NA	Solid	5035	
890-776-9	SW-11	Total/NA	Solid	5035	
890-776-10	SW-12	Total/NA	Solid	5035	
890-776-11	SW-13	Total/NA	Solid	5035	
890-776-12	SW-14	Total/NA	Solid	5035	
890-776-13	SW-15	Total/NA	Solid	5035	
890-776-14	SW-16	Total/NA	Solid	5035	
MB 880-3790/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-3790/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-3790/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-776-1 MS	BH-1	Total/NA	Solid	5035	
890-776-1 MSD	BH-1	Total/NA	Solid	5035	

Analysis Batch: 3809

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-776-1	BH-1	Total/NA	Solid	8021B	3790
890-776-2	BH-2	Total/NA	Solid	8021B	3790
890-776-3	BH-5	Total/NA	Solid	8021B	3790
890-776-4	BH-8	Total/NA	Solid	8021B	3790
890-776-5	BH-9	Total/NA	Solid	8021B	3790
890-776-6	SW-8	Total/NA	Solid	8021B	3790
890-776-7	SW-9	Total/NA	Solid	8021B	3790
890-776-8	SW-10	Total/NA	Solid	8021B	3790
890-776-9	SW-11	Total/NA	Solid	8021B	3790
890-776-10	SW-12	Total/NA	Solid	8021B	3790
890-776-11	SW-13	Total/NA	Solid	8021B	3790
890-776-12	SW-14	Total/NA	Solid	8021B	3790
890-776-13	SW-15	Total/NA	Solid	8021B	3790
890-776-14	SW-16	Total/NA	Solid	8021B	3790
MB 880-3790/5-A	Method Blank	Total/NA	Solid	8021B	3790
LCS 880-3790/1-A	Lab Control Sample	Total/NA	Solid	8021B	3790
LCSD 880-3790/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	3790
890-776-1 MS	BH-1	Total/NA	Solid	8021B	3790
890-776-1 MSD	BH-1	Total/NA	Solid	8021B	3790

GC Semi VOA

Analysis Batch: 3831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-776-1	BH-1	Total/NA	Solid	8015B NM	3865
890-776-2	BH-2	Total/NA	Solid	8015B NM	3865
890-776-3	BH-5	Total/NA	Solid	8015B NM	3865
890-776-4	BH-8	Total/NA	Solid	8015B NM	3865
890-776-5	BH-9	Total/NA	Solid	8015B NM	3865

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QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-776-1
SDG: Eddy County NM

GC Semi VOA (Continued)

Analysis Batch: 3831 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-776-6	SW-8	Total/NA	Solid	8015B NM	3865
890-776-7	SW-9	Total/NA	Solid	8015B NM	3865
890-776-8	SW-10	Total/NA	Solid	8015B NM	3865
890-776-9	SW-11	Total/NA	Solid	8015B NM	3865
890-776-10	SW-12	Total/NA	Solid	8015B NM	3865
890-776-11	SW-13	Total/NA	Solid	8015B NM	3865
890-776-12	SW-14	Total/NA	Solid	8015B NM	3865
890-776-13	SW-15	Total/NA	Solid	8015B NM	3865
890-776-14	SW-16	Total/NA	Solid	8015B NM	3865
MB 880-3865/1-A	Method Blank	Total/NA	Solid	8015B NM	3865
LCS 880-3865/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	3865
LCSD 880-3865/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	3865
890-776-1 MS	BH-1	Total/NA	Solid	8015B NM	3865
890-776-1 MSD	BH-1	Total/NA	Solid	8015B NM	3865

Prep Batch: 3865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-776-1	BH-1	Total/NA	Solid	8015NM Prep	
890-776-2	BH-2	Total/NA	Solid	8015NM Prep	
890-776-3	BH-5	Total/NA	Solid	8015NM Prep	
890-776-4	BH-8	Total/NA	Solid	8015NM Prep	
890-776-5	BH-9	Total/NA	Solid	8015NM Prep	
890-776-6	SW-8	Total/NA	Solid	8015NM Prep	
890-776-7	SW-9	Total/NA	Solid	8015NM Prep	
890-776-8	SW-10	Total/NA	Solid	8015NM Prep	
890-776-9	SW-11	Total/NA	Solid	8015NM Prep	
890-776-10	SW-12	Total/NA	Solid	8015NM Prep	
890-776-11	SW-13	Total/NA	Solid	8015NM Prep	
890-776-12	SW-14	Total/NA	Solid	8015NM Prep	
890-776-13	SW-15	Total/NA	Solid	8015NM Prep	
890-776-14	SW-16	Total/NA	Solid	8015NM Prep	
MB 880-3865/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-3865/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-3865/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-776-1 MS	BH-1	Total/NA	Solid	8015NM Prep	
890-776-1 MSD	BH-1	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 3791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-776-1	BH-1	Soluble	Solid	DI Leach	
890-776-2	BH-2	Soluble	Solid	DI Leach	
890-776-3	BH-5	Soluble	Solid	DI Leach	
890-776-4	BH-8	Soluble	Solid	DI Leach	
890-776-5	BH-9	Soluble	Solid	DI Leach	
890-776-6	SW-8	Soluble	Solid	DI Leach	
890-776-7	SW-9	Soluble	Solid	DI Leach	
890-776-8	SW-10	Soluble	Solid	DI Leach	
890-776-9	SW-11	Soluble	Solid	DI Leach	
890-776-10	SW-12	Soluble	Solid	DI Leach	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-776-1
SDG: Eddy County NM

HPLC/IC (Continued)

Leach Batch: 3791 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-776-11	SW-13	Soluble	Solid	DI Leach	
890-776-12	SW-14	Soluble	Solid	DI Leach	
890-776-13	SW-15	Soluble	Solid	DI Leach	
890-776-14	SW-16	Soluble	Solid	DI Leach	
MB 880-3791/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-3791/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-3791/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-776-5 MS	BH-9	Soluble	Solid	DI Leach	
890-776-5 MSD	BH-9	Soluble	Solid	DI Leach	

Analysis Batch: 3854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-776-1	BH-1	Soluble	Solid	300.0	3791
890-776-2	BH-2	Soluble	Solid	300.0	3791
890-776-3	BH-5	Soluble	Solid	300.0	3791
890-776-4	BH-8	Soluble	Solid	300.0	3791
890-776-5	BH-9	Soluble	Solid	300.0	3791
890-776-6	SW-8	Soluble	Solid	300.0	3791
890-776-7	SW-9	Soluble	Solid	300.0	3791
890-776-8	SW-10	Soluble	Solid	300.0	3791
890-776-9	SW-11	Soluble	Solid	300.0	3791
890-776-10	SW-12	Soluble	Solid	300.0	3791
890-776-11	SW-13	Soluble	Solid	300.0	3791
890-776-12	SW-14	Soluble	Solid	300.0	3791
890-776-13	SW-15	Soluble	Solid	300.0	3791
890-776-14	SW-16	Soluble	Solid	300.0	3791
MB 880-3791/1-A	Method Blank	Soluble	Solid	300.0	3791
LCS 880-3791/2-A	Lab Control Sample	Soluble	Solid	300.0	3791
LCSD 880-3791/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	3791
890-776-5 MS	BH-9	Soluble	Solid	300.0	3791
890-776-5 MSD	BH-9	Soluble	Solid	300.0	3791

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-776-1
SDG: Eddy County NM

Client Sample ID: BH-1

Lab Sample ID: 890-776-1

Date Collected: 06/02/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3790	06/04/21 09:27	KL	XEN MID
Total/NA	Analysis	8021B		1	3809	06/04/21 18:29	KL	XEN MID
Total/NA	Prep	8015NM Prep			3865	06/07/21 15:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3831	06/07/21 23:51	AM	XEN MID
Soluble	Leach	DI Leach			3791	06/04/21 09:36	CH	XEN MID
Soluble	Analysis	300.0		1	3854	06/07/21 17:04	CH	XEN MID

Client Sample ID: BH-2

Lab Sample ID: 890-776-2

Date Collected: 06/02/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3790	06/04/21 09:27	KL	XEN MID
Total/NA	Analysis	8021B		1	3809	06/04/21 18:50	KL	XEN MID
Total/NA	Prep	8015NM Prep			3865	06/07/21 15:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3831	06/08/21 00:51	AM	XEN MID
Soluble	Leach	DI Leach			3791	06/04/21 09:36	CH	XEN MID
Soluble	Analysis	300.0		1	3854	06/07/21 17:09	CH	XEN MID

Client Sample ID: BH-5

Lab Sample ID: 890-776-3

Date Collected: 06/03/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3790	06/04/21 09:27	KL	XEN MID
Total/NA	Analysis	8021B		1	3809	06/04/21 19:11	KL	XEN MID
Total/NA	Prep	8015NM Prep			3865	06/07/21 15:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3831	06/08/21 01:11	AM	XEN MID
Soluble	Leach	DI Leach			3791	06/04/21 09:36	CH	XEN MID
Soluble	Analysis	300.0		1	3854	06/07/21 17:14	CH	XEN MID

Client Sample ID: BH-8

Lab Sample ID: 890-776-4

Date Collected: 06/02/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3790	06/04/21 09:27	KL	XEN MID
Total/NA	Analysis	8021B		1	3809	06/04/21 19:31	KL	XEN MID
Total/NA	Prep	8015NM Prep			3865	06/07/21 15:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3831	06/08/21 01:31	AM	XEN MID
Soluble	Leach	DI Leach			3791	06/04/21 09:36	CH	XEN MID
Soluble	Analysis	300.0		1	3854	06/07/21 17:18	CH	XEN MID

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Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-776-1
SDG: Eddy County NM

Client Sample ID: BH-9

Lab Sample ID: 890-776-5

Date Collected: 06/02/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3790	06/04/21 09:27	KL	XEN MID
Total/NA	Analysis	8021B		1	3809	06/04/21 19:52	KL	XEN MID
Total/NA	Prep	8015NM Prep			3865	06/07/21 15:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3831	06/08/21 01:52	AM	XEN MID
Soluble	Leach	DI Leach			3791	06/04/21 09:36	CH	XEN MID
Soluble	Analysis	300.0		1	3854	06/07/21 17:23	CH	XEN MID

Client Sample ID: SW-8

Lab Sample ID: 890-776-6

Date Collected: 06/03/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3790	06/04/21 09:27	KL	XEN MID
Total/NA	Analysis	8021B		1	3809	06/04/21 20:13	KL	XEN MID
Total/NA	Prep	8015NM Prep			3865	06/07/21 15:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3831	06/08/21 02:12	AM	XEN MID
Soluble	Leach	DI Leach			3791	06/04/21 09:36	CH	XEN MID
Soluble	Analysis	300.0		1	3854	06/07/21 17:38	CH	XEN MID

Client Sample ID: SW-9

Lab Sample ID: 890-776-7

Date Collected: 06/03/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3790	06/04/21 09:27	KL	XEN MID
Total/NA	Analysis	8021B		1	3809	06/04/21 20:33	KL	XEN MID
Total/NA	Prep	8015NM Prep			3865	06/07/21 15:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3831	06/08/21 02:32	AM	XEN MID
Soluble	Leach	DI Leach			3791	06/04/21 09:36	CH	XEN MID
Soluble	Analysis	300.0		1	3854	06/07/21 17:43	CH	XEN MID

Client Sample ID: SW-10

Lab Sample ID: 890-776-8

Date Collected: 06/02/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3790	06/04/21 09:27	KL	XEN MID
Total/NA	Analysis	8021B		1	3809	06/04/21 20:54	KL	XEN MID
Total/NA	Prep	8015NM Prep			3865	06/07/21 15:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3831	06/08/21 02:52	AM	XEN MID
Soluble	Leach	DI Leach			3791	06/04/21 09:36	CH	XEN MID
Soluble	Analysis	300.0		1	3854	06/07/21 17:58	CH	XEN MID

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Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-776-1
SDG: Eddy County NM

Client Sample ID: SW-11

Lab Sample ID: 890-776-9

Date Collected: 06/03/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3790	06/04/21 09:27	KL	XEN MID
Total/NA	Analysis	8021B		1	3809	06/04/21 21:15	KL	XEN MID
Total/NA	Prep	8015NM Prep			3865	06/07/21 15:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3831	06/08/21 03:12	AM	XEN MID
Soluble	Leach	DI Leach			3791	06/04/21 09:36	CH	XEN MID
Soluble	Analysis	300.0		1	3854	06/07/21 18:03	CH	XEN MID

Client Sample ID: SW-12

Lab Sample ID: 890-776-10

Date Collected: 06/03/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3790	06/04/21 09:27	KL	XEN MID
Total/NA	Analysis	8021B		1	3809	06/04/21 21:36	KL	XEN MID
Total/NA	Prep	8015NM Prep			3865	06/07/21 15:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3831	06/08/21 03:32	AM	XEN MID
Soluble	Leach	DI Leach			3791	06/04/21 09:36	CH	XEN MID
Soluble	Analysis	300.0		1	3854	06/07/21 18:07	CH	XEN MID

Client Sample ID: SW-13

Lab Sample ID: 890-776-11

Date Collected: 06/03/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3790	06/04/21 09:27	KL	XEN MID
Total/NA	Analysis	8021B		1	3809	06/04/21 23:00	KL	XEN MID
Total/NA	Prep	8015NM Prep			3865	06/07/21 15:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3831	06/08/21 04:32	AM	XEN MID
Soluble	Leach	DI Leach			3791	06/04/21 09:36	CH	XEN MID
Soluble	Analysis	300.0		1	3854	06/07/21 18:12	CH	XEN MID

Client Sample ID: SW-14

Lab Sample ID: 890-776-12

Date Collected: 06/03/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3790	06/04/21 09:27	KL	XEN MID
Total/NA	Analysis	8021B		1	3809	06/04/21 23:20	KL	XEN MID
Total/NA	Prep	8015NM Prep			3865	06/07/21 15:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3831	06/08/21 04:52	AM	XEN MID
Soluble	Leach	DI Leach			3791	06/04/21 09:36	CH	XEN MID
Soluble	Analysis	300.0		1	3854	06/07/21 18:17	CH	XEN MID

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Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-776-1
SDG: Eddy County NM

Client Sample ID: SW-15

Lab Sample ID: 890-776-13

Date Collected: 06/02/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3790	06/04/21 09:27	KL	XEN MID
Total/NA	Analysis	8021B		1	3809	06/04/21 23:41	KL	XEN MID
Total/NA	Prep	8015NM Prep			3865	06/07/21 15:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3831	06/08/21 05:12	AM	XEN MID
Soluble	Leach	DI Leach			3791	06/04/21 09:36	CH	XEN MID
Soluble	Analysis	300.0		1	3854	06/07/21 18:22	CH	XEN MID

Client Sample ID: SW-16

Lab Sample ID: 890-776-14

Date Collected: 06/02/21 00:00

Matrix: Solid

Date Received: 06/03/21 16:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3790	06/04/21 09:27	KL	XEN MID
Total/NA	Analysis	8021B		1	3809	06/05/21 00:02	KL	XEN MID
Total/NA	Prep	8015NM Prep			3865	06/07/21 15:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3831	06/08/21 05:32	AM	XEN MID
Soluble	Leach	DI Leach			3791	06/04/21 09:36	CH	XEN MID
Soluble	Analysis	300.0		1	3854	06/07/21 18:27	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: Medano VA State #13

Job ID: 890-776-1
SDG: Eddy County NM

Laboratory: Eurofins Xenco, Midland

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

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

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

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

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

Method Summary

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-776-1
SDG: Eddy County NM

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-776-1
SDG: Eddy County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-776-1	BH-1	Solid	06/02/21 00:00	06/03/21 16:32	- 3
890-776-2	BH-2	Solid	06/02/21 00:00	06/03/21 16:32	- 3
890-776-3	BH-5	Solid	06/03/21 00:00	06/03/21 16:32	- 4.5
890-776-4	BH-8	Solid	06/02/21 00:00	06/03/21 16:32	- 1.5
890-776-5	BH-9	Solid	06/02/21 00:00	06/03/21 16:32	- 1.5
890-776-6	SW-8	Solid	06/03/21 00:00	06/03/21 16:32	- 4.5
890-776-7	SW-9	Solid	06/03/21 00:00	06/03/21 16:32	- 4.5
890-776-8	SW-10	Solid	06/02/21 00:00	06/03/21 16:32	- 1.5
890-776-9	SW-11	Solid	06/03/21 00:00	06/03/21 16:32	- 1.5
890-776-10	SW-12	Solid	06/03/21 00:00	06/03/21 16:32	- 1.5
890-776-11	SW-13	Solid	06/03/21 00:00	06/03/21 16:32	- 1.5
890-776-12	SW-14	Solid	06/03/21 00:00	06/03/21 16:32	- 1.5
890-776-13	SW-15	Solid	06/02/21 00:00	06/03/21 16:32	- 1.5
890-776-14	SW-16	Solid	06/02/21 00:00	06/03/21 16:32	- 1.5

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

901 W. Wall Street, Ste. 100
 Midland, Texas 79705
 Tel: (432) 682-4550
 Fax: (432) 682-5966

Page ✓ of _____

2

[illegible]

Eurofins Xenco, Carlsbad

1089 N Canal St.

Carlsbad NM 88220

Phone: 575-988-3199 Fax: 575-988-3199

Chain of Custody Record



Environment Testing America

Client Information (Sub Contract Lab)		Sampler	Lab PM	Carrier Tracking No(s)	COC No:							
Client Contact:		Phone	Jessica Kramer		890-251 1							
Shipping/Receiving			E-Mail: Jessica.kramer@eurofins.com	State of Origin: New Mexico	Page: 1 of 2							
Company:	Eurofins Xenco		Accreditations Required (See note) NELAP - Louisiana NELAP - Texas		Job #: 890-776-1							
Address:	1211 W Florida Ave	Due Date Requested	6/8/2021									
City:	Midland	TAT Requested (days)										
State Zip:	TX. 79701											
Phone:	432-704-5440(Tel)	PO #:										
Email:		WO #:										
Project Name:	Medano VA State #13	Project #:	88000013									
Site:		SSOW#:										
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=Water, S=solid, O=oil, B=Soil, G=Gravel, L=Leachate, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D/DI_LEACH Chloride	8016MOD_NM/8016NM_S_Prep (MOD) Full TPH GRO-DRO-MRO	8021B/6036FP_Calc BTEX	Total Number of containers	Special Instructions/Note:
BH-1 (890-776-1)		6/2/21		Mountain	Solid		X	X	X		1	
BH-2 (890-776-2)		6/2/21		Mountain	Solid		X	X	X		1	
BH-5 (890-776-3)		6/3/21		Mountain	Solid		X	X	X		1	
BH-8 (890-776-4)		6/2/21		Mountain	Solid		X	X	X		1	
BH-9 (890-776-5)		6/2/21		Mountain	Solid		X	X	X		1	
SW-8 (890-776-6)		6/3/21		Mountain	Solid		X	X	X		1	
SW-9 (890-776-7)		6/3/21		Mountain	Solid		X	X	X		1	
SW-10 (890-776-8)		6/2/21		Mountain	Solid		X	X	X		1	
SW-11 (890-776-9)		6/3/21		Mountain	Solid		X	X	X		1	
Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.												
Possible Hazard Identification												
Unconfirmed												
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2 Special Instructions/QC Requirements												
Empty Kit Relinquished by Date Time Method of Shipment												
Relinquished by Date/Time Company												
Relinquished by Date/Time Company												
Relinquished by Date/Time Company												
Custody Seals Intact: Custody Seal No												
Cooler Temperature(s) °C and Other Remarks:												

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-776-1

SDG Number: Eddy County NM

Login Number: 776

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco, 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: 890-776-1

SDG Number: Eddy County NM

Login Number: 776

List Source: Eurofins Xenco, Midland

List Number: 2

List Creation: 06/04/21 02:46 PM

Creator: Copeland, Tatiana

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

Laboratory Job ID: 890-1135-1

Laboratory Sample Delivery Group: Eddy County NM
Client Project/Site: Medano VA State #13

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:
8/24/2021 12:58:42 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: Medano VA State #13

Laboratory Job ID: 890-1135-1
SDG: Eddy County NM

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Definitions/Glossary

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-1135-1
SDG: Eddy County NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
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.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-1135-1
SDG: Eddy County NM

Job ID: 890-1135-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-1135-1

Receipt

The sample was received on 8/19/2021 3:35 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 4.4°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-6886 and analytical batch 880-6831 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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: Medano VA State #13

Job ID: 890-1135-1
SDG: Eddy County NM

Client Sample ID: SW-9 (4.5')

Lab Sample ID: 890-1135-1

Date Collected: 08/19/21 00:00

Matrix: Solid

Date Received: 08/19/21 15:35

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F1	0.00199		mg/Kg		08/21/21 11:33	08/21/21 23:25	1
Toluene	<0.00199	U F1	0.00199		mg/Kg		08/21/21 11:33	08/21/21 23:25	1
Ethylbenzene	<0.00199	U F1	0.00199		mg/Kg		08/21/21 11:33	08/21/21 23:25	1
m-Xylene & p-Xylene	<0.00398	U F1	0.00398		mg/Kg		08/21/21 11:33	08/21/21 23:25	1
o-Xylene	<0.00199	U F1	0.00199		mg/Kg		08/21/21 11:33	08/21/21 23:25	1
Xylenes, Total	<0.00398	U F1	0.00398		mg/Kg		08/21/21 11:33	08/21/21 23:25	1
Total BTEX	<0.00398	U F1	0.00398		mg/Kg		08/21/21 11:33	08/21/21 23:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	08/21/21 11:33	08/21/21 23:25	1
1,4-Difluorobenzene (Surr)	85		70 - 130	08/21/21 11:33	08/21/21 23:25	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		08/21/21 11:02	08/22/21 23:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/21/21 11:02	08/22/21 23:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/21/21 11:02	08/22/21 23:37	1
Total TPH	<50.0	U	50.0		mg/Kg		08/21/21 11:02	08/22/21 23:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130	08/21/21 11:02	08/22/21 23:37	1
o-Terphenyl	98		70 - 130	08/21/21 11:02	08/22/21 23:37	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	37.2		5.04		mg/Kg			08/24/21 06:05	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-1135-1
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)
890-1135-1	SW-9 (4.5')	97	85
890-1135-1 MS	SW-9 (4.5')	103	103
890-1135-1 MSD	SW-9 (4.5')	105	99
LCS 880-6886/1-A	Lab Control Sample	96	95
LCSD 880-6886/2-A	Lab Control Sample Dup	90	94
MB 880-6686/5-A	Method Blank	102	84
MB 880-6886/5-A	Method Blank	101	102
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)
880-5303-A-1-C MS	Matrix Spike	81	87
880-5303-A-1-D MSD	Matrix Spike Duplicate	77	83
890-1135-1	SW-9 (4.5')	86	98
LCS 880-6882/2-A	Lab Control Sample	93	106
LCSD 880-6882/3-A	Lab Control Sample Dup	105	110
MB 880-6882/1-A	Method Blank	97	113
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Xenco, Carlsbad

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-1135-1
SDG: Eddy County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-6686/5-A

Matrix: Solid

Analysis Batch: 6831

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 6686

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/18/21 08:45	08/21/21 11:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/18/21 08:45	08/21/21 11:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/18/21 08:45	08/21/21 11:56	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/18/21 08:45	08/21/21 11:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/18/21 08:45	08/21/21 11:56	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/18/21 08:45	08/21/21 11:56	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/18/21 08:45	08/21/21 11:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	08/18/21 08:45	08/21/21 11:56	1
1,4-Difluorobenzene (Surr)	84		70 - 130	08/18/21 08:45	08/21/21 11:56	1

Lab Sample ID: MB 880-6886/5-A

Matrix: Solid

Analysis Batch: 6831

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 6886

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/21/21 11:33	08/21/21 23:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/21/21 11:33	08/21/21 23:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/21/21 11:33	08/21/21 23:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/21/21 11:33	08/21/21 23:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/21/21 11:33	08/21/21 23:03	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/21/21 11:33	08/21/21 23:03	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/21/21 11:33	08/21/21 23:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	08/21/21 11:33	08/21/21 23:03	1
1,4-Difluorobenzene (Surr)	102		70 - 130	08/21/21 11:33	08/21/21 23:03	1

Lab Sample ID: LCS 880-6886/1-A

Matrix: Solid

Analysis Batch: 6831

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 6886

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08911		mg/Kg		89	70 - 130
Toluene	0.100	0.08850		mg/Kg		89	70 - 130
Ethylbenzene	0.100	0.08716		mg/Kg		87	70 - 130
m-Xylene & p-Xylene	0.200	0.1602		mg/Kg		80	70 - 130
o-Xylene	0.100	0.07410		mg/Kg		74	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-1135-1
SDG: Eddy County NM

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

Lab Sample ID: LCSD 880-6886/2-A

Matrix: Solid

Analysis Batch: 6831

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 6886

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.07681		mg/Kg		77	70 - 130	15	35
Toluene	0.100	0.08233		mg/Kg		82	70 - 130	7	35
Ethylbenzene	0.100	0.08312		mg/Kg		83	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.1517		mg/Kg		76	70 - 130	5	35
o-Xylene	0.100	0.07008		mg/Kg		70	70 - 130	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 890-1135-1 MS

Matrix: Solid

Analysis Batch: 6831

Client Sample ID: SW-9 (4.5')

Prep Type: Total/NA

Prep Batch: 6886

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	<0.00199	U F1	0.0996	0.05112	F1	mg/Kg		50	70 - 130		
Toluene	<0.00199	U F1	0.0996	0.04848	F1	mg/Kg		49	70 - 130		
Ethylbenzene	<0.00199	U F1	0.0996	0.04101	F1	mg/Kg		41	70 - 130		
m-Xylene & p-Xylene	<0.00398	U F1	0.199	0.07510	F1	mg/Kg		38	70 - 130		
o-Xylene	<0.00199	U F1	0.0996	0.03442	F1	mg/Kg		34	70 - 130		

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

Lab Sample ID: 890-1135-1 MSD

Matrix: Solid

Analysis Batch: 6831

Client Sample ID: SW-9 (4.5')

Prep Type: Total/NA

Prep Batch: 6886

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	<0.00199	U F1	0.0998	0.04311	F1	mg/Kg		42	70 - 130	17	35
Toluene	<0.00199	U F1	0.0998	0.05396	F1	mg/Kg		54	70 - 130	11	35
Ethylbenzene	<0.00199	U F1	0.0998	0.04764	F1	mg/Kg		48	70 - 130	15	35
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.08547	F1	mg/Kg		43	70 - 130	13	35
o-Xylene	<0.00199	U F1	0.0998	0.04171	F1	mg/Kg		41	70 - 130	19	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-1135-1
SDG: Eddy County NM

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

Lab Sample ID: MB 880-6882/1-A

Matrix: Solid

Analysis Batch: 6908

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 6882

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		08/21/21 11:02	08/22/21 15:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/21/21 11:02	08/22/21 15:03	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/21/21 11:02	08/22/21 15:03	1
Total TPH	<50.0	U	50.0		mg/Kg		08/21/21 11:02	08/22/21 15:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	08/21/21 11:02	08/22/21 15:03	1
o-Terphenyl	113		70 - 130	08/21/21 11:02	08/22/21 15:03	1

Lab Sample ID: LCS 880-6882/2-A

Matrix: Solid

Analysis Batch: 6908

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 6882

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	820.9		mg/Kg		82	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1046		mg/Kg		105	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	106		70 - 130

Lab Sample ID: LCSD 880-6882/3-A

Matrix: Solid

Analysis Batch: 6908

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 6882

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	870.9		mg/Kg		87	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	1000	1110		mg/Kg		111	70 - 130	6	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	110		70 - 130

Lab Sample ID: 880-5303-A-1-C MS

Matrix: Solid

Analysis Batch: 6908

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 6882

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	995	783.6		mg/Kg		79	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	995	882.1		mg/Kg		89	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-1135-1
SDG: Eddy County NM

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

Lab Sample ID: 880-5303-A-1-C MS

Matrix: Solid

Analysis Batch: 6908

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 6882

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	81		70 - 130
o-Terphenyl	87		70 - 130

Lab Sample ID: 880-5303-A-1-D MSD

Matrix: Solid

Analysis Batch: 6908

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 6882

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	777.0		mg/Kg		78	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	840.1		mg/Kg		84	70 - 130	5	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	77		70 - 130
o-Terphenyl	83		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-6964/1-A

Matrix: Solid

Analysis Batch: 6968

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			08/24/21 04:13	1

Lab Sample ID: LCS 880-6964/2-A

Matrix: Solid

Analysis Batch: 6968

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	271.4		mg/Kg		109	90 - 110

Lab Sample ID: LCSD 880-6964/3-A

Matrix: Solid

Analysis Batch: 6968

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	274.3		mg/Kg		110	90 - 110	1	20

Lab Sample ID: 880-5342-A-1-B MS

Matrix: Solid

Analysis Batch: 6968

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	24.1		250	279.1		mg/Kg		102	90 - 110

Eurofins Xenco, Carlsbad

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-1135-1
SDG: Eddy County NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-5342-A-1-C MSD					Client Sample ID: Matrix Spike Duplicate							
Matrix: Solid					Prep Type: Soluble							
Analysis Batch: 6968												
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit	
Chloride	24.1		250	296.0		mg/Kg		109	90 - 110	6	20	

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-1135-1
SDG: Eddy County NM

GC VOA

Prep Batch: 6686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-6686/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 6831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1135-1	SW-9 (4.5')	Total/NA	Solid	8021B	6886
MB 880-6686/5-A	Method Blank	Total/NA	Solid	8021B	6686
MB 880-6686/5-A	Method Blank	Total/NA	Solid	8021B	6886
LCS 880-6686/1-A	Lab Control Sample	Total/NA	Solid	8021B	6886
LCSD 880-6686/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	6886
890-1135-1 MS	SW-9 (4.5')	Total/NA	Solid	8021B	6886
890-1135-1 MSD	SW-9 (4.5')	Total/NA	Solid	8021B	6886

Prep Batch: 6886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1135-1	SW-9 (4.5')	Total/NA	Solid	5035	
MB 880-6686/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-6686/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-6686/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1135-1 MS	SW-9 (4.5')	Total/NA	Solid	5035	
890-1135-1 MSD	SW-9 (4.5')	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 6882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1135-1	SW-9 (4.5')	Total/NA	Solid	8015NM Prep	
MB 880-6882/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-6882/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-6882/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-5303-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-5303-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 6908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1135-1	SW-9 (4.5')	Total/NA	Solid	8015B NM	6882
MB 880-6882/1-A	Method Blank	Total/NA	Solid	8015B NM	6882
LCS 880-6882/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	6882
LCSD 880-6882/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	6882
880-5303-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	6882
880-5303-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	6882

HPLC/IC

Leach Batch: 6964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1135-1	SW-9 (4.5')	Soluble	Solid	DI Leach	
MB 880-6964/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-6964/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-6964/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-5342-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-5342-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-1135-1
SDG: Eddy County NM

HPLC/IC

Analysis Batch: 6968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1135-1	SW-9 (4.5')	Soluble	Solid	300.0	6964
MB 880-6964/1-A	Method Blank	Soluble	Solid	300.0	6964
LCS 880-6964/2-A	Lab Control Sample	Soluble	Solid	300.0	6964
LCSD 880-6964/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	6964
880-5342-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	6964
880-5342-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	6964

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-1135-1
SDG: Eddy County NM

Client Sample ID: SW-9 (4.5')
Date Collected: 08/19/21 00:00
Date Received: 08/19/21 15:35

Lab Sample ID: 890-1135-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6886	08/21/21 11:33	KL	XEN MID
Total/NA	Analysis	8021B		1	6831	08/21/21 23:25	KL	XEN MID
Total/NA	Prep	8015NM Prep			6882	08/21/21 11:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1	6908	08/22/21 23:37	AJ	XEN MID
Soluble	Leach	DI Leach			6964	08/23/21 15:34	SC	XEN MID
Soluble	Analysis	300.0		1	6968	08/24/21 06:05	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: Medano VA State #13

Job ID: 890-1135-1
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	06-30-22

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

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

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

Method Summary

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-1135-1
SDG: Eddy County NM

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Medano VA State #13

Job ID: 890-1135-1
SDG: Eddy County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-1135-1	SW-9 (4.5')	Solid	08/19/21 00:00	08/19/21 15:35

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

Analysis Request of Custody Record

Page 1 of 1



Tetra Tech, Inc.

301 W. WILSON ST. STE 100
Midland, Texas 79705

Tel (432) 682-4559

(432) 682-3946 Fax

Client Name: EOG Resources		Site Manager: Brittany Long	
Project Name: Medano VA STATE #13		Project #: 212C-MD-02456	
Project Location: Eddy County, NM			
Invoice to: Todd Wells - EOG			
Receiving Laboratory: Xeno Eurofins		Sampler Signature: <i>Myles Taylor</i>	
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
	SW-9 (4.5')		8/19/21							X BTEX 8021B BTEX 8260B			
										X TPH TX1005 (Ext to C35)			
										X 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)			
										X Chloride			
										Chloride Sulfate TDS			
										General Water Chemistry (see attached list)			
										Anion/Cation Balance			
										Hold			

Relinquished by: <i>Myles Taylor</i>	Date: 8/19/21	Time:	Received by: <i>Chloe Goff</i>	Date: 8.19.21	Time: 1535
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

LAB USE ONLY	REMARKS:
4.6	☒ STANDARD
4.4	☒ RUSH: Same Day 24 hr 48 hr 72 hr
	☐ Rush Charges Authorized
	☐ Special Report Limits or TRRP Report

890-1135 Chain of Custody

ORIGINAL COPY

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-1135-1

SDG Number: Eddy County NM

Login Number: 1135

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco, 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: 890-1135-1

SDG Number: Eddy County NM

Login Number: 1135

List Source: Eurofins Xenco, Midland

List Number: 2

List Creation: 08/20/21 11:38 AM

Creator: Kramer, Jessica

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	1.6/2.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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 57808

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 57808
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your closure report and final C-141 for Incident #NAPP2106648279 MEDANO VA STATE #13 FLOW LINE, thank you. This closure is approved.	3/2/2022